OMEGA YACHT SERVICES

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Pre-purchase, Condition, Insurance and Valuation Report

Merlin

The survey was conducted by Nick Vass FCMS FRINA, Marine Surveyor

Table of contents

1) Client details	
Name	A N Other
Telephone	01932 57xxxx
Mobile	07786 25xxxx
Email	another@icloud.com
Address	23 Some Way
Town	Basingstoke
Postcode	RD12 xxx

2) Survey details	
Vessel name	Merlin
Vessel lying	Quay Side Marina, Southampton
Survey date	2024-10-15
In attendance	The purchaser and the broker were present during the inspection but the vendor was not in attendance
Weather	Dry day
Whilst	Afloat on a pontoon mooring and whilst lifted ashore and suspended in the slings of a crane or travel hoist

3) Vessel details		
Vessel type	Motor Vessel	
Model	Sealine S28	
Builder	Sealine International Ltd	
Designer	Tom Murrant	
Identification	Registration number none displayed	Serial number 393
	Year of construction 2004	Hull number GB-SIL28393K405
Engine	Volvo Penta KAD32P x 2	
Accommodation	Four berths in two cabins	
Dimensions listed from	Manufacturer's website	
Dimensions	Overall length 8.8m	Hull length 8.2m
	Beam 3.1m	Draft 1.0m
Fuel capacity	400 litres	
Water capacity	280 litres	

4) Hull

The GRP hull is stiffened by an internal mouldings, also of GRP, plywood bulkheads, semi-bulkheads, bonded-in locker dividers, glassed-in GRP stringers and GRP floor moulding support beams.

The hull's GRP construction utilises a lay-up of polyester resin, mixed-strand glass-fibre matting and woven rovings finished with pigmented gelcoat.

Vessel's hull	The vessel's hull is of the 'deep V' planing type with moulded-in sprayrails and chines		
General condition	Good		
Blisters	No evidence of blistering was found		
Moisture levels		Above waterline	Below waterline
	Bow	0-5	12-15
	Stern	0-5	12-15
	Port	0-5	15-17
	Starboard	0-5	12-15

Equipment used measuring moisture levels

Tramex Skipper Plus

Surveyor's observations

Several cracks due to accident damage were noted all over the topsides and bathing platform. Cracks were found on the starboardside of the hull below the waterline around the sea toilet outlet skin fitting. It is likely that the sea toilet outlet seacock's handle has been forced in the past casing the hull to flex and crack. The damaged areas should be ground back to sound laminate and repaired with epoxy resin matting and colour-matched gelcoat. Trim tabs are screwed to the stern. They did not work and should be repaired or replaced.








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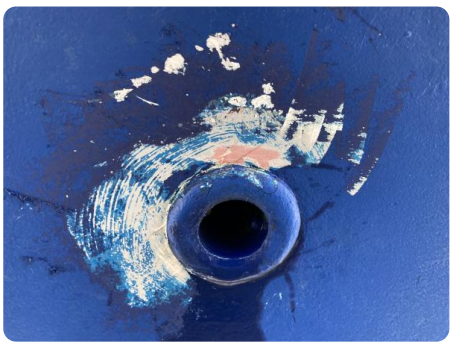
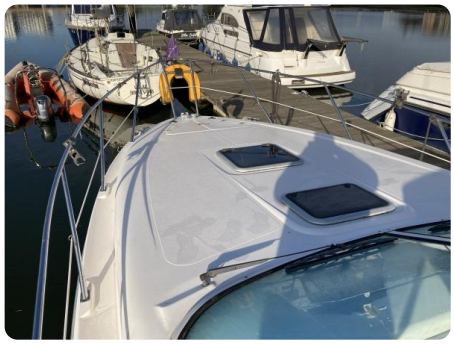


5) Superstructure	
Details	The superstructure consists of a deck, a coachroof and a cockpit in several mouldings of GRP
	The deck is stiffened by glassed-in foam lateral members and fore and after stringers. Areas of load are backed with plywood plates, which were found to be in good order, where access was possible.
Finish	The finish of the superstructure is unpainted, white-pigmented gelcoat
Slats	Teak slats are bonded to the cockpit sole
Slats condition	Worn but serviceable condition
Walk test	I both walk-tested and percussion-tested the superstructure with a plastic-faced hammer and found no signs of delamination of the construction

Surveyor's observations

Cracking due to minor accident damage was found on the starboardside of the deck around the second from aft stanchion base and on both sides of the radar arch. The cracks should be ground back to sound laminate and repaired with colour-matched gelcoat.





6) Hull-Superstructure Joint

Details	The hull and deck were joined together by an inboard shoebox flange joint, which was internally bonded and epoxy-filled. The joint is screwed together at 6” intervals and finished by an aluminium rubbing strake
Condition	The joint and the rubbing strake were found to be in good order and appropriate for the size of the vessel

7) Bilge and Access to Bilge

Access to the bilge is made by lifting the cockpit sole boards, the cabin sole boards and through the engine compartment.

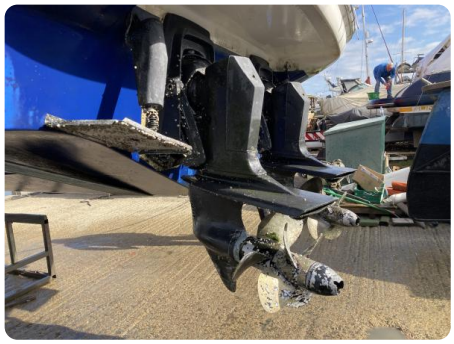
Electric bilge pump	All the electric Bilge Pumps are working
Manual bilge pump	The manual Bilge Pump is working

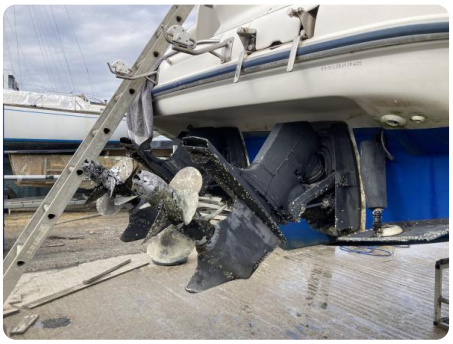
8) Bulkheads and bondings

Bulkhead and Bondings	The vessel is stiffened by bulkheads of marine plywood. The hull is further stiffened by plywood semi-bulkheads in the cabin and locker dividers, all of which are properly attached with well-wetted glassed-in bondings. All the bulkheads were properly bonded to the inside of the GRP hull with glass-fibre matting and resin, and all were found to be in sound condition.

9) Seacocks, Valves and Skin Fittings	
The following skin fittings and seacocks were found below the waterline	Heads inlet. Heads outlet. Depth sounder transducer. Engine coolant inlet.
All metal skin fittings were bright yellow when scraped, showing little corrosion had taken place	Yes
The following skin fittings and seacocks were found above the waterline	Bilge pump outlet. Engine exhausts. Diesel heater exhaust. Gallery sink outlet. Vanity basin outlet. Shower waste outlet. Cockpit scupper.
Seacocks	All seacocks were found to be in good condition and opened and closed easily

10) Stern Gear	
Stern Gear	The vessel is fitted with aluminium propellers, which are attached to two conventional sterndrive units
Stern Gear condition	The Stern Gear was found to be in good order





11) Rudder	
Details	The vessel is not fitted with a rudder
Rudder condition	

12) Steering	
Details	The vessel is fitted with a single wheel steering system
Steering Gear condition	The steering system was found to be in good order

13) Cathodic Protection	
Condition	The anodes are properly bonded to the metal items that they are designed to protect I tested for electrical continuity between the anodes and the metal items that they are designed to protect with a multimeter and found good connections The sacrificial anodes have slightly depleted, showing that they have been effective, but do not need to be replaced yet
Anodes and Cathodic Protection	Sacrificial anodes are fastened to the sterndrive units Sacrificial anodes are fastened to the trim tabs

14) Canvas Work	
Vessel is fitted with the following Canvas Work	Cockpit cover

15) Deck Fittings	
The following Deck Fittings are present	Bow cleats Stern mooring cleats Side mooring cleats Pulpit and guardrails Forehatch Main hatch Skylight hatch Windows Ventilators Portlights Fuel filler cap Water filler cap Electric anchor windlass Horn Windshield wiper
Condition	Defects were found with the Deck Fittings

Surveyor's observations

A working electric anchor windlass is bolted to the inside of the anchor locker. Its cockpit switches and deck-mounted 'down' switch worked well, but its deck-mounted switches are faulty and should be replaced. A four-piece glass windshield surrounds the cockpit. It's seals/gaskets are badly perished and should be removed and refitted with new gaskets.



16) Ground Tackle	
Anchor make	Delta
Anchor weight	8kg
Kedge anchor	No
Kedge make	
Kedge weight	
Anchor windlass	A working electric anchor windlass is bolted to the deck

Surveyor's observations

A working electric anchor windlass is bolted to the inside of the anchor locker. Its cockpit switches worked well, but its deck-mounted switches are broken and should be replaced.

17) Navigation Lights	
Navigation Lights include	Port and starboard Navigation Lights Stern light Steaming light Anchor light

Surveyor's observations

All navigation lights were found to be in working order

18) Electrical Installation	
Battery voltage	The DC electrical system is 12 volt
The following batteries are fitted to the vessel	Engine cranking batteries Domestic power batteries
Electrical system condition	The Electrical System was found to be in good order
AC shore power	The vessel is fitted with an AC shore power electrical system
The AC electrical system included the following components	Inlet socket Power lead RCB circuit breaker Fused switch board Battery charger Sockets Water heater

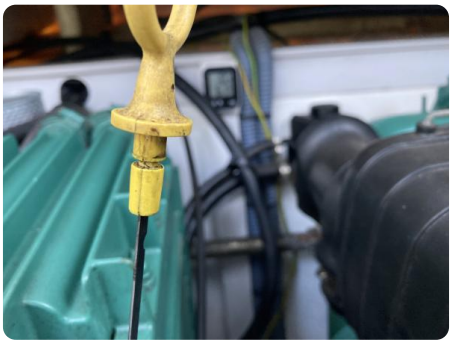
19) Engines	
Number of engines	2 engines
Make of engine	Volvo Penta
Model of engine	KAD32P
Engine condition	The engine control levers are free to move and well located

No dismantling of the engines took place and so the internal condition of the engines cannot be commented upon. Components hidden from view, such as the sumps, crankshafts, camshafts, pistons, valves and cylinder head gasket could not be examined for latent defects. No compression tests of the cylinders took place.

Comments can only be made with regard to the general condition of the engines on the day of the inspection. No guarantee can be made regarding the life expectancy of the engines.

Surveyor's observations

The portside engine number is 2032007244 and the starboardside engine number is 2032007654. The portside engine hour meter read 601 hours and the starboardside meter read 618 hours. The engine control levers are free to move and well located in the cockpit. There are fuel cut-off taps with remote controls and water intake strainers. The engines started easily and ran well during the inspection. The coolant systems worked properly, and the engine and sterndrive oils were found to be at the correct level and clean. Ancillary equipment, such as the alternators, fresh water header tanks, raw sea water coolant strainers and stop solenoids, worked well. The engine oil dipstick O-ring seals are missing and should be replaced. During the sea trial, the engines each ran at a maximum of 3,400 RPM. The vessel reached a maximum speed of twenty-eight knots, which was measured with and against the tide using the vessel’s GPS. However, it should be noted that KAD32P engines should be able to run up to 3,800 RPM and the vessel should be able to reach thirty knots. It is likely that the revs and speed have been affected by the fact that the trim tabs did not work and that the propellers were slightly fouled with barnacles. The trim tabs should be repaired or replaced and the propellers should be cleaned before a second sea trial takes place.



20) Firefighting Equipment

Firefighting Equipment of the vessel includes the following items	Fire blanket Dry powder fire extinguishers in the cabins Automatic fire extinguisher in the engine space
Condition	The vessel's Firefighting Equipment is in good order

21) Fresh Water Systems

Number of tanks	There is more than one tank fitted
Fresh Water pump type	Electric pump
Fresh Water heater	Electric water heater Engine-driven calorifie
Taps	Vanity basin taps Gallery sink taps
Showers	Interior showers(s) Cockpit showers
Fresh Water System condition	The Fresh Water System was found to be in good order

22) Fuel System	
A plastic/stainless steel/painted steel fuel tank is located	Below the cockpit sole
Condition	The Fuel System was found not to be in good order

23) Gas Installation	
Gas system	The vessel is fitted with a gas system
Make of gas bottle (if applicable)	Campingaz
Gas bottle location (if applicable)	A cooker with a hob, grill and oven is located in the galley
The gas bottle should be stored inside a dedicated airtight and watertight locker that is fitted with a drain at the bottom which allows any escaped gas to flow away from the vessel. The locker drain should be linked to a skin fitting located at least 75mm above the waterline by a flexible hose that is formed into a continuous fall. The gas system comprises a length of copper pipe with a flexible hose at each end, armoured at the cooker's end, and a gas shut-off valve in the galley. The gas bottle regulator should be compliant with BS EN ISO 12164 or 16129 Annex M and should be marked with the word MARINE	
Gas bottle information (if applicable)	The gas bottle storage locker is solely used to store the gas bottle The gas bottle locker has a vent at the top The gas bottle locker has a drain no more than 25mm from the bottom of the locker The gas bottle drain hose is at least 19mm internal diameter The gas bottle locker drain hose is formed into a continuous fall he gas bottle storage locker drain exits the outside of the hull at least 75mm above the waterline The LPG gas bottle is free from excessive rust and is in sound condition The flexible gas hoses are free from damage The copper gas pipes are secure and free from corrosion The cooker is in sound condition

	The galley area around the cooker is adequately ventilated Cooker burners are fitted with flame failure devices Cooker burner flame failure devices operated within thirty seconds of the flame being blown out If more than one gas appliance a shut off valve is fitted near to each appliance

Surveyor's observations

The flexible gas hose should be replaced, as it is more than five years old. The gas regulator is not of marine grade and should be replaced with a regulator that is compliant with ISO 10239 Annex M. The gas system was otherwise found to be in good order.

24) Heads	
The following skin fittings and seacocks were found below the waterline	Heads inlet. The hull is further stiffened by plywood semi-bulkheads in the cabin and locker dividers, all of which are properly attached with well-wetted glassed-in bondings. All the bulkheads were properly bonded to the inside of the GRP hull with glass-fibre matting and resin, and all were found to be in sound condition.

Surveyor's observations

A sea toilet by Jabsco is located in a separate compartment. The heads were tested and functioned well. The hoses are formed into sufficiently high anti-siphon loops.

25) Interior observations	
Interior condition	The vessel’s interior was found to be in good condition

Surveyor's observations

The interior is created by gelcoat-faced GRP mouldings, which include a suspended floor, and by plywood bulkheads. There is a two-berth aft cabin, a separate heads compartment and a saloon. The saloon has settee-berths, a dining table and a galley with a sink, a stove, an oven and a working refrigerator. A working Eberspacher diesel cabin heating system and a working stereo system are fitted to the interior.



26) Electronic Gear and Navigation Aids	
Present aboard is the following equipment	Steering compass Fluxgate electronic compass GPS chart/plotter Depth sounder Speed log VHF radio Autopilot Radar
Condition	There are some issues with the vessel’s electronic equipment and navigation aids

Surveyor's observations

The autopilot and fluxgate compass are faulty and should be repaired or replaced.



27) Safety Equipment

The following items were found aboard	Lifebuoy Horn electric Boarding ladder Horn electric

28) The following recommendations should be acted upon before the vessel goes to sea

Repair or replace the trim tabs; Replace the flexible gas hose; Replace the gas regulator with a marine regulator that is compliant with ISO 10239 Annex M; Replace the missing engine oil dipstick O-ring seals; Have the engines and sterndrive units inspected and serviced by a marine engineer.

29) The following recommendations should be acted upon as soon as practical

Clean the propellers of fouling and test the engines again during a second sea trial; Replace the deck-mounted anchor windlass switches; Remove and refit the windshield using new gaskets; Consider replacing all 12-volt batteries; Repair or replace the autopilot; Repair or replace the electronic compass.

30) The following recommendations are of a cosmetic nature

Repair cracking found on the hull; Repair the cracking found on the superstructure.

31) Conclusion

“Merlin” is a generally sound example of this popular and safe family sports motorcruiser. She benefits from a good-sized interior but requires repair. A sea trial took place through the river Itchen and into the Southampton Water for approximately two hours in duration. During this time, the vessel steered and performed well and was fast to reach planing speed. The conditions on the day of the sea trial were calm. The vessel reached a maximum speed of twenty-eight knots, which was measured with and against the tide using the vessel's GPS and speed log. However, it should be noted that KAD32P engines should be able to run up to 3,800 RPM and the vessel should be able to reach thirty knots. It is likely that the revs and speed have been affected by the fact that the trim tabs did not work and that the propellers were slightly fouled with barnacles. The trim tabs should be repaired or replaced and the propellers should be cleaned before a second sea trial takes place.

32) Valuation

Once any defects listed in this report have been rectified, the vessel will be worth in the region of:

£60,000.00

A valuation is defined as the estimated amount for which an asset should exchange on the date of valuation between a willing client and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.

This valuation has been arrived at after investigating the price of similar vessels on the market and by considering the condition of the vessel.

33) Terms and Conditions

It is understood and agreed that the surveyor's report will be a factual statement of the examination carried out within stated limitations and with 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 particular purpose, nor 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. It is further agreed that no liability will arise for any consequential or economic loss, loss of profits, business interruption or loss of use. It implies no guarantee, no safeguard against subsequent defects, or defects not discovered at the time of the survey in woodwork or areas of the vessel which are covered, unexposed, or not accessible to the surveyor internally due to the installation of non-removable linings, panels and internal structures etc., or agreement and permission and instructions not being given to the surveyor to gain access to closed off areas.

The report carries no warranty regarding ownership of the vessel or any warranty regarding outstanding mortgage, charge or other debt there may be on the vessel.

It is understood that estimates of cost of repair given in the report are rough estimates. Clients should be aware that costs vary subsequently from agency to agency and written quotations should be obtained before decisions made.

Notice of a claim or suit must be made to Omega Yacht Services in writing within 90 days of the date the services were first performed. Failing which lack of notice shall constitute an absolute bar to the claim or suit against Omega Yacht Services.

Both parties undertake to maintain the confidentiality of all information supplied by each other and not to divulge such information to third parties without the prior authority of the other. Omega Yacht Services purports to provide an advisory service only, based on the opinion and experience of the consultant responsible for its compilation and issues such advice without prejudice nor guarantee. Dimensions and specifications given of the vessel are approximate.

These Terms and Conditions shall be governed by and construed in accordance with English law and any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the Courts of England and Wales.

34) Cathodic Protection

It is possible that the vessel is suffering from galvanic corrosion due to the poor continuity between the anodes and the metal components that they are supposed to protect, but it could also be stray current corrosion caused by a fault in the vessel's 12-volt DC or 230-volt AC shore power systems. It could also be caused by stray currents coming from other vessels on the marina or from the marina's shore power and electrical earth bonding systems. The marine electrician should also be requested to check for stray currents in the water around the vessel's berth and also check the marina's 230-volt shore power supply and earth/grounding system.

Stray current corrosion is a type of electrolysis where currents in AC and DC electrical systems wander from their intended path due to an electrical fault or short circuit. Stray current corrosion tends to be localised and manifests itself where the current leaves the vessel's metal objects which, in this vessel's case, could be the starboardside propeller shaft or the P-bracket.

Stray current corrosion occurs when metal with an electrical current flowing through it is immersed in a seawater saline electrolyte. The current can leave the metal and flow through the seawater to ground. This will cause corrosion of the metal at the point where the current leaves. Stray current corrosion can cause rapid deterioration of the metal. Stray current corrosion is different from galvanic corrosion in that galvanic corrosion is caused by connections between dissimilar metals of a vessel's underwater metal components, and utilizes the electrical potential of those dissimilar metals. Electrons flow from one dissimilar metal (the anode) to another dissimilar metal (the cathode)

Both stray current and galvanic action corrosion occur because various metals used in a boat have different electrical potential properties. The different potentials or willingness to give up electrons are measured on what is called a ‘galvanic scale’. Zinc sacrificial anodes are electrically bonded to bronze components, because zinc is higher on the galvanic scale and will be eroded away well before the propellers, brass seacocks and skin fittings. Zinc is present in the bronze and brass alloys. Zinc is easily dissolved away, turning bronze and brass fittings into copper and making them pitted, weak, unsafe and turning them pink in colour.

The metal that gives ‘waste-away’ electrons is called the anode. The metal that receives the electrons is the cathode, but the metals can’t exchange electrons unless an electrolyte, such as seawater, is present. Zinc anodes protect cathodes, such as the propellers and seacocks. Once the zinc anodes have been sacrificed, the propellers and seacocks will become an anode and the zinc content in the bronze and brass alloys will waste away in favour of the stainless steel propeller shafts.