

Date : 13 January 2020

Oref : 20000/AA(po0111xr)

## PRE-PURCHASE CONDITION SURVEY REPORT

### S/Y BAVARIA 46

At Athens Jan/20

IN accordance with instructions received from CLIENT, the undersigned performed a pre-purchase survey on the following yacht on 08/01/2020. The following report details the condition of the yacht on the date of survey.

#### 1. General Particulars

Name	: BAVARIA 46	Flag	: Greece
LOA	: 13.99m	Reg. Port	: 000
Beam	: 4.35m	Official No.	: 000
Draught	: 1.84m	CE	: Category A
Status	: Charter Yacht	Hull No.	: DE-BAVD46000000
Type	: Sloop	Call Sign	: SV0000
Builder	: Bavaria Yachtbau	MMSI	: 239000000
Model	: 46 Cruiser	Engines	: Volvo Penta D2-55F
Built	: 2006	Cabins	: 3 x Double, 1 x Twin
Hull	: GRP	Toilets	: 2



MCA Code  
Small Craft Examiner (RYA)



British Marine Surveyors Europe  
Member

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2. **Circumstances of the Survey**

The yacht was inspected while moored stern fast at the Alimos marina, during sea trial off the marina in strong conditions and while held by the marina crane.

At time of inspection the yacht was a Greek flag Charter Yacht and is intended to be reflagged to a private New Zealand flag yacht after sale.

3. **General Limitations of Survey**

*The survey was limited to a non-destructive inspection. Unexposed parts of the yacht were not inspected unless specifically commented upon. Inaccessible parts of the yacht were not inspected. It is possible that dismantling or destructive testing may reveal other defects not possible to be noted by the surveyor.*

*Unless an item was specifically commented upon it should be considered that the item was not inspected. If an item was operated or operation witnessed it will be noted as such in the report, any other items should be considered as untested.*

*This report is intended to be used by the named client in the normal manner concerning the type of survey performed as stated on the first page of the report.*

*The report may additionally be used by insurers or financiers for the purpose of insuring or financing the yacht. The report may be used by the yacht's flag to confirm safety. No liability is undertaken to any other party than the named client, his insurer or bank.*

*The report concerns condition of the yacht at time of survey and future condition cannot be anticipated.*

*Dismantling of machinery may reveal a different condition than was possible to determine within the constraints of a typical inspection circumstances.*

*General periodic servicing requirements are not mentioned in the report.*

*It is always recommended to have any machinery inspected and serviced by a specialist engineer.*

*Unless specified the standing rigging was inspected from deck level. For further inspection of any rigging, inspection by rigger is required. Inspection at deck level cannot find all defects but is satisfactory to make a general assessment.*

*The survey work was performed in accordance with standard terms and conditions which are available at the following link : <http://www.walshsurveyor.com/terms.pdf>*

#### 4. **Contact Details**

##### Potential Buyer

CLIENT  
CLIENT  
CLIENT  
CLIENT

#### 5. **Certification**

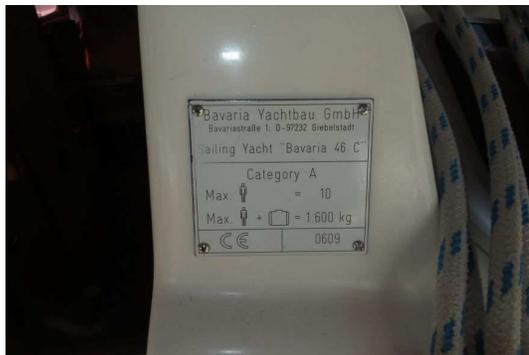
The following original certificates were inspected.

Certificate	Issued	Expiry	Comment
Registry Certificate			Not provided
Measurement Certificate	12/04/2007		
Ship Station License	20/06/2019		
EPIRB Annual Inspection Certificate	14/02/2019	14/02/2020	
Fire Extinguishers Annual Inspection	18/03/2019	18/03/2020	
Liferaft Annual Inspection	18/03/2019	18/03/2020	

#### 6. **CE Marking**

The yacht is CE marked for Category A Ocean with 10 persons on board.  
The HIN No. DE-BAVD46000000 indicates a 2007 model built in 11/2006.

As part of the sale documents, the CE certificate and Builders Certificate to be provided.



CE Plate

#### 7. **General Construction**

Foam sandwich deck and topsides. Solid fiberglass below waterline. Hull strengthened with liner at bilge level secured with mastic and overlaminated.



Overview



Overview

### 8. Hull below Waterline

Hull below waterline surfaces were fair. Hammer sounding did not find any delamination or void. There were no unrepaired damages.



No damages at bow

### 9. Keel

Standard draught keel of cast iron bolted to the hull. There was no spacing at the hull to keel join when lifting the yacht. There were no cracks to the hull around the hull to keel join. There were no damages at the leading or trailing edges.

The keel is with some cosmetic corrosion and pitting under the paint. At some point before it becomes in a poor cosmetic condition the keel requires sandblast, fairing, prime and antifoul.

The stainless keelbolts were without corrosion or sign of leak. The keel attachment area was visually sound and checked with hammer sounding to not have any disbond.



Keel generally intact



No spacing when lifting the yacht



No damages at the leading edge



No damages at the trailing edge



No cracks to hull around the join



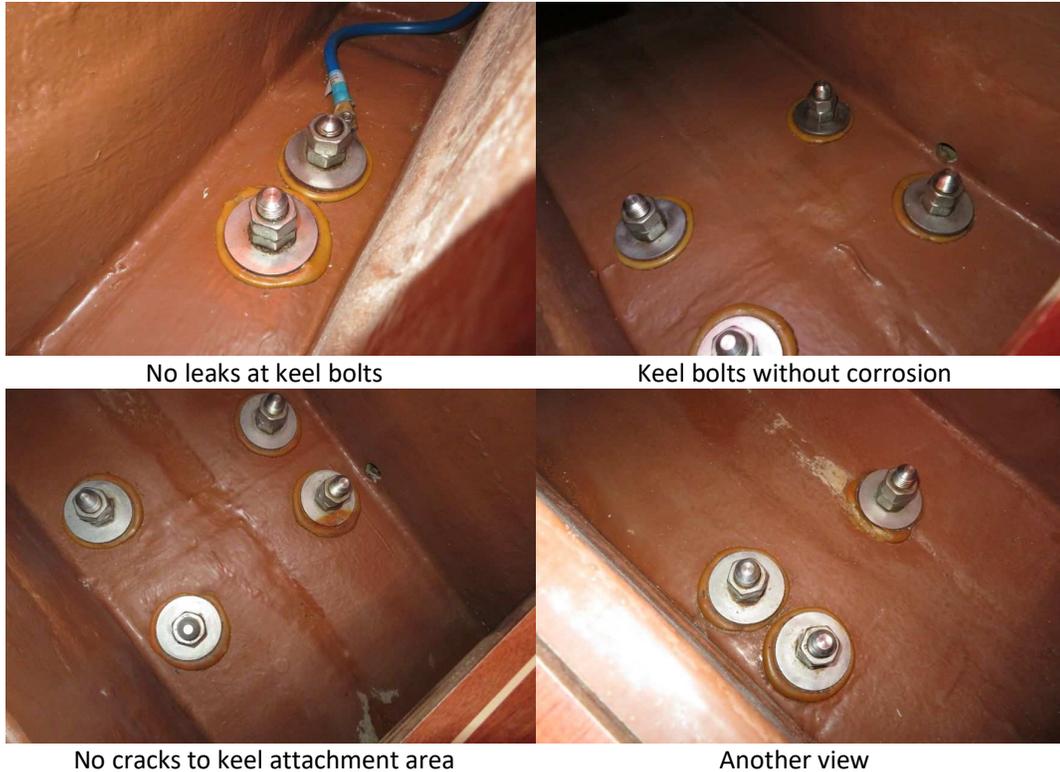
No cracks to hull around the join



Hull to keel join tight and without rust stains



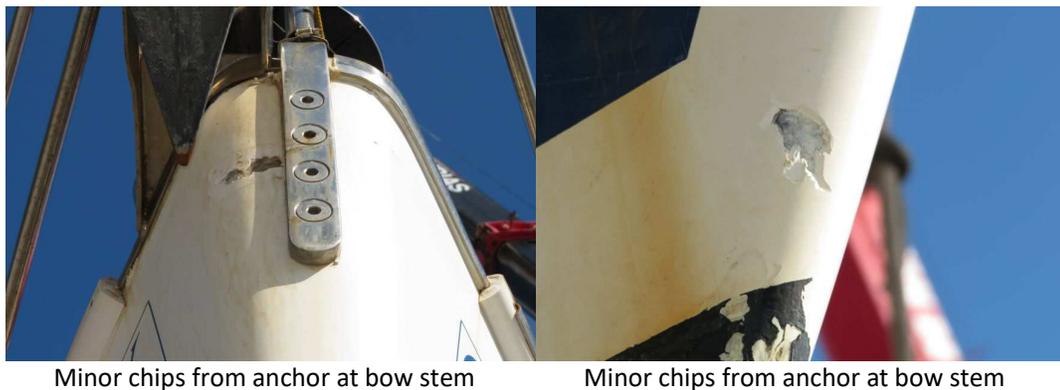
Keel with various minor corrosion under the paint



*Suggestion : The keel is with some cosmetic corrosion and pitting under the paint. At some point before it becomes in a poor cosmetic condition the keel requires sandblast, fairing, prime and antifoul.*

10. **Topsides**

Topsides were fair and without stress crazing. Gelcoat chips at the bow in two locations, require cosmetic gelcoat repair.





Topsides fair

Another view

*Suggestion : Gelcoat chips at the bow in two locations, require cosmetic gelcoat repair.*

11. **Frames, Bulkheads and Internal Structure**

Internal bilge structures found visibly sound and checked with hammer sounding to not have disbond.



No detachment of liner overlaminations



No cracks



Water from deck window leak



No cracks at stringers



Intact structure around chainplates

Part detachment of minor tabbing

12. **Deck Moulding**

The deck was sound underfoot without deflection or cracking sounds. There was no abnormal crazing. Hammer sounding did not find any delamination or void. There was typical cosmetic crazing at the shroud deckplates.

The chain locker deck cover is missing and requires to be returned on board.

*Recommendation : The chain locker deck cover is missing and requires to be returned on board and installed with securing mechanism such as latches.*

13. **Moisture Readings**

Moisture Readings not taken as yacht recently hauled.

14. **Coachroof**

There was no compression or crazing at the mast deck step. The coachroof was also sound underfoot.



No compression or crazing  
at the mast deck step

15. **Cockpit**

Companionway sliding hatch and boards were intact and the lock was working.

The companionway step hatch at the cockpit is of deteriorated plywood. Better to replace with teak or another plywood.

Both cockpit stereo speakers are with their grilles cracked and could be replaced.

Starboard cockpit stereo speaker does not work and requires replacement.

Cockpit aft port side seat teak requires recaulking.

Cockpit teak sections at the sides of the cockpit. They require their perimeters to be recaulked.

The sprayhood and bimini were in satisfactory condition.



Sprayhood without damages



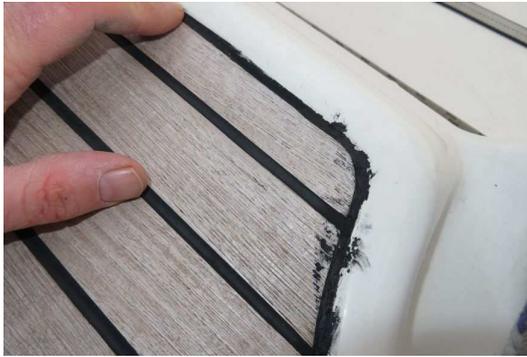
Bimini without damages



Companionway secure



Deteriorated companionway step



Caulking failing around edges  
at cockpit sides



Cockpit aft port seat  
requires recaulking



Damaged stereo speaker grille



Damaged stereo speaker grille

*Suggestion : The companionway step hatch at the cockpit is of deteriorated plywood. Better to replace with teak or another plywood.*

*Suggestion : Both cockpit stereo speakers are with their grilles cracked and could be replaced.*

*Suggestion : Starboard cockpit stereo speaker does not work and requires replacement.*

*Suggestion : Cockpit aft port side seat teak requires recaulking.*

*Suggestion : Cockpit teak sections at the sides of the cockpit. They require their perimeters to be recaulked.*

## 16. **Rudder and Steering**

Fiberglass rudder generally intact. Rudder has a small abrasion on the bottom edge that requires repair.

Rudder bearing said to have been replaced 5 years ago. No abnormal play.

Steering gear is chain driven to a reduction gear which operates a draglink connected to the rudder post. The steering was without corrosion and with smooth operation. The steering range according to the rudder angle indicator was same both sides.



Rudder generally intact



No cracks at top of rudder



Steering gear



Rudder tube seal clips not corroded



Chains without corrosion



Chains without corrosion

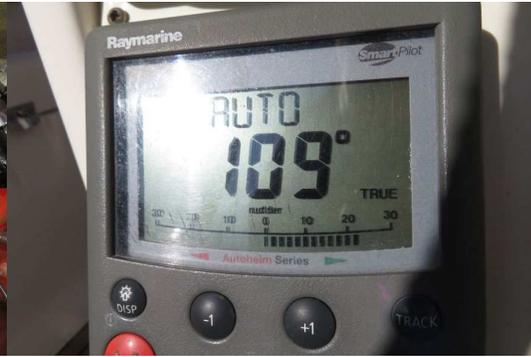
*Suggestion : Rudder has a small abrasion on the bottom edge that requires repair.*

16.1. Autopilot

Electric autopilot which operates a motor attached to the steering gear reduction gear. The autopilot was checked working along with the angle indicator.



Autopilot



Checking autopilot

16.2. Emergency Steering

Tiller connection to the top of the rudder post.

17. Stern Gear

Saildrive rubber boot at the hull underside that fairs the opening is missing.

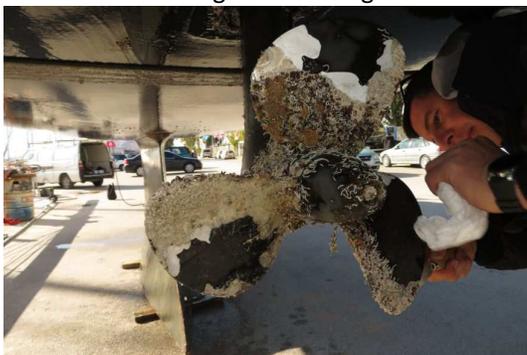
Saildrive leg was without wastage. Aluminium propeller was without play on the rubber hub.



Fairing boot missing



Saildrive leg without wastage



Propeller without damages

*Suggestion : Saildrive rubber boot at the hull underside that fails the opening is missing and could be fitted.*

18. **Bow Thruster**

Bow thruster propeller was without damages. Tunnel laminations were secure. Vetus bow thruster motor was without corrosion. Bow thruster was checked working.

Bow thruster battery terminal bolts and butterfly nuts are corroded due to the deck window leak, and require replacement.



Propeller without damages



Tunnel overlaminations secure



Motor casing without corrosion



Terminal bolts corroded

*Suggestion : Bow thruster battery terminal bolts and butterfly nuts are corroded due to the deck window leak, and require replacement.*

19. **Cathodic Protection**

The keel is without anode and this could be considered to be installed.

The saildrive leg anode was secure and suitable for further use.



Saildrive leg anode

20. **Skin Fittings and other through Hull Apertures**

Transducer fittings were secure and without leaks. Through hull fittings were externally without wastage. Ball valves were externally without corrosion or leak. Hoses were double clipped.

Holding tank outlet valves are seized. They require cleaning or replacement. If replacement use trudesign composite valves which are less likely to seize on toilet outs.

Various other valves tried and found not seized.



Transducer fittings intact



Transducer fittings intact



Through hull fittings without wastage



Through hull fittings without wastage



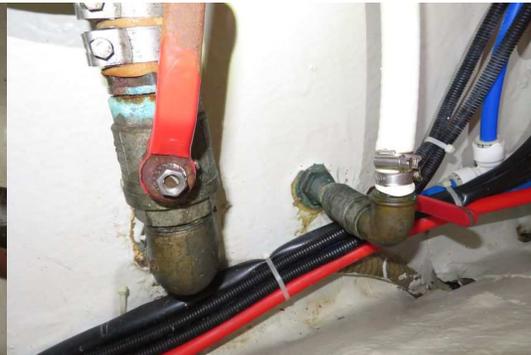
Ball valves without corrosion



Ball valves without leak



Hoses double clipped



Another view

*Recommendation : Holding tank outlet valves are seized. They require cleaning or replacement. If replacement use trudesign composite valves.*

21. **Ports and Windows**

Forward cabin hatch window leaks. It requires removal and resealing around the perimeter. Twin cabin deck skylight leaks. The plexiglass is to be replaced. It is on order.

The bow storage hatch is with screwed on bracket which is cosmetically poor looking. Forward cabin hatch window plexiglass is crazed and could be replaced.



Cosmetically poor repair of hatch



Skylight plexiglass to be replaced



Seal without deterioration

*Suggestion : Forward cabin hatch window leaks. It requires removal and resealing around the perimeter.*

*Suggestion : Twin cabin deck skylight leaks. The plexiglass is to be replaced. It is on order.*

*Suggestion : Forward cabin hatch window plexiglass is crazed and could be replaced.*

## 22. Pulpit, Stanchions, Pushpit, Lifelines and Jackstays

Pulpit and pushpit railings were secure and without damage.

No. 4 (counting from bow) stanchion starboard is loose. The wooden caprail is cracked. The damaged section of caprail to be replaced and the stanchion secured properly. The caprail is part of the securing. The remainder of stanchions were secure. Lifelines were suitably tight.

The aluminium stanchion bases are with galvanic corrosion with the stainless stanchions to a minor extent.

Jackstays were provided which is unusual for charter yacht.



Broken caprail  
and loose stanchion securing



Galvanic corrosion between stainless  
stanchion and base

*Recommendation : No. 4 (counting from bow) stanchion starboard. It is loose. The wooden caprail is cracked. The damaged section of caprail to be replaced and the stanchion secured properly.*

23. **Ground Tackle and Mooring Arrangements**

CQR galvanised main anchor without wastage. The anchor chain is corroded and could be replaced.

Electric anchor windlass found secure and checked working with the bow wired remote. The windlass is moved from the original below deck securing to above deck. This results in better line for the chain.

Anchor roller deck plate is with the forward bolt nut loose at the deck underside and requires tightening.



Anchor without wastage



Anchor windlass secure



Windlass securing bolts not corroded



Chain with corrosion



Checking anchor windlass

Kedge

*Suggestion : The anchor chain is corroded and could be replaced.*

*Suggestion : Anchor roller deck plate is with the forward bolt nut loose at the deck underside and requires tightening.*

#### 24. **Davits, Boarding Ladders, Passerelle**

Manual passerelle is cracked at the starboard side next to the securing bracket. The crack requires grinding out and welding on the top and underside.

Passerelle securing bracket. It is bent on the port side and became also too big for the passerelle width. It requires repair.

Stainless boarding ladder was secure and without damages.



Manual passerelle decking sound

Bent bracket



Cracked framing



Cracked framing



Boarding ladder without damages

*Suggestion : Passerelle is cracked at the starboard side next to the securing bracket. The crack requires grinding out and welding on the top and underside.*

*Suggestion : Passerelle securing bracket. It is bent on the port side and became also too big for the passerelle width. It requires repair.*

## 25. Spars

Furler was secure. Drum was without damages and with free movement.

Deck stepped aluminium mast. Fractional rig. At the interior side the compression post was secure. The boom gooseneck was secure and without fracture. The boom looked straight.

The spreaders were secure and without damage, their clevis pins secured with split pins.

Manual wind indicator Windex is missing one flag and requires repair or replacement.



Furler fork secure and straight



Furler drum without damages



Furler secure at mast



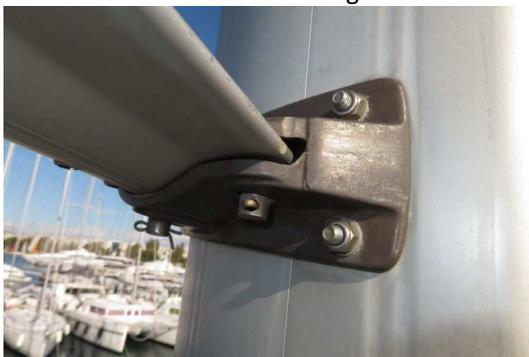
Furler swivel



Boom gooseneck secure and without damages



Rope boom vang sheaves secure



Spreaders secure



Spreaders secure



Spreaders intact



Spreaders intact



Spreaders secure



Spreaders secure



Spreaders intact



Spreaders intact



Compression post secure

*Suggestion : Manual wind indicator Windex is missing one flag and requires repair or replacement.*

26. **Standing Rigging**

1x19 stainless wire terminated in swage terminals. The rigging was set up hard except for the intermediates and lowers as the seller prefers.

The mast fittings were secure and their screws and rivets present. There were no broken wires at entry to swage terminals. Swage terminals were straight and without cracks.

The shroud deckplate welds were without cracks. The deck at the underside was without cracks. The laminated in attachment structure of the shroud chainplates was without external damage.

The adjustable backstay aluminium cylinder is with corrosion pitting but still of use.

The backstay chainplate securing bolts were without corrosion.

The standing rigging is original therefore 13 years of age. It was found in satisfactory condition from deck level and aloft inspection. It requires replacement prior to bluewater sailing or in accordance with insurers requirements.



Cap shroud fittings secure



Cap shroud without broken wires



Intermediates fitting secure



Intermediates no broken wires



Lower fittings secure



Lowers no broken wires



Stemhead fitting without fracture



Stemhead fitting secure



No broken wires at entry to swage terminals



Swage terminals were straight and without cracks



Shroud deck plate welds without cracks



Not more than cosmetic crazing at shroud deckplates



Deck under shroud deckplates without cracks



No significant leaks



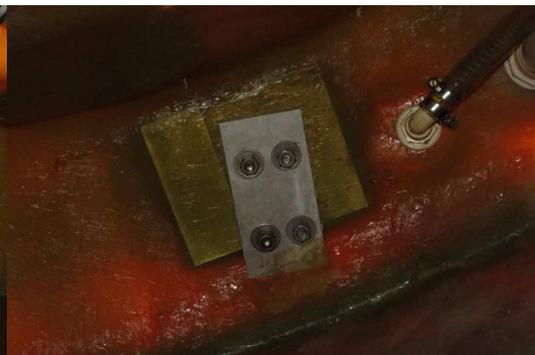
Shroud attachment structure intact



Shroud attachment structure intact



No corrosion at backstay chainplates



No corrosion at backstay chainplates



Small areas of wastage at backstay cylinder



Backstay mast swage no broken wires

**27. Running Rigging**

Running rigging ropes were suitable for further use. Deck organisers were secure. Rope jammers also without damage.



Deck organisers secure



Rope jammers without damage



Rope jammers secure

**28. Winches**

Manual winches were working. The starboard cockpit winch requires service because the stop is broken.



Winches secure

*Recommendation : The starboard cockpit winch requires service because the stop is broken.*

**29. Sails and Covers**

Sails of 2014. The genoa and mainsail were without damages and satisfactory.



Genoa without damages



Another view



Main without damages

**30. Bilge Pumping Arrangements**

Manual bilge pump in the cockpit fitted with strainer. Electric bilge pump manually activated at the saloon. Fitted with non return valve. Both serving the aft saloon common bilge. Checked working. Auto bilge pump could be considered to install if the yacht is left.



Manual bilge pump working



Electric bilge pump working

**31. Firefighting Equipment**

Portable Fire extinguishers. 2 x 6Kg. Dry Powder. Next annual inspection 03/2020.  
Engine compartment is fitted with port for discharge of extinguisher inside.



Fire extinguisher without corrosion

Second fire extinguisher

**32. Lifesaving and Emergency Equipment**

EPIRB battery expiry 04/2021. Next annual inspection 02/2020.  
EPIRB hydrostatic release expiry 02/2021 (2 year).  
EPIRB stowed at interior of yacht.

Liferaft of 2006. 8 Person. Next annual inspection 03/2020. Stowed on deck without hydrostatic release.

Gas inflated 150N lifejackets. There was no servicing certificate. They require minimum 5 year service interval. Acceptable for private use is owner visual inspection, 24 hour inflation and check for leak. Then rearm with new firing head and cylinder.

Harnesses provided.

1 x Soft Horseshoe Lifebuoy, 1 x Rescue Sling and single self igniting light provided.



Liferaft on deck with manual release

Soft horseshoe buoy



Harnesses



Rescue sling



Lifejacket cylinder minor corrosion



EPIRB battery expiry 2021

*Recommendation : Gas inflated lifejackets. There was no servicing certificate. They require minimum 5 year service interval. Acceptable for private use is owner visual inspection, 24 hour inflation and check for leak. Then rearm with new firing head and cylinder.*

33. **Navigation Lights**

Deck light does not work and requires bulb replacement. The remainder of lights were working.

Anchor light LED at switchboard is blinking but the light is working. It is not very bright. Check the bulb.



Bow bicolour working



Anchor light dim



Stern light working

*Suggestion : Deck light does not work and requires bulb replacement.*

*Suggestion : Anchor light LED at switchboard is blinking but the light is working. It is not very bright. Check the bulb.*

#### 34. **Engine and Installation**

##### 34.1. **Engine Compartment**

Enclosed engine compartment. Bilges clean of water and oils. Soundproofing intact.

##### 34.2. **Auxiliary Engine**

Volvo Penta D2-55F. Serial No. 5103999536X. Engine was installed new in 2014. Saildrive of 2014 and installed during 2016-2017.

Engine hours does not work. Check wiring. Consider to install analog hours meter.  
Engine impeller casing is with small leak and probably requires o-ring replacement.  
Engine air filter is missing and requires to be fitted.

The engine was in excellent external condition without corrosion or significant leak and looked practically brand new.



Engine hours not working



Engine without corrosion



Another view



Another view



Minor leak at impeller



No fuel leak at injection pump



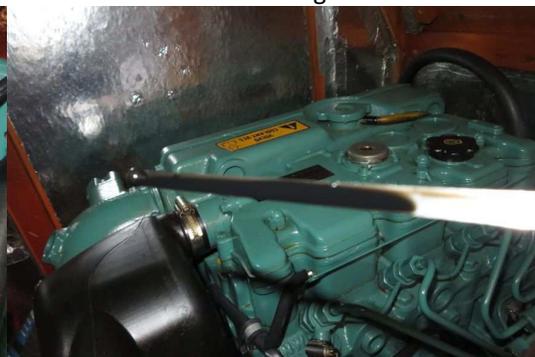
No fuel leak at injectors



No corrosion or leak at exhaust mixing elbow



Air filter missing



Oil looks normal



Engine plate

*Suggestion : Engine hours does not work. Check wiring. Consider to install analog hours meter.*

*Suggestion : Engine impeller casing is with small leak and probably requires o-ring replacement.*

*Suggestion : Engine air filter is missing and requires to be fitted.*

### 34.3. Reverse Gear

Volvo Penta saildrive 130S-B. With coatings intact and no leaks of oil. Saildrive seal without deterioration or leaks. Oil looked normal and was at normal level.



Saildrive without corrosion



Seal without deterioration or leak



Oil without emulsions

35. **Fuel System**

Plastic fuel tank generally intact. No leaks from connections. Shut off valve provided near the tank. Level gauge working. Primary filter without water collected and with minor sediment.

Fuel tank has small leak at the level sensor. It requires to be removed and resealed with sikaflex.



Small leak at level sensor



Fill and vent secure



Level gauge working



Shut off valve

Primary filter without water  
and with minor sediment

*Suggestion : Fuel tank has small leak at the sensor. It requires to be removed and resealed with sikaflex.*

**36. Accommodation General**

The accommodation was generally in order but requires localised revarnishing by carpenter to the woodwork due to previous leaks.

Saloon woodwork at starboard side last cupboard before navigation station, the bottom edge piece is wet damaged and bulging. It requires replacement.

Galley cupboard for the garbage bin is missing the door.

Shelf woodwork at forward cabin starboard of bed requires re-varnish due to previous wetting.

Saloon woodwork at starboard vertical next to hull window requires re-varnish due to previous wetting.

Aft cabins cupboards top next to side opening window require re-varnish due to previous wetting.

Companionway sides, framing and handrails require re-varnish.

The cupboard under the cooker. The veneer is missing from the edge of the shelving visible around the cupboard hatch door.

Due to leaks from the cabin hatch windows the plywood flooring in the forward cabin, twin cabin and corridor from the saloon to the forward cabin is blackened at the edges therefore rotting and requires replacement with original bavaria replacement flooring.

Aft port cabin door handle is loose it requires replacement.



Varnish deterioration at companionway



Varnish deterioration at forward cabin shelf



Blackening of sole boards due to leaks



Blackening of sole boards due to leaks



Varnish deterioration at saloon side



Missing galley cupboard door



Varnish deterioration at aft cabin



Door handle wobbly and missing part



Navigation station



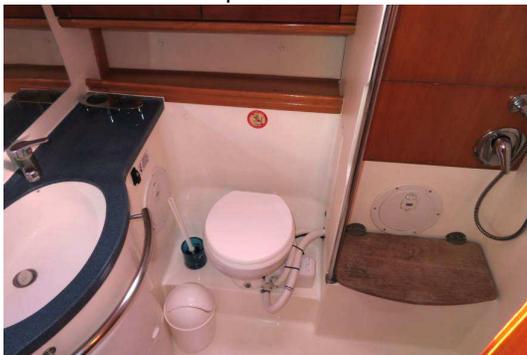
Aft starboard cabin



Aft port cabin



Heads



Heads

*Suggestion : Saloon woodwork at starboard side last cupboard before navigation station, the bottom edge piece is wet damaged and bulging. It requires replacement.*

*Suggestion : Galley cupboard for the garbage bin is missing the door.*

*Suggestion : Shelf woodwork at forward cabin starboard of bed requires re-varnish due to previous wetting.*

*Suggestion : Saloon woodwork at starboard vertical next to hull window requires re-varnish due to previous wetting.*

*Suggestion : Aft cabins cupboards top next to side opening window require re-varnish due to previous wetting.*

*Suggestion : Companionway sides, framing and handrails require re-varnish.*

*Suggestion : The cupboard under the cooker. The veneer is missing from the edge of the shelving visible around the cupboard hatch door.*

*Suggestion : Due to leaks from the cabin hatch windows the plywood flooring in the forward cabin, twin cabin and corridor from the saloon to the forward cabin is blackened at the edges therefore rotting and requires replacement with original bavaria replacement flooring.*

*Suggestion : Aft port cabin door handle is loose it requires replacement.*

### 37. Gas System

Dedicated gas locker with vent and drain via the door. The gas cylinders are corroded and require exchanging. Single cylinder installation. Regulator not corroded. Gas flexible hoses were not labelled. Cooker with minor corrosion. Gimbal lock working. Shut off valve provided near the cooker.



Gas cylinder corroded



Regulator without corrosion



Cooker with minor corrosion



Shut off valve without corrosion

*Suggestion : The gas cylinders are corroded and require exchanging.*

### 38. Fresh Water Tanks and Delivery

Two plastic fresh water tanks located at (1) Forward cabin. (2) Aft Port cabin. Externally intact and secure. No leaks at connections. Fresh water tank forward is assumed empty according to level gauge. Aft tank level gauge working. No leaks at fresh water pump. Water pressure good.

Galley sink tap leaks and requires replacement.

Aft toilet sink tap leaks and requires replacement.



Fill and vent secure



No leaks at forward tank delivery line



No leaks at aft tank delivery



Fill and vent of aft tank secure



No leaks at fresh water pump



Forward tank seems empty



Aft tank level gauge working

*Suggestion : Galley sink tap leaks and requires replacement.*

*Suggestion : Aft toilet sink tap leaks and requires replacement.*

39. **Grey Water System**

Manually activated shower drain pumps checked working and without sign of previous leaks.



Forward shower drain pump no leaks



Aft shower drain pump no leaks

40. **Heads and Black Water System**

Plastic holding tank for each toilet which discharge by gravity assisted by pumping of water into the tanks with the toilets. No sign of leaks.

Holding tank level is wrong (75% but the tanks are empty). Seawater electric toilets were both working and no leaks from each single pump.



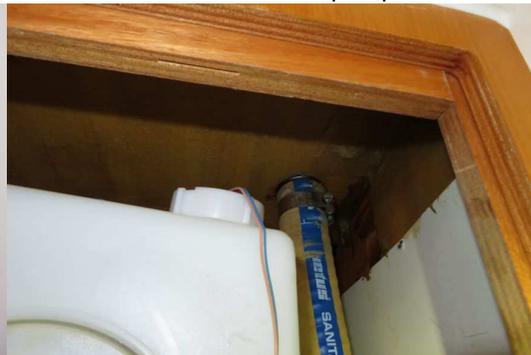
No leaks at toilet pump



No leaks at toilet pump



Holding tank no leaks



Holding tank no leaks



No significant leaks at tank connections.

*Suggestion : Holding tank level is wrong (75% but the tanks are empty). Requires checking by technician but holding tank levels are often not reliable.*

#### 41. **Electrical Installation**

Electrical installation was generally working. There was no wet damage or burnt items. There were no amateur type installations.

During the survey the service battery voltage became unexpectedly low. The service battery bank requires testing and it is likely replacement is required.

TV did not work.

Shore power was working.

Solar charging was working.

Battery charger 12v/30A was working.

VHF battery charger 12v/10A was working.



No burnt items  
or wet damage at switchboard



VHF charger



Batteries



Battery charger working



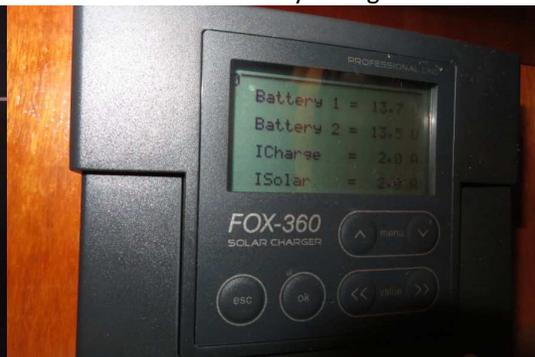
Starter battery voltage



Service battery voltage



Service battery voltage drop



Solar controller working



Stereo working

*Suggestion : TV did not work and requires checking.*

*Recommendation : During the survey the service battery voltage became unexpectedly low. The service battery bank requires testing and it is likely replacement is required.*

**42. Electronic and Navigation Equipment**

Navigational Equipment in the cockpit :

Type	Model	Condition
Chartplotter	Raymarine	Working. - The chartplotter casing is cracked but still of use.
Speed / Depth	Raymarine ST60+ Tridata	Powers On. Speed log impeller requires cleaning. Depth working.
Wind Indicator	Raymarine ST60+ Wind	Working
Autopilot Control	Raymarine ST6002 Smart	Working
Magnetic Compasses		Good no bubble



Chartplotter working



Depth working



Wind Indicator working

Navigational Equipment and electronics at the Navigation Station :

Type	Model	Condition
VHF DSC		VHF cable requires replacement because it is damaged.



VHF working



VHF cable insulation failed

*Recommendation : VHF cable requires replacement because the insulation is deteriorated.*

*Suggestion : Speed log impeller requires cleaning.*

43. **Heating and Refrigeration**

43.1. **Water Heater**

Water heater powered by 230v or engine heater connections. Water heater was working and was without leak.



Water heater no leaks

#### 43.2. Refrigerator

Refrigerator small fan grille is corroded and could be replaced. Refrigerators were checked working. Top opening refrigerator compressor was without corrosion.



Refrigerator fan grille corroded



Refrigerator compressor without corrosion



Side opening refrigerator internals intact

*Suggestion : Refrigerator small fan grille is corroded and could be replaced.*

#### 44. Other Equipment

Inflatable tender was seen while folded and looked satisfactory. 2.5hp Yamaha outboard of 2014. Propeller without damages. Motor externally without corrosion.



Tender looked satisfactory



Outboard propeller without damages



Motor without corrosion

#### 45. **Sea Trial**

Sea trial was made off the marine under engine up to 2700rpm. The exhaust was clean even at full rpm. The engine operated without abnormal vibration or sound. The gears operated properly. The autopilot was working. The sail gear operated smoothly.



On sea trial



Exhaust clean at full rpm

#### 46. **Recommendations**

*Recommendations are in my opinion, insurance related. Owners are advised to attend to these items.*

- 46.1. The chain locker deck cover is missing and requires to be returned on board and installed with securing mechanism such as latches.
- 46.2. Holding tank outlet valves are seized. They require cleaning or replacement. If replacement use trudesign composite valves and the difference in price from standard to be buyer expense.
- 46.3. No. 4 (counting from bow) stanchion starboard. It is loose. The wooden caprail is cracked. The damaged section of caprail to be replaced and the stanchion secured properly.
- 46.4. The starboard cockpit winch requires service because the stop is broken.

- 46.5. Gas inflated lifejackets. There was no servicing certificate. They require minimum 5 year service interval. Acceptable for private use is owner visual inspection, 24 hour inflation and check for leak. Then rearm with new firing head and cylinder.
- 46.6. During the survey the service battery voltage became unexpectedly low. The service battery bank requires testing and it is likely replacement is required.
- 46.7. VHF cable requires replacement because the insulation is deteriorated.

47. **Suggestions**

*Suggestions are not insurance related and may contain advisories to the new owner.*

- 47.1. The keel is with some cosmetic corrosion and pitting under the paint. At some point before it becomes in a poor cosmetic condition the keel requires sandblast, fairing, prime and antifoul.
- 47.2. Gelcoat chips at the bow in two locations, require cosmetic gelcoat repair.
- 47.3. The companionway step hatch at the cockpit is of deteriorated plywood. Better to replace with teak or another plywood.
- 47.4. Both cockpit stereo speakers are with their grilles cracked and could be replaced.
- 47.5. Starboard cockpit stereo speaker does not work and requires replacement.
- 47.6. Cockpit aft port side seat teak requires recaulking.
- 47.7. Cockpit teak sections at the sides of the cockpit. They require their perimeters to be recaulked.
- 47.8. Rudder has a small abrasion on the bottom edge that requires repair.
- 47.9. Saildrive rubber boot at the hull underside that fairs the opening is missing and could be fitted.
- 47.10. Bow thruster battery terminal bolts and butterfly nuts are corroded due to the deck window leak, and require replacement.
- 47.11. Forward cabin hatch window leaks. It requires removal and resealing around the perimeter.
- 47.12. Twin cabin deck skylight leaks. The plexiglass is to be replaced. It is on order.
- 47.13. Forward cabin hatch window plexiglass is crazed and could be replaced.

- 47.14. The anchor chain is corroded and could be replaced.
- 47.15. Anchor roller deck plate is with the forward bolt nut loose at the deck underside and requires tightening.
- 47.16. Passerelle is cracked at the starboard side next to the securing bracket. The crack requires grinding out and welding on the top and underside.
- 47.17. Passerelle securing bracket. It is bent on the port side and became also too big for the passerelle width. It requires repair.
- 47.18. Manual wind indicator Windex is missing one flag and requires repair or replacement.
- 47.19. Deck light does not work and requires bulb replacement.
- 47.20. Anchor light LED at switchboard is blinking but the light is working. It is not very bright. Check the bulb.
- 47.21. Engine hours does not work. Check wiring. Consider to install analog hours meter.
- 47.22. Engine impeller casing is with small leak and probably requires o-ring replacement.
- 47.23. Engine air filter is missing and requires to be fitted.
- 47.24. Fuel tank has small leak at the sensor. It requires to be removed and resealed with sikaflex.
- 47.25. Saloon woodwork at starboard side last cupboard before navigation station, the bottom edge piece is wet damaged and bulging. It requires replacement.
- 47.26. Galley cupboard for the garbage bin is missing the door.
- 47.27. Shelf woodwork at forward cabin starboard of bed requires re-varnish due to previous wetting.
- 47.28. Saloon woodwork at starboard vertical next to hull window requires re-varnish due to previous wetting.
- 47.29. Aft cabins cupboards top next to side opening window require re-varnish due to previous wetting.
- 47.30. Companionway sides, framing and handrails require re-varnish.
- 47.31. The cupboard under the cooker. The veneer is missing from the edge of the shelving visible around the cupboard hatch door.

- 47.32. Due to leaks from the cabin hatch windows the plywood flooring in the forward cabin, twin cabin and corridor from the saloon to the forward cabin is blackened at the edges therefore rotting and requires replacement with original bavaria replacement flooring.
- 47.33. Aft port cabin door handle is loose it requires replacement.
- 47.34. The gas cylinders are corroded and require exchanging.
- 47.35. Galley sink tap leaks and requires replacement.
- 47.36. Aft toilet sink tap leaks and requires replacement.
- 47.37. Holding tank level is wrong (75% but the tanks are empty). Requires checking by technician but holding tank levels are often not reliable.
- 47.38. TV did not work and requires checking.
- 47.39. Speed log impeller requires cleaning.
- 47.40. Refrigerator small fan grille is corroded and could be replaced.

48. **Valuation**

In order to provide valuation market research was made on the internet marketplaces for same model/year presently for sale. The following yachts were found.

Model	Year	Location	Listing Price EUR
46 Cruiser 4cab	2006	Croatia	109,900
46 Cruiser 4cab	2006	St. Martin	106,995
46 Cruiser 4cab	2006	Rhodes	105,000
46 Cruiser 4cab	2006	Palma	90,000
46 Cruiser 4cab	2006	Split, Croatia	90,000
46 Cruiser 4cab	2006	Athens, Greece	90,000
46 Cruiser 4cab	2006	Lefkas, Greece	88,044
46 Cruiser 4cab	2006	Greece	85,000
46 Cruiser 4cab	2006	Spain	85,000
46 Cruiser 4cab	2006	Croatia	78,000
46 Cruiser 4cab	2006	Croatia	75,600

The price range was 75,600 – 109,900 EUR.

The average price was calculated to be 91,230 EUR and this is considered to be the market value of the subject yacht offered for sale in Mediterranean waters.

49. **Conclusion**

The yacht was found structurally sound. There were no major defects. The yacht was generally operational and requires the annual maintenance.

There were various minor wet damaged areas of the interior woodwork and the forward cabin and corridor bilges had not been drained after the deck window leaks, leading to blackening of the sole boards edges. This was disappointing. The general condition was otherwise good. The yacht should not be more than a normal insurance risk.



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