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Accredited Member of the Yacht Designers and Surveyors Association

**REPORT OF AN INSURANCE SURVEY CARRIED OUT ON THE VESSEL:**

# [redacted] 1982 wooden sloop

Accredited Member YDSA


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**CONTENTS.**

## A. GENERAL NOTES

The following survey was carried out ashore at

[redacted]
for
[redacted]

### Scope

The survey was carried out as an insurance survey and contains less information than a full structural survey. It should not be relied upon by a prospective purchaser.

Where equipment was tested this is detailed in the text. References to condition are in relation to the vessel's age (i.e. good condition does not necessarily mean new). The engine was inspected visually but not started (note items that appear serviceable may be found defective under power).

Recommendations are restricted to:

(A) items which should be addressed before the vessel is used and/or which may affect insurability and;
(B) items which should be addressed in the near future order to prevent future problems.

Recommendations are printed in red for quick reference within the body of report and are also listed in the summary. They do not cover cosmetic or minor defects, although suggestions to address these may be included.

The survey is for the client above. No liability is extended to anyone else.

### Limitations

Parts of the vessel that were covered, unexposed or inaccessible due to fixed panels, mouldings etc. were not examined, so I cannot say these areas are free from defects other than where specified. No fittings or fastenings were removed for examination other than where specified. Note it is not possible to detect some latent and hidden defects without destructive testing which is not possible without the owner's consent.

Note the vessel was not inspected afloat. No assurance can be given about the watertight integrity of the hull and underwater fittings.

The boat was in mid refit with many of the systems and fittings removed. Where these are described, it is assumed they will be refitted and checked for good working order.

The sails were not examined as part of this survey.

### Conditions

Inspected ashore under cover, weather dry and fair, air temperature 15°c. The boat had been ashore for some 2-3 months for repairs and refinishing to the external structures. The mast was seen in a rack by the vessel.

## B. SUMMARY AND RECOMMENDATIONS

### Summary

[redacted] is a wooden masthead sloop, believed built in 1982 to a design by Hector Domato. The original plans dated 1971 were seen onboard.

No faults were found to any of the exterior hull, deck and coachroof structures and all exterior finishes have been renewed by the Dolphin Quay yard to a good standard.

The original construction was to a high standard using good quality materials and has been well maintained since then.

Some of the systems and equipment need refurbishment or replacement. The gas system would not meet present day standards. Access to, and the quality of, the through hull valves should be improved. There should be provision for regular anchoring given the possibility of rig and engine failure in exposed coastal waters.

In all other respects, the vessel is in excellent condition.

### Recommendations

A. Defects which should be rectified before vessel is used and/or which may affect insurability.

1. Provide adequate access to the cockpit drain skin fittings so they can be inspected and operated (A).
2. Fit suitable fire extinguishers onboard as described (A).
3. The gas system as presently installed is unsafe and should be replaced (A).

B. Defects which should be rectified in the near future order to prevent future problems.

1. Make good cracks and screw holes where the engine seawater intake grid was fitted (B).
2. Replace the screws securing the cutlass bearing (B).
3. Overhaul the stern gland, inspecting and replacing the packing material and any hose clips on flexible sections (B).
4. Renew the internal bonding wires between the anode and the engine block (B).
5. Replace nylon skin fitting valves with DZR (de-zincification resistant brass) ball valves (B).
6. Replace the mainsheet traveler (B).
7. Replace the fuel supply line and associated couplings (B).

## C. VESSEL DATA

**Dimensions (as given on plans)**

| | | |
|---|---|---|
| LENGTH OVERALL | : | 11.35m |
| LENGTH WATER LINE | : | 8.73m |
| BEAM | : | 3.24m |
| DRAFT | : | 1.83m |
| DISPLACEMENT | : | 7600kg |
| BUILT | : | Timon Manioba, Argentina 1982 |
| ENGINE | : | Volvo Penta 2003*, 29hp 3 cylinder diesel. |

* model designation, not the year of build.

## D. Hull, Deck and Structure.

### D1. Ballast Keel.

The vessel has a lead ballast keel, secured with stainless steel bolts. These are between the 225mm spaced frames. The aftermost two were tested with a spanner and no movement found. There are two heavy lifting eyes around midships which appear to be threaded onto the keel fastenings (note oil and water in the bilge limited inspection in this area).

Externally the ballast keel is secured tightly against the wooden skeg with no signs of gapping. The mastic within the joint appears flexible and unbroken.

The forepart of the lead keel is covered with a copper tingle which extends up past the join to cover the timber of the forefoot. This is secure. There is grounding dent some 10mm deep and 50mm radius on the forward surface of the keel. No signs of cracks or strains were seen elsewhere in relation to this. The keel surface is otherwise smooth and well coated.

### D2. Planking below the waterline.

The planking is tight seamed carvel laid. It is believed to be a Brazilian hardwood cedar, secured with bronze screws to the frames. The screw heads are all well plugged with no signs of swelling or looseness to these. From the original plans (seen onboard) the planking is believed to be 24mm thick.

The underwater hull was inspected from various angles and found to be lying fair with no prominent seams or evidence of movement. It was hammer sounded and random spike tested (this involves gently pressing the surface fibres with the edge of a spike, not digging into the wood) and found in satisfactory condition with no signs of softness. The garboard seam is tight and the plank lies fair along this. The hood ends are tight with no signs of movement.

The planking around the engine seawater intake (which has been replaced) is cracked and has deep unfilled screw holes (shown) - presumably from where a grid was attached. This has since been overprimed and antifouled. It would be advisable to fill these cracks and screw holes when the vessel is

next ashore and to build up a greater thickness of primer to prevent local deterioration of the timber (B).

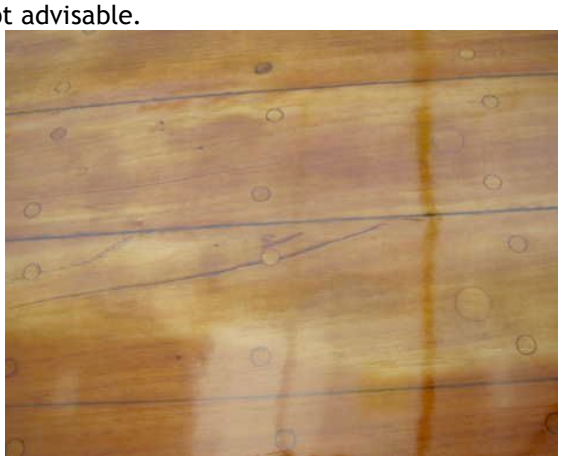
The hull surface is finished with red antifouling which has been recently applied. It overlays several previous coats which are flaking in places. It would be advisable to scrape back all the antifouling back to the original primer within the next 2-3 years to keep the hull smooth and ensure good adhesion of further coats.

**D3. Keel, centreline structure and floors**

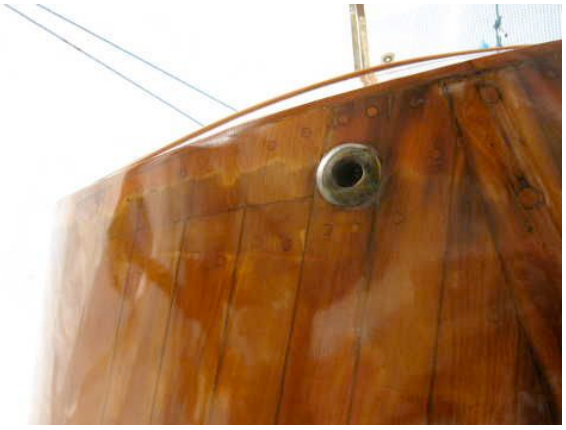
Internally the vessel has a hardwood keelson (believed Lapacho or Ipe – a south American hardwood) to which the ballast keel are bolted. This is around 220mm sided fore and aft, swelling to about 300mm midships. Sawn floors are bolted to this and steamed or sawn hardwood (believed Viraro) frames to the floors, all using stainless bolts. Where seen this construction is in good order. Random spike testing around potentially suspect areas such as through bolts or hull fittings showed no signs of softness or decay.

**D4. Topsides planking, bulwarks etc.**

The topsides are carvel laid varnished Brazillian cedar, for the most part tight seamed with some thin splines of the same wood or hard stopping in places. As with the underwater hull, the planks are screwed to the frames and the screws bunged with the same wood. No loose or missing bungs were seen. The surface finish is very good having been recently refurbished (shown). There is some variation in colour but to remove this would entail sanding thickness out of the planking which is not advisable.



The planks are clear grained, single lengths with no significant splits, darkening or other signs of deterioration beneath the varnish. The hood ends are tight with no signs of movement. The curves are fair with no deformation along the run of the planks or ‘stepped’ appearance across the seams.



There is a small area of short lengths at the edge of the port transom (shown); these appear to be a local surface repair and are secure.

The transom is of the same timber, with three edge fastened boards of the same wood as the hull with a hard stopping between. There are no gaps around the edge of the transom.

**D5. Frames.**

The frames are steam bent or sawn hardwood, believed Viraro (also a south American hardwood), on approximately 220mm centres, 40mm sided and around 30mm deep. Where accessible, the heads of the frames were felt behind the beam shelf and found to be hard. The frame heels terminate at the keel and again no signs of undue softness were found where seen. No splits were seen along the line of the fastenings. The hull behind the lockers and bunks has a clear finish which allows the wood and construction to be seen. A repair was noted to a single frame on the starboard side inside the cockpit locker. This is well executed.

**D6. Beamshelf and stringers**

The beam shelf and stringers are believed to be Viraro, as with the frames and floors. These are secured with stainless steel bolts. Where accessible, no signs of splits or deterioration were seen to the bilge stringers. The beamshelf has inner and outer pieces, again all varnished and secured with stainless bolts. No signs of decay were seen where accessible.

**D7. Bulkheads**

Plywood bulkheads are fitted forward by way of the mast and at the break of the cockpit. All are secure. These have limited structural function, the hull framing and structure providing the main supports.

**D8. Deck beams**

The deck beams are believed to be Viraro, the spacing coinciding with the frames. Where seen these were secure and showed no signs of deterioration.

**D9. Decks and built cockpits**

The decks are sheathed plywood which have recently been overcoated with cream non-slip paint. They were weight loaded, hammer sounded and examined. No signs of weakness or ‘give’ were found. The paint coatings are carried into the scuppers and there are no cracks between the deck and planking. The sheer strake extends up to form a low bulwark.

A small area of hollow sounding ply was found at the stem where possibly the sheathing has come loose.

The cockpit is built plywood with a caulked teak sole. This is in good order. There are two drains forward.

The plywood is decayed around the aft engine control panel (shown).

Inside the boat, the underside of the plywood sub deck is painted where accessible. It appears to have been recently replaced along some of the side deck sections.

**D10. Built coachroof.**

Solid mahogany sides in good condition and varnish finished. Corner posts are sound. Quadrants and beading around the edge are in good condition and secure. The coach roof top is finished as for the deck in sheathed plywood, coated with non slip paint.

There is a hollow area beneath the sheathed plywood to starboard of the main companionway (shown in red chalk) which is likely to have soft plywood beneath. If it spreads or leaks It should be cut out and filled to prevent further damage.

E1. **Rudder and Steering.**

There is a solid rudder built from edge joined hardwood boards and reinforced with stainless straps welded to the stock. There is a full length skeg. The structure is well made and secure. It was lifted and loaded at the extremes of turn and no undue play or movement seen in the bearings.

The rudder stock has a steering arm which connects by wire and pulley to a wheel. The mechanism operates smoothly with no undue play. The wires appear reasonably tight and in good condition. The steering arm is securely clamped to the stock.

The wheel is securely mounted on a pedestal and is stainless steel with a wooden rim, all in good order. The wheel brake does not work.

A screw cap allows access to the top of the rudder stock and a square section emergency tiller can be fitted over this.

**E2. Stern Gear.**

There is a two bladed 16” left handed bronze propeller which has been painted with antifouling. It turns within an aperture cut in the deadwood. The propeller is secure on a 25mm stainless steel shaft. A drilled nut and pin are tight.

The shaft turns smoothly with no signs of binding or excessive play in the stern bearing.

The blade was lightly hammer sounded and the antifouling scraped, and no signs of dezincification were seen.

The cutlass bearing is secured to the deadwood with two screws, the heads of which are damaged/ partially missing (shown). The bearlng will not come off (it will be threaded onto

a bronze tube), but it would be advisable to replace these screws when the vessel is next ashore (B).

Inside the boat the stern bearing can not be accessed without dismantling, a fixed calorifier limiting access to the panels over the aft bilge. There is a remote greaser which appears to be working satisfactorily. It would be advisable to check the condition of the packing material and replace any hose clips on flexible hose sections (B).

**E3. Cathodic Protection.**

A new pear anode is securely fastened some 1.5m forward of the propeller on the port side. The bonding between the anode and propeller was checked with a resistance meter and some 250Ω noted (there should be near zero). It would be advisable to replace the internal bonding wires (B).

A round anode is fastened to the rudder blade strap.

E4. **Skin Fittings and other through Hull Apertures.**




The through hull fittings detailed below were examined from inside and outside the boat and hammer tested. All valves were opened and closed to their fullest extent. Hose fittings and their associated clips were tested for security.

All of the through hull fittings apart from the engine water intake are nylon, marked 'KTM' (shown bottom left). The only nylon skin fittings that have type approval in the EU are made by 'Marelon'. Non metallic skin fittings are increasingly vulnerable to damage as all plastics of this type become brittle with age. It would be advisable to replace them with new DZR ball valves which are relatively inexpensive and should thread straight onto the existing bronze through hull fittings (B). These should be thoroughly inspected when the plastic seacocks have been removed. Note the cockpit drains share the engine space so even a minor engine fire will quickly render them inoperable.

A calorifier has been fitted in the space beneath the cockpit and this has blocked access to

the cockpit drain skin fittings and the stern gland. In particular it was found impossible to access the starboard cockpit drain handle and the port one could only be worked with difficulty. It is recommended that access holes be cut in partitions/ shelves to allow quick access to both these valves (A).

LIST OF SKIN FITTINGS

A. Bilge pump drain access forward under sink in heads, hose clip corroded (see bottom left picture). There should be two clips. Nylon valve.
B. Sink drain, access forward under sink in heads. Nylon valve.
C. Unidentified drain, access forward under sink in heads. Nylon valve.
D. Sea toilet outlet, access alongside toilet. Nylon valve. Only one hose clip – there should be two. Note the hard plastic bend is vulnerable to impact damage and should be replaced with soft hosing when the skin fittings are replaced.
E. Port cockpit drain, access limited beneath calorifier (top right photo), nylon valve.
F. Starboard cockpit drain, inaccessible and not properly inspected. A metal 'Y' section joins the sink drain to this above the fitting and is corroded (top left photo).
G. Drain (fridge?) under starboard cabin sole, nylon valve. Single hose clip – there should be two.
H. Engine seawater intake, new DZR ball valve, access under starboard cabin sole.

One of the two above waterline skin fittings at the transom (the pump outlet) has a corroded hose clip (shown) which should be replaced (B).

There are two paddle wheel logs fitted port and starboard. The port one is stiff and the starboard seized.

## F. Deck structures.

### F1. Main Companionway and other Accesses to Accommodation.

There is a hinged mahogany washboard which fits in stainless slides, and a sliding hatch. All are secure and work smoothly. There is a good quality casement lock.

Hatches over the saloon and forecabin can be opened from either end and have locking pins. Both are wood with 10mm Perspex tops which are cracked and/or crazed. Whilst they remain sufficiently strong to bear weight it would be relatively straightforward to fit new tinted acrylic tops.

### F2. Ports Windows etc.

There are 5 aluminium framed windows each side, all secure with no signs of internal leaking.

### F3. Pulpit, Stanchions, Pushpit, Lifelines and Jackstays.

There is a stainless steel pulpit and pushpit, both reasonably secure. The stanchions were not fitted at the time of survey but the were seen in the salon and appear in good order. Their stainless steel deck sockets were checked and found to be firmly attached.

Mahogany handrails either side of the coachroof are secure.

F4. **Rigging Attachment Points.**

There is a stainless steel welded forestay fitting at the stem which is well-made and securely bolted.

A deck ringbolt, assumed for a storm jib was tested with a lever and found secure.

Three chainplates are fitted either side, all internally bolted to frames. All were tested with a lever and no undue movement seen.

There is a single hydraulic adjustable backstay, also secure.

F5. **Ground Tackle and Mooring Arrangements.**

There is a 20kg folding fisherman anchor stowed in the saloon with some 10m of 9mm chain attached. Various mooring ropes provide adequate warps for use with this.

It would be difficult to deploy this quickly from the bow and, in the absence of a windlass, difficult to retrieve by hand in any wind strength. For other than sheltered day sailing, it is recommended that a suitable windlass and stem mounted anchor of a modern design be fitted. For this size yacht, the anchor should weigh 15kg and have some 50m of 8mm chain.

A 270mm cleat is fitted on the foredeck and two 200mm cleats at the stern. All were tested with a lever and found secure.

F6. **Other Deck Gear and Fittings.**

A bracket to hold the base of the spinnaker pole is broken (shown). It should be possible to weld this back.

The thread of one of the forward dorade vents has corroded and could be replaced with a PVC one to match those aft on the coachroof.

One of the cleats at the base of the mast is missing a bolt (shown).

F7. **Davits and Boarding Ladders..**

None.

## G. Rig.

The vessel has a masthead sloop rig.

### G1. Spars.

The main mast was seen on a rack. It an anodized aluminium spar with a single set of spreaders.

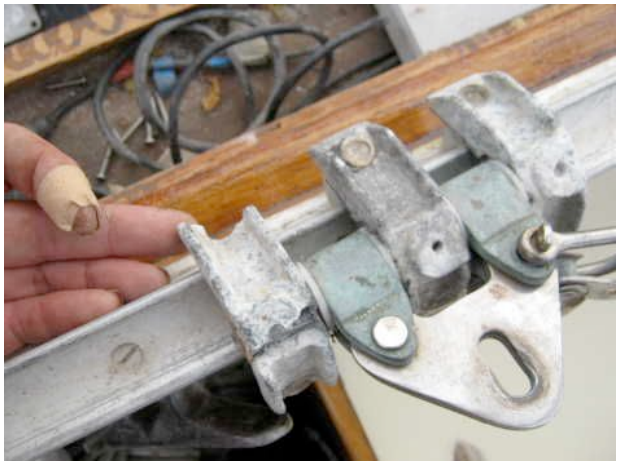
The aluminium is slightly pitted where the mast boot covers it (shown). None of the pits are deep but it is recommended this be coated with Vaseline or Blakes 'Mast protect' when it is refitted.

The boom was not available for inspection.

### G2. Standing Rigging.

Seen attached to the mast. 1x19 8mm stainless steel wire. All swages were visually inspected and appear in good condition. Bottle screw bodies were seen attached to the chain plates and in good order. Mast attachment tangs and spreaders are securely bolted to the spar. Note insurers may require rigging to be replaced after 10 years – no information on the age of this rig was available.

### G3. Running Rigging.



Not set up.

The mainsheet traveler has a broken roller (shown) and may give in an accidental gybe. It should be replaced (B).

Four winches around the mast are all seized or missing their barrels. The winches on the coachroof are also seized. Those on the cockpit coaming operate smoothly.

Halyards seen on the mast were worn and UV hardened.

### G4. Sails and Covers etc.

Not seen

## H. Safety.

### H1. Navigation Lights.

A combined port and starboard light is mounted on the pulpit. A white stern light is on the pushpit (unattached at present) and a mast head light tricolour/ steaming light was seen in the cabin. When connected these would be sufficient to comply with current regulations for a vessel of this type.

H2. **Bilge Pumping Arrangements.**

A diaphragm bilge pump is securely mounted in the saloon floor and was seen in working order. Two electric bilge pumps are fitted and were seen powered up but not operating.

Note the bilge has about 10cm depth of oil and water which needs to be removed with absorbent pads or similar.

H3. **Firefighting Equipment.**

There are no working fire extinguishers onboard (A). A 1.5kg dry powder extinguisher by the chart table expired in 1999.

There should be at least two 1kg dry powder fire extinguishers marked 5A/34B/C and preferably a separate automatic extinguisher within the engine compartment or at least an access hole through which an extinguisher can be discharged. FM200 types are recommended for engine spaces as powder can be ingested and damage the engine if discharged whilst running.

There should also be a fire blanket by the stove.

H4. **Lifesaving and Emergency Equipment.**

An out of date flare pack is forward. No other safety equipment was seen but it is assumed this would be carried when the yacht is re-commissioned.

The RNLI operate 'Sea Check', a free boat safety inspection service which can advise on appropriate safety equipment. See
http://www.rnli.org.uk/what_we_do/sea_and_beach_safety/sea_safety/sea_check

## I. Engine.

I1. **Installation.**

A Volvo Penta MD2 diesel is fitted on flexible mounts. These are securely bolted to wooden bearers. The installation is to a good standard. Engine surface coatings are in good condition.

I2. **Running and service checks**

Not tested. 1821 hours shown on the tachometer.

I3. **Controls and indicators**

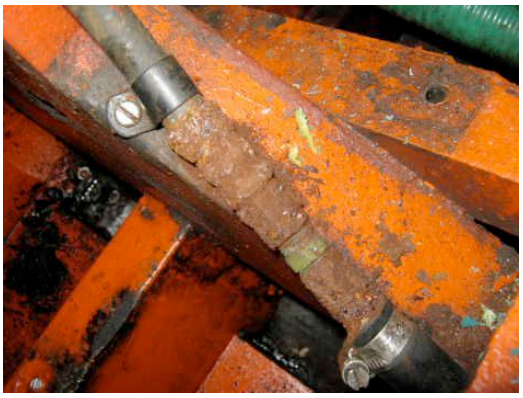
Not tested. There are two panels, the forward one is missing the charge voltage indicator. A single lever gear control by the helm operates smoothly.

I4. **Exhaust system**

The engine has a flexible, water cooled exhaust with a water lock to prevent following seas entering the system. The pipe is looped well up to a transom outlet. The system is in serviceable condition.

I5. **Fuel system**

The fuel tank is mounted beneath fixed panels and could not be accessed. A fuel water separator and second stage fuel filter is mounted beneath the cabin sole and is in satisfactory condition with no signs of leaks or water in the bowl.



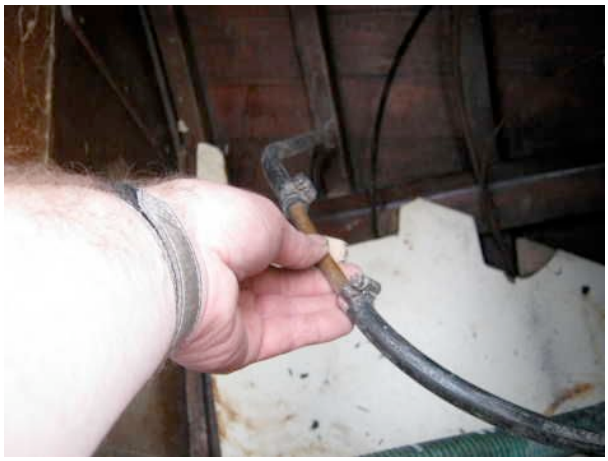
The fuel hose is black rubber, un-marked but in good condition. A connector within the engine space is heavily corroded (shown) although not leaking. It is suggested this be replaced along with the hose, the latter using fire resistant type conforming to BS EN ISO7840 when the system is next refurbished (B).

## J. Accommodation and on Board Systems.

J1. **Accommodation General.**

N/a, vessel in mid refit .

J2. **Gas Installation.**



There are two 3kg gas bottles in a plywood locker in the cockpit. This has holes through to the bilge along its corner joints (above left). There is a drain to the cockpit at the front but as the cockpit drains exit beneath the waterline this would only allow any leak to disperse slowly. It would be possible to laminate fibreglass within the locker to at least prevent leaks escaping direct to the bilge, but note present day standards require gas lockers to drain directly overboard.

The rubber gas pipe appears original (marked with Spanish text) and runs from the bottle with a short connecting piece of copper pipe (shown) then to the cooker in a continuous length. Again this would not comply; flexible hose should be no more than 1m long from the bottle to a fixed pipe which should be secured every 200mm, then an armoured flexible section from the bottle to the cooker. Connectors should be purpose made. The hose should be no more than 10 years old. There is no gas tap next to the cooker. There is a three burner gas cooker with no flame cut offs incase one of the burners extinguishes – all are requirements.

The gas system as presently installed is unsafe and should be replaced (A).

Note current gas safety standards were revised in 2001 and most insurance companies will require gas systems to comply with these standards. Www.calormarineshop.co.uk has further details. The above fault description is not comprehensive and a 'Gas Safe' registered engineer (used to be known as Corgi) can advise on what is needed.

It may be more cost effective to fit a spirit stove.

J3. **Fresh Water Tanks and Delivery.**

Not tested.

J4. **Heads.**

Manual sea toilet fitted – not tested. Securely mounted with the inlet and outlet hoses led well up to avoid siphoning.

J5. **Electrical Installation.**

There are three 12v batteries securely mounted beneath the cockpit. Isolator switches are beneath the helm seat and a panel to port controls main 12v systems. The wiring is well laid out and there are no signs of corrosion behind the switchboard face.

J6. **Electronic and Navigation Equipment.**

Not tested. A VHF and MF/SW/HF radio were seen. It is understood other equipment will be refitted. A Danforth 'Constellation' globe compass is fitted at the helm. This spins smoothly and returns to its original position when deflected. There are no bubbles in its fluid.

J7. **Heating and refrigeration.**

**N/a.**

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5 November 2010

**K. Valuation**

'Don Jose' is a wooden mast head sloop, built in Argentina in 1982. She was inspected ashore at Dolphin Quay boatyard, Emsworth on 1 November 2010 to carry out an insurance survey.

She is a unique vessel. There are very few similar types with which she could be compared currently on the market. The high quality of the hull construction and her external appearance sets her apart from most wooden hulled yachts of this size and design. She has been very well maintained. Although some of the systems need updating, the cost of this is insignificant compared to the typical renovation that a wooden vessel of this age would require.

I would estimate her value to fall within a range of **£40,000 to £50,000 (forty to fifty thousand pounds)**.

The valuation relates only to the date and place referred to and assumes a willing buyer and seller and generally conducive market conditions. It also assumes the engine and systems are in good working order and that the remaining refitting and re-commissioning work are completed to a good standard.

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5 November 2010