

#### Pre Purchase Survey Report

Boat Name: MY "XXXXX"

Year of construction: 1995

Boat Type: J 130

Date and Place of Survey: 25th and 30th August 23 at Marina San Giorgio di Nogaro, Italy

#### By order of XXXXXXXXXX (Buyer)

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Submitted without prejudice,

Ocean Advice Ltd.

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#### **General impression**

The Boat as presented in the Marina by the Owner and a Broker appeared in good condition. The owner seems to be an experienced sailor.

#### **Particularities**

J Boats have a Balsa Wood Core, which makes the Hull very light and stable, but also susceptible for moisture inside the core and therefore instabilities in the structure.

The Carbon Fibre reinforced Mast is another feature of the J Boat, which requires special attention. Carbon Fiber is very sensible regarding exposure to UV Light ( Sunlight ), therefore a close cover with paint is required.



#### 1. Moisture reading on superstructure

Over the last two weeks there have been high temperatures over 30 C without rain. Those are ideal circumstances for a reading of moisture.

Two sections with higher moisture had been detected.



The anchor chain compartment has no Balsa Wood Core.

The compartment behind, where the anchor is placed, has no drainage.

This leads to that water that enters into that compartment will remain, and should be adjusted to enable rapid drainage.

The hatch and its frame needs to be redone and a drainage for the Anchor compartment installed. By inclination from the Anchor Compartment towards the chain compartment or additional through-hull drainage. First the anchor compartment, there is a section where the wood structure is rotten. Especially around the hatch frame.

Instrument used: Skipper 5 Moisture Meter - SMM5

The reason for that is most likely that the paintjob around the wood wasn't done properly, especially on the inside part.





Second Area is the shroud connection Stb.



Most likely it is only the sealing of the cover plate.

In any case that area has to be dismounted and carefully inspected. Also the ceiling inside the Boat should be dismounted to be inspected.

Before closing the area again, ensuring it is completely dry.

It is always a good idea to close or cover cut outs and holes for screws with epoxy primer to prevent water from entering the core or fibre structure.

# 2. Extractable Spinnaker Boom

The Boom has a cut out for the water to drain.



Also there are some foam matts stuffed into the boom tube, for sure not original.



I assume it was made to prevent water from running back into the bow cabin and I would recommend closing that area and installing proper drainage instead.

#### 3. Stainless connections

In general the connections are looking good.

Only at the Bow / Anchor compartment the screws and nuts are oxidized.





The Gearbox and electric engine for the anchor winch are new.

On the top you can see the rust appearing on some connections.

It might be that some screws or nuts that had been used are not AISI 316.

It is better to replace them.



### 4. Electrical installation and Galvanic Isolation.

The electrical Installation does not show any faults, the batteries are in good condition and the charging via the charger or the alternator is functional.

The main connection board is easy to access.





The grounding is not functioning.

Earthing cables from the engines are disconnected / broken

All Metal parts on / inside the boat should be connected with the Zinc Anodes in the water.



This boat has Zinc anodes only on the shaft.

If the connection of all grounding lines do not end on the engine , the system

does not work. This causes oxidation / damage on metal parts especially Aluminium.

### 5. Engine and Propulsion

Even though the engine has already 2800 hrs it is running well.

In low RPM there is quite some vibration when the boat is in movement.



This is caused by the worn shaft bearings and by the fouling on the propeller.

The propeller Rubber inserts are broken and need to be replaced as well

All the sealings / bearings have to be changed.

It might be that due to the installation of the shaft sealing PSS the inner bearing is missing.

That causes those vibrations as well, because the shaft has its connection only on the engine and on the cutless bearing support outside.



The PSS Shaft Seal and its installations (not connected to active cooling), indicate that the bearing is not installed.

https://www.shaftseal.com/pss-installation-instructions.html

But for a smooth running which gives less stress to parts of the propulsion and engine the inner bearing is essential.

The missing inner bearing might be the indication for the consuming rubber on the second bearing.



The red tube is usually used for the connection with an active seawater cooling.

Here it is just leading over the water line.

While driving you can feel how it sucks air. It does not have any cooling effect.



# 6. Boom and Mast

The boom shows light oxidations. It is made out of aluminum.



It is always recommended to isolate different materials like stainless in Aluminium from each other. There are special paints and or fittings for that purpose. The now oxidised boom parts need to be addressed with lemon acid and covered up with epoxide primer and best acrylic paint.

The mast appears in good condition, only small scratches in the paint should be fixed.



Because the Carbon Fiber is also an electric conductor it is recommended to connect the base to the grounding system.

# 7. Navigation Autopilot,

The navigation computer is functioning, but the controllers aren't. The handheld control works but its display does not and the main Autopilot controller does not work at all.



It is now to find compatible new Instruments.



The Furuno Radar on Board is not showing the right course.

It is 20-30 degrees off.

This might be only a question of adjustment, but this is not certain.

# 8. Shower drainage

At this point there is no device installed for draining the shower. At this point

The water from the shower will drain into the central bilge.

This needs to be fixed with a shower box or a direct pump system.

# 9. Ceilings in Salon

Some of the head linings are loose and it appears that the glue on the base plate is not sticking anymore. This indicates humidity in the cabin over a longer period.





### 10. Storage Stb.

The storage aft Stb. accessible from the cockpit, used to store fenders etc. is open through to the Steering compartment. Here it is recommended to install at least a net between these two sections to prevent Material rudder, if it fell into the mechanism.

### 11. Steering

The rudder works fine. But there is a light oxidation on the Aluminium Parts. That for sure is also caused by the disconnected / interrupted Grounding.

### 12. Moisture check hull

is pending and will be conducted on the 29/08/23. The first impression of the hull condition led me to believe that there will be no findings of moisture spots / osmosis in critical condition.

### 13. Blue Hull Paint / Gelcoat condition

There is considerable UV damage and numerous scratches and marks and one approximate 40 cm in diameter was obviously not repaired by a professional on the port site.

- 14. Soft furnishings below decks show signs of wear and staining.
- 15. The storm-hood is damaged and will require repairs or will worsen. Similarly, the cockpit cushions need to be replaced
- 16. The anti-foul is chipping off, pitted and rough in many places. Inspection suggests that the hull has not been primed adequately and should be stripped back, a preventative epoxy primer applied, before primer and subsequent antifoul.



# 17. Keel Bolts / Keel Hull Joint

Under normal circumstances there is no need to tighten the keel bolts every year.

The Keel Hull Joint is laminated with fiberglass. In this case it is recommended, when anyway stripping the hull, to reinforce that part with 3 more layers of fiberglass rovings.

# Additional Check on 30/08/23

- 1.) The moisture reading of the hull was conducted without any negative or suspicious results. Even though it was raining hard in the days before an equal reading within the tolerance for moisture in the Sandwich and solid constructions.
- The inside of the boat was dry and did not show any signs of water entering during the hard rain.
- 3.) The anchor winch electrical funktion was tested. It is funktional.

#### Valuation

The above mentioned faults need to be fixed / repaired. In my estimation these equate to around  $10.000 \in$ . In addition, between  $1.000 - 2.500 \in$  should be considered to renovate the obsolete autopilot controls (pending further examination and enquiry).

The current market situation, referred to in the latest report of The Yacht magazine, states that there is a downward trend in sailing yacht sales. With regards to available J boats, not so commonly available in the Mediterranean, I am led to a valuation of  $80.000 \in$  in its current condition (excluding the autopilot repair).

Villach, 30/08/23

# DI Torsten Lieb