

HAMBLE
MARINE
SURVEYS

Pre-Purchase Survey

‘[REDACTED]’

4th March 2016

MARINE SURVEYORS & CONSULTANTS
PO Box 356, Romsey, Hampshire, SO51 1DQ
Tel: 02380 458478, Mob: 0755 488 3606, Email: julian@hamblemarinesurveys.com
www.hamblemarinesurveys.com

'Dufour 385'



MARINE SURVEYORS & CONSULTANTS

PO Box 356, Romsey, Hampshire, SO51 1DQ

Tel: 02380 458478, Mob: 0755 488 3606, Email: julian@hamblemarinesurveys.com

www.hamblemarinesurveys.com

THIS IS TO CERTIFY that at the request of the purchaser [REDACTED]
[REDACTED] the undersigned surveyor
attended on the Sailing Yacht:-

'[REDACTED]'

Lying ashore Hamble Point Marina, 4th March 2016, for the purposes of a
Pre-Purchase Survey.

CONTENTS

Vessel Details
Scope of Survey
Survey Conditions
Recommendations

1. General Description
2. Hull, Deck & Structure
3. Steering, Stern Gear & Skin Fittings
4. Deck
5. Rig & Sails
6. Engine
7. Accommodation and On-Boards Systems
8. 12v & 220v Systems
9. Navigation Systems
10. Safety Equipment
11. Summary
12. Summary of Recommendations
13. Terms of Business

VESSEL DETAILS

Vessel Name: [REDACTED]
Manufacturer: Dufour Yachts
Model: Grand Large 385
Designer: Umberto Felci
Year of Build: 2006 build (2007 model)
HIN: FR DUFE3544K607
Construction: GRP
LOA: 11.72m*
Beam: 3.93m*
Draft: 1.95m*
Displacement: 6.980Kg
Ballast weight: 1,950kg
Water Capacity: 440Lts*
Fuel Capacity: 160Lts*
Propulsion: Volvo Penta D2-40 & Saildrive
Survey Location: Hamble Point Marina
Weather during survey: 10°C, Cloudy, showers, moderate breeze
Purpose of Survey: Pre-Purchase Survey
Date of Survey: 4th March 2016

Client:



* These particulars have not been verified and their accuracy cannot be guaranteed



Dufour 385 Grand Large

SCOPE OF SURVEY

The purpose of this survey is to establish the general condition of the structure of the vessel and her installed equipment and systems. All areas of the vessel were inspected where practicable and panels where needed were removed to gain access but not where adhesive or concealed fastenings have been used or by removal damage could be caused. All major items of equipment were switch tested and visually inspected externally where practicable, but not dismantled.

Where evidence of defective equipment or equipment in poor condition is noted further investigation may be suggested by approved service agents.

The condition of core materials where used in deck or hull lay-up were not assessed for strength or condition.

Painted surfaces were not scraped if found in good condition, but subsequently existing repairs or defects may not become apparent due to such coatings. Where access could not be gained within the scope of the survey for detailed inspection of part of the vessel including the below waterline antifouled surfaces, or her installed equipment, no liability will be accepted for the poor condition of such items should it later become evident.

The survey does not include testing or assessment of the engine(s) or machinery and any detailed report of those items should be commissioned from a qualified marine engineer. The performance data for all equipment including the propulsion system from the manufacturers is not referred to and no comparison is made.

The rig was inspected from deck level only. The rig and associated hardware were not tested under load or assessed for performance.

SURVEY CONDITIONS

This report has been prepared specifically for [REDACTED] 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 prior permission of Hamble Marine Surveys. Whilst all due care and diligence has been exercised in the collection of data for and the preparation of this report, Hamble Marine Surveys purports to provide an advisory service only, based on the opinion and experience of the individual consultant responsible for its compilation. Hamble Marine Surveys issues such advice in good faith and without prejudice and guarantee. Hamble Marine Surveys shall not be liable for any loss (including indirect and consequential loss) damage, delay, loss of market, costs, expenses of whatsoever nature or kind and however sustained or occasioned.

The survey 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 survey. It implies no guarantee, no safeguard against latent defects, subsequent defects, or defects not discovered at the time of survey in woodwork or areas of the vessel which are covered, unexposed, or not accessible to the surveyor internally and

externally due to the installation of non-removable linings, panels, coatings and internal structures etc., or agreement and permission and instructions not being given to the surveyor to gain access to closed off areas. If this survey does not discuss a specific item, equipment or machinery, it is not covered by the survey.

This survey is personal and confidential to the above named client and has no extended warranty if disposed of to a third party for any purpose. This report does not address stability, vessel performance or overall design, and no warranty is conveyed under these headings.

The attached Terms of Business of Hamble Marine Surveys should be read in conjunction with this report.

IMPORTANT NOTE

'██████████' is a 10 year old vessel. She is a used vessel and as such her installed equipment, machinery and systems are subject to normal wear and tear common for a vessel of this age. This survey is a snap shot of the vessel's condition on the day of the survey. It implies no warranty or provides no guarantee towards the equipment, machinery or systems present on this vessel. While every care is taken in assessing and documenting and where possible switch testing equipment on the day of the survey, it is inevitable that items due to wear and use will require future maintenance and possible upgrading and replacement.

RECOMMENDATIONS

Recommendations will be classified into three categories and appear in the report as *blue text*:-

- (A) Items requiring attention prior to next use of the vessel and represent a potential structural or safety issue.*
- (B) Items requiring attention as part of the on-going maintenance of the vessel and should be scheduled accordingly.*
- (C) Items of general maintenance, husbandry and advice for future good practice.*

Recommendations are made as a guide only and further information on any recommendations and suggestions made can be provided if required.

1. General Description

'██████████' is a 2006 built, 2007 model Dufour 385 Grand Large constructed in moulded GRP, finished in a white gelcoated exterior on the topsides and antifouled below the waterline. She is a Bermudian sloop rigged sailing yacht designed for cruising.

Her decks are moulded in GRP and finished with a teak veneer on the side deck and in the cockpit and with a gelcoat non-slip finish on the coachroof. Her interior is finished in varnished Moabi mahogany and veneered plywood arranged about a three cabin layout with two heads, galley, saloon and chart table area. She has a 40hp diesel auxiliary engine connected via a saildrive to a 2 blade fixed propeller.

At the time of the surveys on the 4th March 2016 the vessel was ashore at Hamble Point Marina, supported in a purpose made cradle providing for good access under and around the vessel save for the areas covered with the cradle patches.

The weather conditions were fair during the survey although rainfall later on in the survey meant moisture testing of the decks was not possible.

The vessel's own 12v systems were all live and a 220v shore power supply was provided.



Dufour 385 '██████████' ashore Hamble Point Marina 4th March 2016.

2. Keel

The vessel has a cast iron bulb keel secured to the hull with keel bolts visible in the interior bilge. The keel was noted in satisfactory condition with no evidence of obvious past impact damage to the surface or bulb.

The keel's antifouling coating was intact and noted to have good adhesion.

Some surface unevenness was noted about the keel but this is likely to be the result of the casting process.

The keel to hull join was secure with a cosmetic cord of sealant running around the joint. No obvious movement was noted.

All twelve keel bolts were visually inspected including the double nuts and backing plates. All were noted sound with no significant corrosion or obvious leakage. All the keel bolts would benefit from light abrasion and routine cleaning.

The sole boards were all lifted to access the keel bolts, although the box seat in the saloon could not be lifted as the aft port screw is snapped at the screw head.

RECOMMENDATIONS

- 1. It is suggested that all the keel bolts be routinely cleaned and monitored. The box seat in the saloon should be lifted and the snapped screw removed to permit easier access to the keel bolts for future maintenance. (C)*

3. Hull

The hull is constructed from hand laid moulded multi-mat GRP with a separate deck moulding secured to one another at the hull to deck join. The moulded hull is further strengthened by a bonded and laminated inner hull moulding. The inner moulding is moulded separately to the hull and the two bonded together using structural adhesives whilst the hull remains in the mould. The inner moulding is shaped to include box section stringers and surfaces onto which the interior furniture is affixed.

The hull was lightly hammer tap-tested below the water line externally checking for any areas of dry, loose or soft laminate common with delamination or faults during production. It should be stressed that even with consistent readings found during hammer tap-testing flaws in the laminate may still exist.

Hull Moisture Readings

24 areas of antifouling were scraped off the hull to reveal the white gelcoat coating underneath. These areas were tested with a Sovereign Quantum Marine Moisture Meter and a comparative reading* was obtained for each area.

| | |
|---------------------|-------------------------------------|
| Air Temperature | 10.7 °C |
| Surface Temperature | 9.4 °C |
| Relative Humidity | 46.6% |
| Weather Conditions | Scattered rainfall, Moderate breeze |

Readings were taken above the waterline as a baseline comparison and also below the waterline in 24 different locations. The above waterline readings were low and to be expected. The below waterline readings were also low and indicate minimal moisture uptake over the years, and the possibility that the vessel has been ashore for some time. The results for moisture are none the less encouraging for the vessel's age.

| Sovereign Quantum Relative Scale 1-100* | Shallow Readings | Deep Readings |
|--|------------------|---------------|
| Above Waterline | 15-16 | 16-17 |
| Below Waterline | 17-20 | 14-23 |

No blistering or surface deformation was noted on the underwater surfaces in those areas revealed by removing the antifouling coating.

**The comparative readings obtained with the moisture meter are only a guide and do not indicate an actual moisture content but more a comparative reading where figures between 15-18 for GRP pleasure vessel are regarded as normal. Vessels ashore for longer periods of time will generally give a lower reading as they 'dry out'. A low reading however does not indicate a future without osmosis or wicking and conversely a high reading does not necessarily indicate the likely hood of imminent osmosis or the presence of such. Annual winterisation ashore and use of good antifouling and epoxy coating systems can minimise the risk of osmosis and wicking.*

The blue hull antifouling was in good condition having clearly only recently been applied. The antifouling coating is likely to be adequate for this coming season afloat. The brand of antifouling applied is not known.

4. Topsides

The topsides were presented in polished white pigmented gelcoat with an adhesive blue and silver hull stripe and boot stripes at the waterline. The topsides were found in overall sound condition with no signs of significant surface deformation. Many minor marks and blemishes were noted including a couple of areas where past gelcoat repairs have clearly been undertaken.

The adhesive decals around the hull are marked and damaged in areas.

The topsides have cosmetic marks and blemishes in places, which are not uncommon on a vessel of this age. None are considered significant and all can be polished out with care if required.

A stainless steel bow protector was noted fitted. The bow protector is badly dented which is its designed purpose. The bow protector could be removed and repaired or replaced to improve its appearance.

On the starboard side of the topsides the stainless steel water deflector for the chain locker drain is deformed and will need replacing.



Image of the starboard chain locker drain deflector, noted deformed.

Around the transom a rubber strip was noted. The strip is designed to cover the hull to deck joint, but also to provide protection. The strip is badly marked and scuffed.

RECOMMENDATIONS

- 1. It is recommended that the topsides be further polished and gelcoat repaired where visible scratches remain. The bow protector if desired could be removed for repair or replacement for cosmetic reasons. The starboard chain locker drain deflector will need replacing as it is deformed. The decals will need repairing where damaged. (B)*
- 2. It is suggested that consideration be given to replacing the transom rubber strip as it is badly marked and scuffed. (C)*

5. Deck Moulding

The deck is constructed from a single GRP moulding which is of a sandwich construction and injection moulded with a PVC foam core. The deck was presented in a moulded textured finish over the vast majority of the coachroof with teak present in the cockpit on the seats and sole and on the side decks.

Where visible the gelcoated surfaces of the deck moulding were inspected and found in sound condition with no signs of surface stress cracking or obvious deformation. The visible gelcoated surfaces of the deck were extensively hammer tap-tested. No evidence of obvious voids or delamination to the deck moulding was noted.

Cosmetic marks and blemishes were present across the visible gelcoated deck areas, none considered significant and all easily removed with cleaning and polishing.

The deck was walked over and noted to be sound under foot with no evidence of obvious sponginess or flexing including creaking.

Due to the weather conditions the visible gelcoated areas of the deck could not be assessed for moisture and the condition of the core not assessed any further.

The teak areas of the deck were tap-tested for signs of detachment of the teak planks and visually inspected for evidence of excessive wear or splits in the teak planking.

The teak was in fair condition for the vessel's age especially taking into consideration that the vessel has been used previously for commercial charter.

The teak was found overall well adhered to the underlying deck, and with little evidence of detachment or excessive wear. The teak is weathered and slightly uneven, but at a rate to be expected for a 10 year old vessel. The estimated wastage is around 20-25% however this is an estimate only.

The teak was extensively hammer tap-tested down both side decks and foredeck. Two areas were noted on the deck to have split or lost underlying adhesion. This includes a radius shaped section of teak on the port forward corner of the foredeck where the coachroof slopes down to the flat deck. The second area is in way of the port shroud base and is again a small split in the curved planking. Both areas strictly speaking need little immediate attention, but replacement of the damaged planks would be suggested.

Further areas of teak detachment were noted in the cockpit and are discussed in Section 6.

RECOMMENDATIONS

- 1. It is suggested that the teak decking be further maintained and cared for to prevent excessive wastage due to aggressive cleaning and use of strong detergents. Care advice can be sought from the brokers and from Shipwrights specialising in teak*

care and maintenance. The two small areas of split teak noted should be lifted and replaced if desired. (C)

6. Cockpit

The cockpit area was well laid out and accessible from both sides of the deck. The cockpit sole and seats are laid with teak decking and the forward section of the cockpit protected by a canvas sprayhood.

The gelcoated surfaces of the cockpit were checked for gelcoat cracking and deformation. All were noted sound with minor marks and blemishes common for a vessel of this age.

The hinges of the cockpit lockers were inspected and several were noted loose including the port locker hinges and starboard aft locker hinges. All loose hinges will need re-securing.

The aft helm seat fold down to permit easier access into the cockpit and to access the liferaft stowage locker. The seat was articulated up and lowered and noted to function well. The pivot pin to starboard is secured using a split ring. The ring is deformed and needs replacing.

The teak in the cockpit was checked and inspected much the same as the teak on the decks. Several areas of teak were noted to have lost perimeter bonding which is not uncommon in high use areas. The areas include the two seating areas to each side of the cockpit just under the sprayhood and the teak on the starboard and port aft side teak panels in way of the helm positions. These areas were only detected using percussion testing. Visually they are not obvious and as such no immediate action is required. The areas should they start to spread will require re-bonding back down by sealant injection under the teak, and re-instating the sealant around the panel perimeters.

In the cockpit twin steering positions were noted and a fixed teak drop leaf teak cockpit table. The table was noted secure and the teak in fair condition.

RECOMMENDATIONS

- 1. It is recommended that the cockpit locker hinges all be checked and where loose re-secured. (B)*
- 2. It is suggested that the teak in the cockpit especially in the four areas highlighted be monitored. Should the loss of underlying adhesion spread then remedial repair work will be necessary. (C)*
- 3. It is suggested that the split ring on the starboard pivot of the lifting helm seat be replaced as it is deformed. (C)*

7. Hull to Deck Join

The hull to deck join was not visible or accessible for external inspection due to the presence of aluminium toe rail around the deck. The toe rails are bonded and screwed and in overall sound condition. The toe rail has many areas with cosmetic marks, abrasion and scratches.

The hull to deck join is overlapping and bonded and screwed.

Internally the hull to deck join was not accessible due to cosmetic panelling and joinery, but a small area aft and forward was visible in the aft cockpit lockers and chain locker respectively. The condition of the join was found to be sound in these locations with no signs of separation or movement.

8. Bulkheads & Internal Stiffening

The internal full and partial bulkheads were inspected, where accessible. All were found fully intact with no signs of separation or deformation. The bulkheads are non-structural and sit in moulded recesses in the deck and inner moulding and secured in place using a white sealant.

The internal stiffening of the hull is created by a bonded and laminated inner moulding around the floor and keel areas. The inner moulding is laminated to the hull inner surface and bonded using structural adhesives in way of the keel, elsewhere it is bonded to the hull using adhesives only. The bonding cannot be assessed due to restricted access. The sole board were lifted in the saloon where possible to permit inspection of the inner moulding and were visible under the cabin berths. The inner moulding was noted in sound condition with no obvious evidence of detachment from the hull and damage to the moulding itself.

9. Rudder & Steering

The rudder is of a GRP sandwich construction with a foam core and of a hung spade design. The rudder was inspected externally. The surface of the blade was hammer tap-tested and noted sound with no flaws in the laminate or obvious delamination.

No excessive sideways play was noted in the stock suggesting the upper and lower rudder bearings are in sound condition and remain serviceable.

The rudder stock is stainless steel in composition which was secured to a quadrant arrangement. The stock was only visible at its very top. Elsewhere the stock was not accessible for inspection.

The steering was found to operate smoothly lock to lock from the twin steering positions. All cables where visible were secure although they are in need of re-tensioning. The steering system is designed by Lewmar with twin wheels connected

to sprockets over which chains pass that are connected to stainless steel cables. The cables pass via conduits to the quadrant.

The moulded binnacles to each side of the cockpit were inspected. On the starboard side the underside of the binnacle was inspected via the aft cabin. The cushion was noted damp. Closer inspection reveals that the lower portion of the moulding under the pedestal has collected water. The source of the ingress is likely to be from around the compass.



Image of a inspection panel removed on the underside of the starboard binnacle accessible form the starboard aft cabin. Note the water pooling at the base of this moulding.

Both binnacles should be inspected and the leak on the starboard side rectified, the water that has collected removed and the cabin cushion dried.

The Lewmar steering wheels were noted secure, although the leathering covering over both wheels is badly weathered and will need replacing.

A Raymarine ST6002 pilot system is installed on the vessel. A rotary drive motor is installed under a joinery box in the starboard cockpit locker. The motor is connected directly to the starboard steering unit via a chain. Slack was noted in the system and the chain will need re-tensioning. The pilot system was operational but with the vessel ashore the system could not be assessed for operation or performance.

RECOMMENDATIONS

- 1. It is recommended that the leak from the starboard steering binnacle be located and rectified. The water that has collected at the base of the binnacle will need removing and the cushion removed for drying. As a precaution the port steering binnacle should be opened up and checked also. (B)*
- 2. It is recommended that both steering wheels have their leather covering replaced as it is weathered, the steering cables all re-tensioned and the chain on the pilot motor also re-tensioned. (B)*

10. Stern Gear

The stern gear includes a Volvo Penta saildrive and 2 blade fixed propeller.

The saildrive leg was in sound condition secure and without evidence of surface corrosion. An antifouling type coating was evident on the saildrive surface.

The service history of the saildrive is not known.

A cosmetic rubber gaiter surrounding the saildrive leg externally was sound.

The 2 blade propeller is manufactured by Volvo Penta. The propeller was secure to the saildrive and without significant corrosion.



Image of the stern gear.

A two blade rope cutter was fitted forward of the propeller. The unit was secure and operational.

The saildrive unit was inspected from within the engine compartment. The oil was dipped and noted clear in colour with no obvious emulsification and at the correct level.

The internal diaphragm seal was inspected and noted covered with what appears to be oil. The seal if over 7 years old should be replaced as recommended by Volvo Penta.

RECOMMENDATIONS

- 1. It is recommended that the saildrive be full checked and serviced by a Volvo Penta technician and the age of the internal rubber diaphragm seal determined. The oil covering the seal will need cleaning back and the source of the oil determined. (B)*

11. Cathodic Protection

The following anode were present:-

Saildrive anode noted in new condition and secure.

12. Skin Fittings & Through-Hull Apertures

No skin fittings or valves were dismantled as part of this survey, but all were inspected and operated.

The external skin fittings were inspected during the vessel time ashore. All were in apparent sound condition although all had been coated with antifouling. The heads inlet and outlet skin fittings were inspected further having their antifouling coating removed. Both were in sound condition with no pitting or obvious corrosion noted.

Internally the skin fittings and associated valves were all noted to have been made from a yellow metal. The precise grade of the alloy is not known but is likely to be a corrosion resistant brass alloy. Very close monitoring will be necessary of all skin fittings and valves for evidence of future corrosion and leakage.

The valves include:-

Engine raw water inlet on saildrive leg
Aft heads inlet and outlet
Aft heads shower bilge
Aft heads holding tank outlet
Forward heads inlet and outlet
Forward heads shower bilge

Aft heads sink drain
Forward heads sink drain
Galley sink drain

All valves were found to open and close although most valves were stiff to operate and several very stiff. All the seacock valves will need servicing with the vessel ashore.

All hoses attached to valves were noted secured using two stainless steel clips.

Two plastic skin fittings for the depth and speed transducers were inspected under the forward saloon sole. A blanking plug was present. Around the depth transducer grime had collected and the area was damp. It is possible a minor weep may be present around this transducer which will need further investigation.

All seacocks when not in use should be kept closed, routinely checked and annually serviced.

RECOMMENDATIONS

- 1. It is recommended that all seacocks valves be serviced as several are very stiff to operate, and the moisture around the depth transducer investigated further. (B)*

13. Ports, Windows and Ventilation

All deck hatches and opening coachroof portlights were checked and noted in sound condition. All were operated and found to open and close as designed. No evidence of past significant water ingress was noted in way of any hatches or portlights.

It was noted that the forecabin hatch has a passive vent installed through the glazing. The vent has been leaking and the forward cabin cushion is damp.

All hatch and portlight seals should be routinely cleaned to preserve their water integrity.

The access companionway was inspected secured using a removable Perspex washboard and sliding coachroof. Both were in sound condition. The washboard is located in a plastic gutter. The gutter at its top to both sides is damaged. The gutter should be replaced in due course.

The vessel was open and the washboard lock not tested.

RECOMMENDATIONS

- 1. It is suggested that all hatch and portlight seals be routinely cleaned to preserve their water integrity. (C)*
- 2. It is recommended that the passive vent on the forecabin deck hatch be re-sealed as it has been leaking and the cushion will need to be dried. (B)*

- 3. It is suggested that the plastic washboard gutter be replaced as it is damaged at its top on both sides of the companionway. (C)*

14. Pulpit, Pushpit, Guardwires

The pulpit and pushpits were inspected for damage and securing. The starboard pushpit is very slightly loose at its base.

The pulpit is deformed slightly to starboard. The rear base on the starboard side is clearly loose where it has been lifted. The pulpit will need removing for straightening and re-secured to the deck. Even though the pulpit is deformed slightly it remains secure and safe.

All stanchion posts were inspected. The two aft posts to port and the two mid posts to starboard are bent. The forward mid stanchion post base to starboard is cracked where the securing pin passes through the post base.



Image of one of the forward stanchion bases. Note the crack in the casting in way of the securing pin.

All the guardwires were checked and noted secure and correctly tensioned.

There are two transom guardwires which were both well secured.

RECOMMENDATIONS

- 1. It is recommended that the bent stanchion posts all be removed for repair, and the cracked stanchion post base to starboard be replaced. (B)*

15. Rigging Attachment Points

All the stainless steel rigging attachment points on the deck were inspected and checked for damage, deformation, corrosion and movement. All were found in sound condition.

The tie bars for the side deck shroud attachment points on deck were inspected inside the saloon. Both were secure with no evidence of movement or leakage.

The forestay and backstay rigging attachment points were inspected accessible via the chain locker and aft lazarette. They were secure with no signs of deformation, movement, leakage or corrosion.

16. Ground Tackle

A 16kg galvanised Delta type anchor was mounted on the bow roller attached to an estimated 30m of 10mm galvanised chain. The chain is secured to an unknown length of three-strand warp, but believed to be approximately 40m in length. The anchor was noted to be in fair condition. The chain attached to the anchor was heavily corroded especially at the final 2m length visible in the locker. The remainder of the chain in the base of the locker appears not as corroded, but would have to be removed for a more detailed inspection. The section of corroded chain can either be cropped or de-scaled and re-coated. It may prove easier to simply replace all the chain.

The vessel is fitted with a Quick electric anchor windlass. The windlass was not tested as the engine must be running for the system to be live. The hand control for the windlass is located in the forward cabin. The windlass was inspected. It was noted that the lifting cap over the chain pipe into the chain locker was missing along with the spring loaded chain guide.

The windlass motor was inspected from underneath accessible from a high level cupboard in the forward cabin. The locker was damp and it is clear the windlass securing bolts have been leaking. The windlass motor is corroded externally.

It is likely that the windlass will need unbolting from the deck to permit the motor to be fully cleaned of corrosion, the chain guide and cover of the chain pipe will need to be re-instated, and the windlass re-sealed and secured back in situ. The windlass will need testing.

The chain locker was noted largely sound. The hinges of the chain locker lid were noted loose.



Image of the windlass motor from in a cupboard at the front of the forward cabin. Note the corrosion over the motor evidencing water ingress.

RECOMMENDATIONS

- 1. It is recommended that the corroded chain that is visible be cropped or it may prove easier to simply replace all the chain. (B)*
- 2. It is recommended that the windlass will need unbolting from the deck to permit the unit to be fully serviced and corrosion cleaned from the motor casing. The cupboard in the forward cabin will need cleaning out, and the missing cover and guide on the windlass re-instated. (B)*
- 3. It is recommended that the hinges of the chain locker lid be re-secured. (B)*

17. Deck Fittings

Deck fittings including padeyes and mooring cleats were all inspected. These were all found in sound condition with no signs of distortion, corrosion or movement. Where possible the underside of all deck fittings in the cabin were inspected for evidence of movement or leakage.

The starboard aft mooring cleat is very slightly loose and should be re-secured.

On the foredeck a padeye for the inner forestay was inspected from inside the cupboard housing the windlass motor in the forecabin. The securing bolts are rust stained and may indicate a weep. It was noted that the bolts for the padeye have small penny washers in use. For a padeye that is designed to support an inner forestay, it would be expected that a large backing plate should be utilised so spreading the load, or possibly an L-shaped angle bolted to the deck and forward bulkhead.

RECOMMENDATIONS

- 1. It is suggested that the starboard aft mooring cleat be re-secured. (C)*
- 2. It is recommended that the foredeck padeye be re-sealed back down and a larger backing plate utilised or an L-shaped brace bolted to the deck and bulkhead. (B)*

18. Canvas

The following canvas items were noted on the vessel;

Sprayhood 5/10
Mainsail Stackpack Bag 4/10
UV strip on the headsail – not inspected fully
Wheel Covers – 6/10
Table cover – 6/10

The stainless steel frames for the sprayhood were noted well secured and sound.

RECOMMENDATIONS

- 1. It is suggested that the canvas covers all be sent for cleaning and servicing. It is likely that the sprayhood and stackpack are nearing the end of their lifespan and will need replacing in due course. (C)*

19. Rig & Sails

A double spreader silver anodized aluminium mast made by Sparcraft was inspected from deck level. The mast was in sound condition as far as could be determined from an external visual inspection from deck level. Minor marks and scratches were noted on the mast section, but none considered significant. The mast was in-column with no adverse twist or bend. The mast is deck stepped with a separate mast compression post below decks transferring load from the deck to the hull just forward of the keel.

At the base of the mast compression post rust staining was noted. The source of the staining is unclear. The area should be cleaned back and monitored.

The spreaders were all inspected from deck level and found to be straight and in line. The rig was shaken and no obvious play was noted in the spreader roots, although this is not a definitive test.

The boom is also made by Sparcraft and in sound condition. The boom section is without obvious damage and noted straight when sighted along its length. The gooseneck fittings were found in sound condition and secure with wear present common with a vessel of this age and considered serviceable. It was noted that the vertical long split pin in use on the boom end of the articulating joint at the goose neck appears damaged. The pin should be extracted and replaced.

On the underside of the boom where stainless steel eyes secure for the mainsheet blocks, corrosion is developing. This is not uncommon, but should be rectified before the pitting becomes significant. These areas in question should be cleaned back and if necessary the stainless steel fittings moved slightly to permit cleaning before being re-riveted in place utilising a barrier compound.

A Sparcraft rigid spring vang was inspected. The vang was secure to the boom and mast. The mainsheet was released and the boom noted to rise slightly suggesting the boom based on a non-loading test is operational.

The standing rigging is 1/19 stainless steel wire and found from an external inspection to be in satisfactory condition. The rigging is arranged in a continuous manner tensioned at deck level using bottle screws. Split pins were present and all found correctly installed and over taped. The rigging is circa 10 years old. It is likely that if required by your insurance provider, the rigging may need replacing in due course.

The standing rigging was inspected visually from deck level. The condition of the rigging screws were sound, although the condition of the rigging aloft was not assessed.

A removable inner forestay is fitted to the vessel and noted secured in its stowed position at the time of the survey.

It is not clear when the rig was last checked and re-tuned, but it is likely that the rig is due a full check aloft and re-tune by a professional rigger.

The running rigging about the vessel was found in generally fair condition. A mixture of braid on braid pre-stretched cordage was in use. The running rigging appears to be original and remains serviceable. Wear and weathering was noted on several control lines including the reef lines at the boom end. With the vessel back afloat all the halyards first should be checked fully along their length and replaced as necessary. The control lines are less critical and should be replaced as necessary.

All the blocks for line handling on the vessel were inspected. All were found in sound condition with no signs of excessive wear, corrosion or damage.

The two genoa turning blocks mounted on cars on the side decks were inspected. The port side sheave is worn and on the starboard side the securing bolt through the sheave appears to be working loose.

All other hardware about the vessel including genoa cars and tracks and turning blocks were all found in serviceable condition. Continued monitoring and upgrading is

prudent to prevent failure of deck hardware especially when undertaking extended cruising. The deck hardware was inspected with the vessel ashore and static. The deck hardware was not assessed under load.



Image of the port side genoa turning block. Note the wear to the sheave.

The winches on the vessel are all made by Harken. All the winches were individually 'spun' tested and found to operate correctly. Two winch handles were noted. Both are worn and the locker device on both is missing.

The Facnor headsail furling system was inspected and noted sound. The system was not tested under load, but rotated smoothly. It was noted that play was evident about the two tie bars to each side of the forestay under the furling drum. Plastic bushes are fitted to reduce play, it is suspected the bushes are become worn and should be replaced.

The mainsail is slab reefed with three reef points. The mainsail was not hoisted with the vessel ashore. The mainsail appears in largely sound condition, however the condition of the sail cannot be fully assessed with the sails flaked on the boom in a stackpack. The sail will need to be sent to a sail loft for assessment or hoisted and placed under load.

The headsail was noted stowed below in the aft cabin. The headsail appears original supplied with the vessel made by Elvstrom. Again the sail could not be fully assessed.

Under the forward cabin berth a storm jib was note din its sail bag. The sail appears in good condition, although it was not unpacked or assessed further.

RECOMMENDATIONS

- 1. It is recommended that the rig be fully checked and re-tuned by a qualified rigger, and the standing rigging replaced in due course, although in this regard I would suggest your insurance company be consulted. (B)*
- 2. It is recommended that the genoa side deck turning blocks be inspected by a rigger. It is likely that the port sheave will need replacing and the starboard block securing pin re-secured. (B)*
- 3. It is recommended that the vertical split pin in us on the gooseneck fitting be replaced as it is damaged. (B)*
- 4. It is suggested that consideration be given to closely monitoring the stainless steel fittings on the underside of the boom. If possible the corrosion that is developing should be cleaned back. (C)*
- 5. It is suggested that the Facnor furling system be checked by a rigger. Attention should be paid to the bushes located at the base of the unit where secured to the forestay. The bushes appear worn. (B)*
- 6. It is suggested that the winch handles be replaced as they are worn. (C)*

20. Engine Installation

The engine is located in a purpose made machinery compartment under the cockpit sole. Access to the engine compartment is via lifting companionway steps, and removable panel to each side of the compartment. The gas strut securing on the underside of the companionway steps was loose.

The engine compartment is well sound proofed on all faces and doors. The fire retardant properties of the sound proofing were not assessed. No fire extinguisher is installed in the engine compartment.

The engine is a Volvo Penta D2-40 Serial No. 5102002278

The engine hours are displayed at 2,939hrs as indicated on the digital rpm display.

The service history of the engine is not known.

The engine was visually inspected only. This inspection does not constitute a full engine survey. It is strongly recommended that a Volvo Penta technician be engaged to fully check and if necessary service the engine.

The engine and associated fittings were found in overall fair condition. Corrosion is evident across the upper surfaces of the engine around the injectors and the heat exchanger which may be leaking. There is evidence of re-spraying of the engine's exterior.

The engine bilge was noted largely clean and dry, however water was noted to have become trapped around the front of the moulded engine sump.

All external hoses and cabling were found well secured and without any obvious wear damage. The raw water anti-siphon unit secured up high to port was noted loose.

The engine mounts were found in fair condition.

The fuel tank is located under the starboard cabin berth. The tank was of a plastic construction and noted secured. The fuel pick-ups were secure and no obvious leakage noted. All rubber ISO 7840 fuel lines were checked along their length and noted sound.

The engine oil was dipped and found without evidence of moisture at the correct level but dark in colour.

The coolant reservoir was inspected at the front on the engine. The fluid was at the correct level.

The exhaust system was traced along its length and noted sound and the water trap secure.

The engine compartment is actively ventilated and all ducting noted intact.

The engine controls are located on the port side of the cockpit. The engine was not started with the vessel ashore or assessed further.



Image of the engine installation.

RECOMMENDATIONS

1. *It is recommended that the engine be fully checked and if necessary serviced by a Volvo Penta technician. The corrosion noted on the engine externally will need to be addressed, the anti-siphon re-secured and the suspected leak around the heat exchanger investigated further. It would be suggested that the service history of the engine be determined, and discussed with a service agent keeping in mind the high engine hours. (B)*
2. *It is recommended that the gas strut secured under the companionway steps be re-secured. (B)*
3. *It is suggested that the water trapped at the front of the engine bilge be cleaned out. (C)*

21. Accommodation

The interior was in a largely clean and dry condition at the time of the survey.

The interior joinery is varnished Moabi Mahogany veneered plywood and solid hardwood capping with veneered sole boards and vinyl panelling. The interior joinery was in fair condition although the wear about the galley and chart table and companionway steps indicates clearly that the vessel has been used in the past for charter use. Cosmetic marks and blemishes were noted about the interior joinery and more significant wear noted in the areas already mentioned. The sole boards are also in a chipped and worn state and will need renovation. It was noted that the joinery is water stained at the base of the companionway.

The interior joinery is likely to benefit from extensive renovation and repair.

The soft furnishings were fabric covered in the saloon and cabins. The fabric is in fair condition although the cushion covers in the starboard aft cabin and forward cabin are damp from leaks already covered earlier in this report.

The layout is based around a three cabin arrangement with two heads and saloon with chart table area and galley.



Dufour 385 layout

The stowage about the vessel is extensive with all cupboards and locker tested and all found to operate correctly. All doors were operated. The door handles are loose on the aft heads door. It was also noted that the veneer on this door edge is coming loose and missing in areas. Many of the push locks on cupboard doors are 'sticking' and will need lubrication and adjustment.

RECOMMENDATIONS

- 1. It is recommended that the interior joinery undergoes renovation where marked or damaged and at the base of the companionway where water stained. The veneer where missing and loose on the aft heads door will need repairing. (B)*
- 2. It is recommended that the aft heads door handles be repaired as they are loose. (B)*
- 3. It is suggested that all push latches be lubricated where 'sticking'. (C)*

22. Gas Installation

A purpose made gas locker located back aft in the cockpit to port was inspected. No gas bottles were present in the locker at the time of the survey. The age of the regulator and flexible hose in the locker is unclear. If over 5 years old the regulator and hose should be replaced as a precaution. The gas locker would benefit from being cleaned out as it is rust stained at its base.

The locker is drained and the lid secure.

A copper rigid gas line connecting the gas locker to the galley was not accessible along its length.

A two burner Eno marine cooker was inspected at the galley. The cooker was inspected visually, but not tested or assessed for gas leaks. The cooker will need cleaning and testing, and where corrosion was noted these areas cleaned back.

A gas shut off valve was located under the galley.

RECOMMENDATIONS

- 1. It is recommended that the gas system including the cooker unit is pressure tested and assessed by a qualified Gas Safe technician. It is further recommended that the flexible rubber hoses and regulator in the gas locker be replaced if their age is over 5 years old. (B)*
- 2. It is suggested that the gas locker base be cleaned as it is rust stained. (C)*

23. Fresh Water System

The fresh water system is serviced by two plastic tanks, located under the port aft cabin berth and under the forward berth. The tanks were not accessible for a detailed inspection.

A Flojet water pump is installed under the saloon seating to starboard. The installation was inspected and switch tested. The pump was loose on its mounts and the manifold for the selector switches for the two tanks was also loose.

Taps in the two heads and galley and on the transom were all tested and noted to function well with a good pressure of water.

The heads compartments are served by shower bilge pumps. Both pumps were operational. The forward heads shower pump was noted loose.

The hot water system is serviced by a hot water storage tank located under the saloon seating. The hot water heating system is achieved via a calorifier system and immersion 220v system. All connections appeared intact with no evidence of leakage. The hot water immersion system was turned on and noted to heat water over a 1 hour period.

An electric bilge pump and manual bilge pumps are installed on the vessel. Both are operational. The securing pin on the operation arm of the cockpit manual bilge pump is working loose and will need to be re-secured back in position.

RECOMMENDATIONS

- 1. It is recommended that the water pump and tank manifold unit be re-secured under the saloon seating to starboard. (B)*
- 2. It is recommended that the forward shower bilge pump be re-secured under the heads sink unit. (B)*
- 3. It is suggested that the pin securing the operation arm on the cockpit manual bilge pump be re-secured as it is working loose. (C)*

24. 12v & 220v Electrical Systems

A full 12v and 220v electrical system is installed on the vessel.

The 12v system is powered by 2 x 12v 105Ah service batteries and a 12v 102Ah engine start battery. The batteries were secured within a battery boxes aft of the engine compartment.

All battery terminals were in good condition and with no evidence of corrosion.

The state, health and age of the batteries are not known.

At the chart table a well labelled and clear 12v switch panel was inspected. The panel switches were all switch tested and all found to operate correctly as labelled.

Where possible all 12v wiring through out the vessel was inspected. The cabling remains well secured and sound where visible.

All interior lighting was checked. Several of the interior lights are not working which may be defective bulbs. These include the forward galley down light, standard aft saloon reading light, chart table light and both reading lights in the forward cabin while working were both loose.

A VDO CD/Radio head unit was noted at the chart table. The unit was live and the saloon speakers noted to work. Cockpit speakers are fitted, but they did not appear to be working.

A small inverter unit was noted under the chart table seat. The unit appears to be wired to a single socket at the chart table. The inverter when turned on did not appear to function. The wiring to the inverter was noted loose and will need checking.

The mast is electrically grounded to the keel should the vessel be struck by lightning. The grounding cable is broken by virtue of the fact it is badly corroded.



Image of the forward bilge. Note the base of the compression post and green corroded grounding strap which has parted.

A 220v shore power cable secured to a socket in the starboard aft lazarette locker was inspected and found in sound condition. The shore power system operated as

designed via a RCD fuse box under the navigators seat at the chart table, with a Quick 25amp battery charger noted to operate correctly when turned on. The performance of the battery charger was not assessed.

RECOMMENDATIONS

- 1. It is recommended that the interior lights not currently working all be brought back into operation, and the two forward cabin reading lights that are loose re-secured. (B)*
- 2. It is suggested that the cockpit stereo speakers be brought back into operation. (C)*
- 3. It is recommended that the inverter under the chart table seat be brought back into operation with the wiring to the unit checked and secured. (B)*
- 4. It is recommended that the mast grounding strap be replaced at the base of the compression post. (B)*

25. Heating & Refrigeration

A Webasto heating system is installed on the vessel. The heater unit is located back aft to starboard in the lazarette. The heater unit was noted to run, and heat produced from each of the vents in the aft cabins, saloon, heads compartments and forward cabin. The heat flow from the saloon and forward cabin was poor. Closer inspection reveals the ducting is not correctly secured together under the foot of the aft starboard cabin berth. The two aft cabin heater vents are missing their covers. Replacement vent with the directional controls on should be re-instated.

The fuel supply to the heater unit is via a plastic hose connected to the top of the fuel tank. No shut off valve was noted.

It was also noted that the heater exhaust hose is secured to the engine exhaust hose using a clip. The clip is corroded and will need replacing.

A top loading Isotherm fridge was inspected at the galley. It was noted to run when activated on the 12v switch panel.

The fridge compressor is located under the cooker installation and was noted secure and in apparent sound condition, although rust staining was noted over the unit and its base.

The service status of the fridge unit is not known.

The fridge unit was empty and clean.

RECOMMENDATIONS

- 1. It is recommended that the heater ducting be re-secured back together under the starboard aft berth where it has come apart. The heater fuel supply lines should be replaced for copper lines as is good practice, and a shut off valve installed. The*

securing clip for the heater exhaust where secured to the engine exhaust hose should be replaced as it is corroded. (B)

- 2. It is suggested that the directional vents be re-instated on the aft cabin ducting where missing. (C)*

26. Sanitation System

The vessel has Jabsco manual sea toilets installed in the two heads. The hosing to the heads was secure with no evidence of past leakage. The aft heads pumps to a holding tank located under the saloon sole. The holding tank is stainless steel and well secured with all hosing intact.

The holding tank is emptied via a manual pump located in the aft heads compartment. There was no holding tank level gauge. It is unclear if the tank is empty or not.

The forward heads pumps to direct overboard discharge.

Both marine toilets were inspected as far as possible with the vessel ashore, but not tested.

27. Electronic & Navigation Systems

The following electronic & navigational equipment was inspected and switch tested.

| | | |
|----------------------------|-----------------------|-------------|
| Icom IC-M505 DSC VHF | Nav Station | Working* |
| 2 x Raymarine E80 Plotters | Nav Station & Cockpit | Working |
| Raymarine Raydome | Mast Mounted | Working |
| Raymarine GPS Antenna | Transom | Working |
| ST6002 Autopilot display | Binnacle | Working |
| ST60+ Tridata Display | Nav Station | Working |
| 2 x ST60+ Wind Displays | Binnacles | Not Working |
| 2 x ST60+ Graphic Displays | Binnacles | Working |
| Magnetic Compasses x 2 | Binnacles | Working |

*No position data was being received on the VHF at the time of the survey suggesting an incomplete Seataalk data connection.

The two wind displays were live, but no wind data was being received.

An NMEA interface socket was noted at the chart table for a laptop to be used utilising Raytech navigational software.

The two chart plotters are connected to one another via a NMEA interface. The cockpit display appears to be the slave.

A masthead VHF antenna and Wind transducer and Windex were all noted correctly orientated and secure.

The depth and speed data were not assessed for their accuracy with the vessel ashore.

The ST60+ displays on the port binnacle were loose.

RECOMMENDATIONS

- 1. It is suggested that all the navigational equipment be checked for accuracy and where re-calibration or testing is needed it is done so prior to using this equipment for navigation. This is to include cartography in use by the plotters. (C)*
- 2. It is recommended that the wind transducer data feed be brought back into operation. (B)*
- 3. It is recommended that the Seatalk data feed be re-established with the VHF so that the DCS functionality is operational. (B)*
- 4. It is recommended that the ST60+ displays on the port binnacle be re-secured where loose. (B)*

28. Safety Equipment

The following safety equipment was found on the vessel. The equipment was noted, but not tested unless indicated otherwise.

- Manual & Electric bilge pumps - Working
- Day Shapes
- Flares expiry 2018
- Radar Reflector
- Emergency tiller
- 3 x 1 kg 5A 34B Powder extinguisher (expiry 2015)
- 1 x 1kg 8A 34B Powder extinguisher (expiry 2015)
- 1 x 4kg 21A 113B Powder extinguisher (expiry 2015)
- Brittany Kedge Anchor
- Assorted spares
- 2 x smoke alarms
- Pilot Gas Alarm – not working
- Fire Blanket
- Fog Horn
- Inflatable Tender – condition not assessed
- Various fenders and assorted warps all in serviceable condition
- Navigation lights including:-

| | |
|------------------------|---------|
| Port (red) | Working |
| Starboard (Green) | Working |
| Steaming Light (White) | Working |
| Anchor Light (White) | Working |

| | |
|---------------------|---------|
| Stern Light (White) | Working |
| Deck Flood Light | Working |

The two bow navigation lights were loose.

RECOMMENDATIONS

- 1. It is recommended that the existing safety equipment is serviced and checked for suitability for the vessel's intended use. Where expired or defective equipment is found these should be serviced or replaced. Suitable safety equipment should be carried on the vessel to compliment the anticipated use of the vessel, area of operation and number of crew. (B)*
- 2. It is suggested that the bow navigation lights be re-secured. (C)*

29. Summary

'██████████' was found in overall fair condition for her age, with every indication that the vessel has been well used over the years both in commercial charter and privately. This is evident by the wear that was noted to the interior joinery and the high engine hours.

No significant structural or safety related recommendations were made in the report, with all recommendations and suggestions requiring implementation to preserve the safe future operation of the vessel.

With the recommendations and suggestions in this report implemented and a strong pro-active approach to future on-going maintenance, '██████████' will continue to be a well found cruising yacht for the future.



Hamble Marine Surveys

Marine Surveyors & Consultants
PO Box 356, Romsey
Hampshire, SO51 1DQ
Tel: 0755 488 3606
Email: julian@hamblemarinesurveys.com
Web: www.hamblemarinesurveys.com

Report compiled by Julian Smith AssocIIMS
Hamble Marine Surveys
6th March 2016



30. Summary of Recommendations & Suggestions

Recommendations & Suggestions will be classified into three categories;

- (A) Items requiring attention prior to next use of the vessel and represent a potential structural or safety issue.*
- (B) Items requiring attention as part of the on-going maintenance of the vessel and should be scheduled accordingly.*
- (C) Items of general maintenance, husbandry and advice for future good practice.*

(A) Recommendations - *(Items requiring attention prior to next use of the vessel and represent a potential structural or safety issue).*

(B) Recommendations - *(Items requiring attention as part of the on-going maintenance of the vessel and should be scheduled accordingly).*

- 1. It is recommended that the topsides be further polished and gelcoat repaired where visible scratches remain. The bow protector if desired could be removed for repair or replacement for cosmetic reasons. The starboard chain locker drain deflector will need replacing as it is deformed. The decals will need repairing where damaged. (B)*
- 2. It is recommended that the cockpit locker hinges all be checked and where loose re-secured. (B)*
- 3. It is recommended that the leak from the starboard steering binnacle be located and rectified. The water that has collected at the base of the binnacle will need removing and the cushion removed for drying. As a precaution the port steering binnacle should be opened up and checked also. (B)*
- 4. It is recommended that both steering wheels have their leather covering replaced as it is weathered, the steering cables all re-tensioned and the chain on the pilot motor also re-tensioned. (B)*
- 5. It is recommended that the saildrive be full checked and serviced by a Volvo Penta technician and the age of the internal rubber diaphragm seal determined. The oil covering the seal will need cleaning back and the source of the oil determined. (B)*
- 6. It is recommended that all seacocks valves be serviced as several are very stiff to operate, and the moisture around the depth transducer investigated further. (B)*
- 7. It is recommended that the passive vent on the forecabin deck hatch be re-sealed as it has been leaking and the cushion will need to be dried. (B)*
- 8. It is recommended that the bent stanchion posts all be removed for repair, and the cracked stanchion post base to starboard be replaced. (B)*
- 9. It is recommended that the corroded chain that is visible be cropped or it may prove easier to simply replace all the chain. (B)*
- 10. It is recommended that the windlass will need unbolting from the deck to permit the unit to be fully serviced and corrosion cleaned from the motor casing. The cupboard in the forward cabin will need cleaning out, and the missing cover and guide on the windlass re-instated. (B)*
- 11. It is recommended that the hinges of the chain locker lid be re-secured. (B)*
- 12. It is recommended that the foredeck padeye be re-sealed back down and a larger backing plate utilised or an L-shaped brace bolted to the deck and bulkhead. (B)*

13. *It is recommended that the rig be fully checked and re-tuned by a qualified rigger, and the standing rigging replaced in due course, although in this regard I would suggest your insurance company be consulted. (B)*
14. *It is recommended that the genoa side deck turning blocks be inspected by a rigger. It is likely that the port sheave will need replacing and the starboard block securing pin re-secured. (B)*
15. *It is recommended that the vertical split pin in us on the gooseneck fitting be replaced as it is damaged. (B)*
16. *It is suggested that the Facnor furling system be checked by a rigger. Attention should be paid to the bushes located at the base of the unit where secured to the forestay. The bushes appear worn. (B)*
17. *It is recommended that the engine be fully checked and if necessary serviced by a Volvo Penta technician. The corrosion noted on the engine externally will need to be addressed, the anti-siphon re-secured and the suspected leak around the heat exchanger investigated further. It would be suggested that the service history of the engine be determined, and discussed with a service agent keeping in mind the high engine hours. (B)*
18. *It is recommended that the gas strut secured under the companionway steps be re-secured. (B)*
19. *It is recommended that the interior joinery undergoes renovation where marked or damaged and at the base of the companionway where water stained. The veneer where missing and loose on the aft heads door will need repairing. (B)*
20. *It is recommended that the aft heads door handles be repaired as they are loose. (B)*
21. *It is recommended that the gas system including the cooker unit is pressure tested and assessed by a qualified Gas Safe technician. It is further recommended that the flexible rubber hoses and regulator in the gas locker be replaced if their age is over 5 years old. (B)*
22. *It is recommended that the water pump and tank manifold unit be re-secured under the saloon seating to starboard. (B)*
23. *It is recommended that the forward shower bilge pump be re-secured under the heads sink unit. (B)*
24. *It is recommended that the interior lights not currently working all be brought back into operation, and the two forward cabin reading lights that are loose re-secured. (B)*
25. *It is recommended that the inverter under the chart table seat be brought back into operation with the wiring to the unit checked and secured. (B)*
26. *It is recommended that the mast grounding strap be replaced at the base of the compression post. (B)*
27. *It is recommended that the heater ducting be re-secured back together under the starboard aft berth where it has come apart. The heater fuel supply lines should be replaced for copper lines as is good practice, and a shut off valve installed. The securing clip for the heater exhaust where secured to the engine exhaust hose should be replaced as it is corroded. (B)*
28. *It is recommended that the wind transducer data feed be brought back into operation. (B)*
29. *It is recommended that the Seataalk data feed be re-established with the VHF so that the DCS functionality is operational. (B)*
30. *It is recommended that the ST60+ displays on the port binnacle be re-secured where loose. (B)*
31. *It is recommended that the existing safety equipment is serviced and checked for suitability for the vessel's intended use. Where expired or defective equipment is found these should be serviced or replaced. Suitable safety equipment should be carried on the vessel to compliment the anticipated use of the vessel, area of operation and number of crew. (B)*

(C) Suggestions - (Items of general maintenance, husbandry and advice for future good practice).

1. *It is suggested that the bow navigation lights be re-secured. (C)*
2. *It is suggested that the directional vents be re-instated on the aft cabin ducting where missing. (C)*
3. *It is suggested that all the navigational equipment be checked for accuracy and where re-calibration or testing is needed it is done so prior to using this equipment for navigation. This is to include cartography in use by the plotters. (C)*
4. *It is suggested that the cockpit stereo speakers be brought back into operation. (C)*
5. *It is suggested that the pin securing the operation arm on the cockpit manual bilge pump be re-secured as it is working loose. (C)*
6. *It is suggested that the gas locker base be cleaned as it is rust stained. (C)*
7. *It is suggested that all push latches be lubricated where 'sticking'. (C)*
8. *It is suggested that the water trapped at the front of the engine bilge be cleaned out. (C)*
9. *It is suggested that the winch handles be replaced as they are worn. (C)*
10. *It is suggested that consideration be given to closely monitoring the stainless steel fittings on the underside of the boom. If possible the corrosion that is developing should be cleaned back. (C)*
11. *It is suggested that the canvas covers all be sent for cleaning and servicing. It is likely that the sprayhood and stackpack are nearing the end of their lifespan and will need replacing in due course. (C)*
12. *It is suggested that the starboard aft mooring cleat be re-secured. (C)*
13. *It is suggested that the plastic washboard gutter be replaced as it is damaged at its top on both sides of the companionway. (C)*
14. *It is suggested that all hatch and portlight seals be routinely cleaned to preserve their water integrity. (C)*
15. *It is suggested that the teak in the cockpit especially in the four areas highlighted be monitored. Should the loss of underlying adhesion spread then remedial repair work will be necessary. (C)*
16. *It is suggested that the split ring on the starboard pivot of the lifting helm seat be replaced as it is deformed. (C)*
17. *It is suggested that consideration be given to replacing the transom rubber strip as it is badly marked and scuffed. (C)*
18. *It is suggested that the teak decking be further maintained and cared for to prevent excessive wastage due to aggressive cleaning and use of strong detergents. Care advice can be sought from the brokers and from Shipwrights specialising in teak care and maintenance. The two small areas of split teak noted should be lifted and replaced if desired. (C)*
19. *It is suggested that all the keel bolts be routinely cleaned and monitored. The box seat in the saloon should be lifted and the snapped screw removed to permit easier access to the keel bolts for future maintenance. (C)*



MARINE SURVEYORS & CONSULTANTS

PO Box 356, Romsey, Hampshire, SO51 1DQ

Tel: 02380 458478, Mob: 0755 488 3606, Email: julian@hamblemarinesurveys.com

www.hamblemarinesurveys.com

Terms of Business

IT IS AGREED that:-

- A. These Surveyor's Terms of Business shall form part of the Agreement between the Surveyor and the Client; and**
- B. The Surveyor shall perform the Scope of Work as set out in the Agreement subject to the following terms:**
 - 1. Services**
 - 1.1 The Surveyor shall undertake the services to which these terms relate with reasonable care, skill and diligence.
 - 1.2 The Client's instructions and the scope of the Surveyor's services hereunder, are as defined in the Scope of Work. Any subsequent changes or additions to the Scope of Work must be agreed in writing by the Parties.
 - 1.3 The Client undertakes to:
 - 1.3.1 ensure that full instructions are given to the Surveyor and are provided in sufficient time to enable the required services to be performed effectively and efficiently. The Client agrees to disclose to the Surveyor all relevant information of which they have knowledge, or to which they have access, in relation to the Vessel to be surveyed;
 - 1.3.2 in consultation with the Surveyor, procure all necessary access to premises and vessels (including lift-out, trials and facility for inspection ashore and afloat as appropriate) for no less than such a time as shall in each particular circumstance be reasonable to enable all appropriate inspections and tests to be undertaken or performed; and
 - 1.3.3 ensure that all appropriate safety measures are taken to provide safe and secure working conditions provided always that in the event of any breach of the requirements of Clauses 1.3.1 to 1.3.3 causing any failure on the Surveyor's part to undertake the Scope of Work the Client shall be responsible for all consequential costs incurred by the Surveyor and in respect of any element of the Scope of Work undertaken.
 - 1.4 Pursuant to the Scope of Work, the Surveyor will inspect the Vessel as thoroughly as is practicable and endeavour to comment on the more important items where, in the Surveyor's reasonable opinion, major costs consequences are considered likely to arise. It follows that the Surveyor cannot comment on every minor matter but the Surveyor will try to point out where small factors may become more serious.
 - 1.5 The Surveyor's intention is to report on the condition of the hull(s), superstructure and fixtures (if any) of the Vessel so far as can reasonably be ascertained from a visual inspection of the Vessel at its location at the time of survey. The Client accepts that the Surveyor's survey report(s) cannot cover hidden, unexposed or inaccessible areas of the Vessel, (for clarity this includes core materials, the hull where antifouled and painted surfaces) and neither can the Surveyor undertake to investigate areas that the Surveyor believes to be inaccessible at the time of inspection. Where the Surveyor is unable to gain access to areas commonly accessible, the Surveyor will endeavour to point this out.

- 1.6 If a rig is stepped at the time of the survey the inspection will cover only those areas visible from deck level. The Client accepts that the Surveyor's survey report(s) cannot cover hidden, unexposed or inaccessible areas of the rigging and spars. The Surveyor makes no representation and gives no warranty for the rig or its fixtures or fittings including sails.
- 1.7 Installed navigational electronics will be operated, but not tested for performance. Settings and full functionality will not be assessed and the accuracy of cartography and radar/AIS systems will not be commented upon. It is always recommended that a trained service agent for the navigational electronics be consulted.
- 1.8 Where a vessels propulsion system is inspected as part of the survey the scope of the survey is limited to an external inspection only. The Surveyor makes no representation and gives no warranty for the engine(s) or generator(s) and their associated systems or any assessment of their mechanical performance. It is always recommended that a trained service agent be consulted.
- 1.9 The vessels 12/24v and 110/220v systems will be switch tested. Internal condition and performance of wiring and electrical components and equipment including batteries will not be assessed for performance or compliance to appropriate regulations.
- 1.10 In every case, the Surveyor recommends a full survey of a Vessel, to include inspection of the Vessel while lifted out and while in the water. Where the Surveyor accepts instructions to survey a Vessel solely on the basis of an inspection of the Vessel out of the water, the Surveyor makes no representation and gives no warranty as to the watertight integrity of the hull and fixtures and fittings including seacocks and valves or buoyancy of the Vessel.

2. Valuations

- 2.1 All valuation work undertaken shall be in accordance with the Scope of Work and, unless otherwise stated in writing, such work relates solely to the date and place referred to. Valuations are based on opinions only and are not representations of fact, nor do they carry with them any guarantee of the particulars or information on which opinions are based. Valuations assume a willing buyer and willing seller and market conditions applicable at the time of valuation or such other date as is expressly referred to.

3. Fees

- 3.1 The fee agreed between the Surveyor and the Client for the services to be provided by the Surveyor under this Agreement ("the Survey Fee") shall not include the costs of travel, subsistence and accommodation which will be charged in addition and in accordance with this Clause 3.
- 3.2 The Survey Fee and all expenses shall become due and payable on such terms and in such amounts as shall be agreed from time to time. VAT or other EU equivalent shall be payable, if applicable, in addition to all fees and expenses. Invoices will be submitted in respect of all fees and expenses when due and the amount of each invoice shall be settled within 28 days of the date of the invoice. Thereafter, interest shall be payable on all sums owing and unpaid at a rate of 3% over Barclays Bank plc (London) base rate.

4. Limitations

- 4.1 The Surveyor shall not be liable under this Agreement for any loss or damage caused in circumstances (i) where there is no breach of a legal duty of care owed to the Client by the Surveyor or (ii) where, notwithstanding any such breach, any loss or damage is not a reasonably foreseeable result of such breach.
- 4.2 All services and reports are provided for the Client's use only. No liability of any nature is assumed towards any other party and nothing in these terms, or the relationship between the Surveyor and the Client, shall confer or purport to confer on any third party a benefit or the right to enforce any provision of these terms. The provisions of the Contracts (Rights of Third Parties) Act 1999 shall not apply to this Agreement and any person who is not a party to this Agreement shall have no right under that Act to enforce any term(s) of this Agreement.
- 4.3 The Surveyor shall not be responsible for loss or damage or any increase in loss or damage resulting from any material breach by the Client of any term of this Agreement.
- 4.4 Any claim by the Client in respect of any breach of the Surveyor's obligations under this Agreement must be notified to the Surveyor as soon as is reasonably practicable after the Client becomes aware of the breach. Where any breach is capable of remedy, the Surveyor must be afforded a reasonable opportunity to put matters right at his expense.

- 4.5 The Client agrees that, for reasons of commercial practicality, it is necessary to limit the Surveyor's potential liability in respect of loss or damage suffered by the Client as a result of any breach by the Surveyor of any of the Surveyor's obligations under this Agreement. As such, the Client agrees that no liability howsoever arising whether under this Agreement or otherwise shall attach to the Surveyor except insofar as such liability is covered by the professional indemnity insurance referred to at paragraph 4.6 and such liability (including Claims Expenses) shall in any event be limited to £250,000 or such higher sum as the parties shall agree in writing prior to commencement of the services to which these terms relate (hereafter referred to as "the Agreed Indemnity Limit").
- 4.6 The Surveyor shall maintain professional indemnity insurance in the amount of the Agreed Indemnity Limit throughout the period of the performance of the Surveyor's duties hereunder provided that such insurance shall remain available at reasonable market rates.
- 4.7 The Surveyor's liability shall not extend to particulars, data and other information given to the Surveyor by others or obtained from outside sources, publications and the like reasonably relied upon by the Surveyor, including Class records, registry details or other such information and no assurances can be given regarding the accuracy of the same.
- 4.8 Unless otherwise stated in writing, all services and reports are provided on the basis that they carry no guarantee regarding ownership or title, freedom from mortgages or charges, debts, liens or other encumbrances, or vessel stability, performance or design.
- 4.9 The Client shall be responsible for any losses, expenses or other costs reasonably incurred by the Surveyor that are caused by a breach of the Client's obligations to the Surveyor hereunder.
- 4.10 The Surveyor shall not be liable in respect of any breach of his obligations hereunder resulting from unforeseeable causes beyond the Surveyor's reasonable control

Business or Commercial Operations

- 4.11 Notwithstanding any other provision of this Agreement, where the Client is acting in the course of a business or commercial operation:
- 4.11.1 the Surveyor's liability shall expire twelve months after the Survey Report is delivered to the Client and The Surveyor shall thereafter have no further liability whether in contract, tort or otherwise; and
- 4.11.2 the Surveyor shall have no liability whether in contract, tort or otherwise for:
- 4.11.2.1 any consequential or economic loss or for loss of profit or turnover or loss of use suffered by the Client howsoever arising, whether under this Agreement or otherwise, and without prejudice to the generality of the foregoing the Surveyor shall not be liable for any consequences of late performance of any survey and/or late delivery of any survey report;
- 4.11.2.2 any breach of his obligations hereunder of which written notification shall not have been given within 14 days of the date on which the Client ought reasonably to have become aware of the existence of such breach;
- 4.11.2.3 any loss, injury or damage sustained as a result of:
- i. any defect in any material or workmanship;
 - ii. an Act of God or other circumstances beyond the control of the Surveyor; or
 - iii. the act, omission or insolvency of any person other than the Surveyor;
- and the Surveyor shall have no liability to indemnify the Client in respect of any claim made against the Client for any such loss, injury or damage;
- 4.12 Notwithstanding any other provision of this Agreement:
- 4.12.1 unless otherwise stated in writing, no guarantee is given against faulty design, latent defects or of suitability of any vessel or other item for any particular purpose or of compliance with any particular local, national or international requirement or code, and opinions are given without the benefit of running of

machinery or opening up or other dismantling whether of interior linings, machinery or other items or systems;

- 4.12.2 the Surveyor shall have no liability whether in contract, tort or otherwise in respect of the consequences of late, incomplete, inadequate, inaccurate or ambiguous instructions or the non-disclosure by the Client of relevant information.

5 Law and disputes

- 5.1 This Agreement shall be construed in accordance with and shall be governed by English law. All disputes arising out of or in connection with this Agreement shall be submitted to the exclusive jurisdiction of the Courts of England and Wales.

6. Miscellaneous

- 6.1 The Surveyor may terminate the appointment forthwith if the Client fails for more than 28 days to pay any sum due when demanded, or if the Client fails to respond promptly to requests for information and/or instructions and fails adequately to respond to 28 days' formal notice of such failure, without prejudice to the Surveyor's accrued rights.
- 6.2 Without prejudice to the accrued rights of the other party, either party may terminate the appointment forthwith by notice if the other party shall become bankrupt or insolvent, or make any arrangement or composition for the benefit of creditors, or have anything analogous to any of the foregoing under the laws of any jurisdiction occur to it, or cease (or threaten to cease) to carry on business.
- 6.3 No exercise or failure to exercise or delay in exercising any right or remedy vested in either party shall be deemed to be a waiver by that party of that or any other right or remedy.
- 6.4 Neither party shall transfer or assign its rights or obligations under these terms without the prior written consent of the other.
- 6.5 In the event that any provision of these terms is held to be a violation of any applicable law, statute or regulation, such provision shall be deemed to be deleted from these terms and shall be of no force or effect and these terms shall remain in full force and effect as if such provision had not been contained herein. Notwithstanding this, in the event of any such deletion the Parties shall negotiate in good faith in order to agree the terms of an acceptable alternative provision.
- 6.6 Except where expressly stated to the contrary in a written document signed by the Parties on or after the date hereof, these terms form the entire agreement between the Parties and supersede all previous agreements and understandings between the Parties, and no warranty, condition, description, term or representation is given or to be implied by anything said or written in negotiations between the Parties or their representatives prior to the communication of these terms.
- 6.7 References to "the Surveyor" include the Surveyor's employees and persons, firms and companies appointed or engaged by the Surveyor as the Surveyor's agents for carrying out any work or services under these terms, all persons, firms and companies to whom performance of any work or services under these terms is sub-contracted or delegated by the Surveyor, and all agents and employees of persons, firms and companies referred to in this clause.
- 6.8 Any communication required to be given under these terms by either party shall be in writing and shall be sufficiently given either by letter, fax or electronic mail (provided the same is capable of being recorded by the recipient in durable form) sent to the other at the contact details previously notified and any such notice shall be deemed to have been given at the time at which it would in the ordinary course of transmission have been received.
- 6.9 Each party undertakes to maintain the confidentiality of all information supplied by the other and not to divulge such information to third parties without the prior written authority of the other.

Words denoting the masculine include the feminine and neuter and vice versa.
