

Insight

MARINE SURVEYS LTD

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GENERAL CONDITION SURVEY REPORT

For Yacht IMX 40 'Cracker'

This is to Certify that I the undersigned carried out a survey on the above vessel at Brightlingsea, Essex, England on the 9 June 2010 at the request of Mr. Linnarsson of Pipergaton 4, 112- 24 Stockholme, Sweden, for the purpose of reporting on the vessels condition subject to the limitations below. This Pre purchase survey was carried out on the understanding that I am legally liable to the above client only and not to any subsequent holder of the said report. Such liability must be constructed as a contract under British law and jurisdiction and any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the courts of England and Wales.

CONDITIONS / FACTORS LIMITING SURVEY

- Y The reason for the survey was to carry out a structural and mechanical evaluation of the vessel for pre-purchase, mortgage, finance and or insurance purposes.
- Y The vessel was ashore supported on chocks. This allowing access to the hull bottom, apart from the chocking positions.
- Y Machinery installations, auxiliary and ancillary equipment, gas and other service systems, electronic equipment, pumping and plumbing, sanitation systems, navigational aids and other sundry items were visually inspected only.
- Y Diesel engine examined externally only.
- Y All tanks were inspected where visible but not internally and they have not been pressure tested; their contents have not been tested for contamination.
- Y Windows hatches and external doors have not been tested for water tightness.
- Y Skin fittings and valves were not dismantled.
- Y The gas system was not tightness tested.
- Y No liability whatsoever is accepted for any injury, death or damages arising from those parts of the vessel to which access could not be gained at the time of the survey and on the strength of which I am unable to comment.

- Ÿ This survey is not undertaken with any intention to ascertain that the vessel would comply with any rule or code of practice as may be required by any authority under whose jurisdiction the vessel may be operated. Due to over coatings joiner work, installations alike, access to certain parts of the vessel were difficult or impossible and therefore no responsibility can therefore be accepted for failure to discover or report on these defects which may exist in these areas.
- Ÿ The mast and rigging were examined to head height only. The mast should be un-stepped before voyaging so that the presently inaccessible parts of the spars and its rigging can be examined.

DEFINITION OF TERMS

- Ÿ The use of the word *appears/appeared* indicates that a very close inspection of that component/system/area was not possible due to constraints imposed upon the surveyor (e.g. no power available, inability to remove panels).
- Ÿ The use of the word *serviceable/adequate* indicates that particular system, component or item is sufficient for a specific requirement.
- Ÿ The use of the word *good condition* indicates that the component /system is nearly new with only minor cosmetic or structural discrepancies noted.
- Ÿ The use of the word *fair* indicates that the component/system is functional as is with minor repairs and should be monitored often to see if its condition deteriorates.
- Ÿ The use of the word *poor* indicates that the component/system is unsuitable as is and will need to be replaced or repaired for it to be considered functional.
- Ÿ *Readily accessible* means cable of being reached for operation, inspection or maintenance without removal of any craft structure or use of any tools or removal of any item.
- Ÿ *Urgent Recommendations* must be done urgently, preferably before re-floating and certainly before any use is made of the vessel.
- Ÿ *Recommendations* should be done at the earlier of next docking or within six months or such other time scale as may be specified.
- Ÿ *Suggestion / advisory comments* for information and consideration, or may be necessary to comply with waterways standards or regulations on inland waterways, but not of particular significance to safety or insurability at this stage.

VESSEL PARTICULARS

Name of vessel: Cracker.

Hail Port: Brightlingsea.

Owner: Co. YSUK Yacht Brokers.

Official Number: Not verified.

Intended use: Recreational / private.

Navigation Limits: Category A. Ocean. (max load 8 people).

IRC rating: Certificate (fully Endorsed).

Date of Survey: 9/6/10.

Type: Aft cockpit, wheel steered cruiser/racer with a 10 berth layout.

Designed: X Yachts in Denmark in 2001.

LOA: 12.100m **Beam:** 3.800m **Draft:** 2.4m.

Displacement: 6,830 Kgs.

Ballast: 3,100 Kg.

Engine: Volvo MD2040 40HP Diesel.

Hull number: DK-XYA-40069E101.

Sleeping accommodation: Sleeps ten. Twin aft cabins, sleeps three in each rear cabin, two berths in main saloon, double berth in forepeak.

EU Directives

The vessel did carry a Builders Name Plate of the type laid down in accordance with the EU Recreational Craft Directive 94/25/CE bearing the CE mark and the Design Category of the subject vessel. The vessel did have a hull identification number (HIN) in accordance with EN ISO10087 (BS7490) and did carry a BMIF 'Boatmark' number.

The above information, with particular reference to engine details is gathered from various sources, that is Brokers details, and neither confirmed nor guaranteed.



DESIGN AND CONSTRUCTION

A precise specification for the structural lay up was not available at the time of the survey and this cannot be confirmed. However the hull construction appeared to be of typical solid polyester laminate with fibreglass matt and woven roving. The internal hull structure consisted of cored fibre glass floor stringers, partitions, plywood bulkheads and joinery bonded to the hull and deck moulding. There was accommodation for ten adults in three cabins. The displacement hull was heavily rounded through to a deep ballasted keel.

The hull was fitted with a separate fibre reinforced plastic deck moulding of similar construction bolted to the main hull with the bottom and sides of the hull strengthened internally by encapsulated stringers and encapsulated transverse bottom frames. The scantlings may be considered to be average and typical for this type and size of vessel, and generally appeared to have been built to accepted recreational marine industry production standards and practices at the time of its construction.

EXTERNAL HULL EXAMINATION

The vessel was not tested for transverse or longitudinal metacentric stability or buoyancy. It was not possible to ascertain the maximum allowable load for the vessel.

The vessel was lifted ashore and held in slings on a hard stand at the above site. There was good external access except in way of the slings and other supporting structures. There was reasonably good internal access except in way of fuel and water tanks and similar fitted items. The vessel was not 'stripped out' for survey she had been washed off and was in generally good clean condition.

The vessel was viewed from a distance at various angles and no apparent or obvious signs of major longitudinal or transverse deformation or structural failure which might indicate earlier serious damage or poor repairs observed.

The side, bottom and transom panels were generally in good order, fair and free of obvious moulding and pigment defects but it was noted that there were a number of minor scratches and contact abrasions on the topsides. The stem was particularly examined and no significant contact gouges or abrasions were noted.

There were three small areas of gelcoat damage on the transom quarter on the starboard side, but these were of no structural consequence.

The bottom and side panels of the hull were lightly hammer tested using an engineers ball hammer to test to see if there were any obvious voids in the lay up but none were discovered. This was particularly carried out at acute points of the hull form or at points of contra flexure where such voids may be expected. No guarantee can be given, however, that such voids do not exist. The hull was sounded all over by this means with no indications of soft spots being noted in the gelcoat and, judging by the general hard resonance, the structure appeared to have been solidly built to a good standard. The hull was especially examined at the points where the bulkheads were fitted and no sign of a hard spot in these areas were noted nor were there any signs of gel coat cracking indicating that the shell was 'hinging' seen.

FIG 1

The vessels bottom was cleaned of weed, crustaceans and other marine growth, and the antifouling coating was found generally in a good condition, with the remaining adhering well to the shell suggesting compatible paints had been used. Where considered necessary in the circumstances at the time of the survey, paint coatings were removed from the shell (in sample areas only) in order to evaluate the local gel coat condition in those areas. This was done to allow the



surveyor to form an overall impression of the general status of this. It should be noted however, that, unless a hull has been completely cleaned back to the bare gel coat prior to the survey, I cannot confirm the detailed condition of the shell gel coat surface, fastenings etc. My conclusion therefore based on the evidence of the sample areas examined. It became apparent that the underbody had been coated with a gel shield type paint system. The epoxy was well adhered generally but there were occasional patches especially around the waterline which were detached and the underlying gelcoat was visible (see Fig 1). Warranties of the epoxy coating system are usually supplied by the Yacht Builder (5 years) and any

existing warranties should be checked. Broken areas in the epoxy could be lightly sanded down, cleaning away all loose fragments, washing with freshwater and then thoroughly drying out and sealing with a suitable primer before applying a epoxide resin stopping compound and finally painting.

The undersigned surveyor has made every effort to determine the presence of blisters short of destructive testing, and that blisters were not found. This, however, does not mean that blisters won't develop at a later date.

Moisture meter readings on the immersed sections were not taken as the hull surface did not dry sufficiently during the time allowed for haul out. Note for future moisture meter readings: Surface coatings which carry large amounts of copper or tin (as in this case) will cause false readings.

BALLAST / KEEL

All the ballast was contained within the cast iron keel which was secured to the hull by steel bolts. In way of the keel attachments the hull was reinforced by a glassed in stiffeners and by substantial frames and dividers. No damage or deterioration was evident on the interior structure, and no signs of movement was observed on the exterior. There were a few fine cracks observed around the fairing sections at the front of the head and around the ballasted areas on both sides (see Fig 2 and Fig 3). These were of no structural consequence, but it is advisable to have them ground out, dried, sealed and rectified as soon as possible. The keel bolts were not drawn for inspection.



FIG 2



FIG 3

Recommendation

1. Employ a competent boat builder to repair the fine cracks observed in the gelcoat around the head of the keel and around the lower ballasted areas on both sides (see Fig 2 and Fig 3). These fine cracks were of no structural consequence, but it is advisable to have them ground out, dried, sealed and rectified as soon as possible. (Morgan Marine quoted £1500 Sterling for repairs on the day of my Inspection, this will include the craning out of the vessel).

Note: Such cracks are often caused in these areas by limited structure of the gel coat, but do not effect the structural integrity of the adjacent solid structure. No indications of serious degrading were noted.

INTERNAL STRUCTURE

The internal hull structure consisted of plywood bulkheads, cored stringers, floors, partitions and joinery bonded to the hull, and deck moulding. Most of the bonding was hidden by lining and cabinetry and could not be inspected. Where visible, the bondings, bulkheads and stringers appeared to be secure and free of defects and the laminates all appeared to be fully and satisfactorily 'wetted out'.

SUPERSTRUCTURE / COCKPIT/ CANVAS

Deck: Main deck was cored FRP.

Wheelhouse/coachroof: Cored fibreglass.

The deck, cockpit and superstructure were formed from one fibre reinforced plastic moulding, apparently of the same grade and construction as the main hull though this could not be confirmed. This was specially examined and found generally weather tight, free of moulding and pigment defects and it also appeared to be satisfactory secured to the hull moulding. Where it was possible to examine the deck fastenings these were found adequate, in generally good order and the unit was well secured. The deck and superstructure unit was particularly examined for star crazes in highly stressed areas and under the side stanchion feet for stress crazing but none of these defects were found.

The deck was tested in a number of places with the Surveyors weight and no undue flexing of the structure noted.

BILGE PUMP INSTALLATION / BILGE AND ACCESS

Pumps: 1 x electric keel pump. 1 x diaphragm manual pump.

The vessel was subdivided by non watertight screen bulkheads. Oil and water separation was provided for. The engine bay hatch and traps located below the saloon flooring allowed access to the bilge. Various other traps were accessible through out. The main bilges were found generally clean and dry. The keel section was wet but this is not uncommon.

The one manual gaiter type hand pump appeared to have been competently installed and was in a good serviceable condition, and although it was not possible to survey all the associated pipework in detail such as I was able to inspect appeared satisfactory with the connections and worm drives clamps in a serviceable condition. The pumps handle was stowed in a cockpit locker and was secured with a retaining lanyard so that it could not be accidentally dropped overboard. Note: Carry a spare diaphragm and non-return valve for the manual pump in your spare kit.

The electric pump was not visible but was tested and proved powering

DECK GEAR & FITTINGS

The majority were all found of adequate size and well bolted. Where accessible found with adequate additional reinforcing within the laminate. Each mooring cleat was hammer tested and found in good condition, structurally secure and without undue rope wear. The toe rail was intact with no major damage or distortion. As far as possible to establish with out dismantling the remaining deck

gear and fittings were securely fastened and suitable for the Yacht.

The safety rail around the anchor platform was slightly bent and the nuts which secure the rail on the starboard side were missing. The mooring cleat on the port aft quarter requires removing sealing and refitting (rain water ingress observed).



FIG 4

Recommendation

1. Secure the safety rail around the anchor platform. (2 x nuts missing/ access via chain locker/ see Fig 4).
2. The mooring cleat on the port aft quarter requires removing sealing and refitting (rain water ingress observed through steering gear compartment).

SEA VALVES & SKIN FITTINGS

Material: Plastic spigots/ no actual skin fittings.

Valves: 1 x ball valve for forward sink outlet and engine. 2 x plastic for toilet.

Hoses: Reinforced PVC.

Emergency wood plugs: All observed.

Transducers: 2 x PVC under aft berth.

The fittings were not drawn for inspection but were examined in situ externally by hammer and scrape testing and were found in a good condition with no obvious defects. All through hull fittings were fitted with valves on the inside of the hull and these were also examined without opening up for seizure, position and corrosion.

These appeared to be in good order, accessible and satisfactorily operational with no water ingress in way of seals or glands. Although it was not possible to survey all the associated pipework in detail such as I was able to inspect appeared satisfactory with the connections and worm drives clamps in a serviceable condition.



Note: The water around the transducer fittings below the forward berth (see image above) has sourced from the leaking hand rail around the anchor platform. As mentioned previously.

ELECTRICAL INSTALLATION

Ship's system voltage: 12Volt / 240 Volt.

Batteries: Four heavy duty acid batteries.

Generator: Engine alternator / Sterling charger.

There were four heavy duty lead acid type batteries which were adequately secured against any movement and their terminals were covered. The area of installation below the saloon seating and adjacent the engine were considered adequately ventilated, and the batteries appeared to be in reasonably good condition.

The system was fitted with a marine type fuse board correctly installed. The fuses, wiring and associated equipment where accessible were found in good order and generally operational, with none of the wiring found to run in the bilge area and clear of any source of direct heat or fuel or gas piping. The wiring was PVC insulated, and in the limited places for inspection, the wiring was adequately clipped up and fitted where necessary with crimped end fittings. *Tidy the wiring in the battery space and refit the cover over the junction box.*

The cable sizes all appeared to be adequate for the circuits examined and the DC cables were all of the multi-strand type.

The DC system was fitted with a master isolator switch, and it was considered to be installed as close to the batteries as practicable and was checked to see if it functioned correctly and found in good order.

The 240 Volt system was on during my inspection and appeared to have been competently installed, was properly protected and in good order.

The navigational lights were tested, and they appeared to comply with the appropriate regulations.

NAVIGATIONAL EQUIPMENT

The vessel was fitted with the following nautical equipment which appeared to be in generally good working order:

Brookes & Gatehouse instrument system with Compass, Speed gauge, Depth gauge. VHF, GPS, satnav / chartplotter, Depth, Log, Autopilot (hydraulic strut). 3 multifunction displays in cockpit, 5 20/20s on mast, 1 multifunction at navigation table, twin illuminated compasses in cockpit.

ENGINE INSTALLATION.

Main engines: make: Volvo model: MD2040 hp 40hp.

Type: Diesel on Volvo sail drive folding propeller.

Engine cooling: Closed fresh water/raw water heat exchanger.

Reduction gear: Reduction gearbox.

Engine hours: Not verified.

Engine bed: Fibreglass stringers

Pan under engine: Divided bilge.

Engine number: 5102501855/868846.

Note: Inspection of the engine was restricted to the installation only and the above details are not guaranteed.



A visual inspection of the engine, filters and related connections showed no signs of abuse and a good maintenance regime became apparent. The stringers that support the engine mounts were cored fibre glass and in turn they were secured to the hull and appeared to be free of stress. The main flexible engine mountings were in good order. The crankcase oil was checked and appeared to be clean and at the correct level.

During the test run a simple audio test was carried out, no undue knocks were noted in the bearings or running gear and no undue noise, piston slap, or bearing

failure was noted and such simple running tests as we were able to effect indicated that the machinery appeared to be functioning correctly. It was not possible to check the compression of the engines nor was it practicable to remove injectors and check the actual cylinder pressures, however the machinery was superficially clean, free of significant rust and excessive oil leaks and appeared to be in a serviceable condition, however, it is always strongly recommended that the engines are further examined and tested by a competent Marine Engineer familiar with this type of machinery prior to purchase.

The exhaust was of the wet type, and the manifold, silencer and hoses appeared sound without breaks or fractures and there was no sign of carbon deposits. Clear of the manifolds the exhaust system was fully supported.

Engine throttle and gear controls were adequately secured and were tried and found in a good, smooth operational condition.

The stern gear was examined externally-without opening up-and was found in a good serviceable condition overall. The propeller showed no sign of corrosion and the propeller blades were individually sighted for obvious signs of deformation, with none found. The propeller was removed during my inspection by an Engineer employed by Morgan Marine, and the sacrificial anode replaced, it was refitted and was a snug fit to its shaft and was properly secured. When the shaft was rotated by hand it was free. (see image).



The sail drive seal was secure and in a good condition with no obvious signs of water ingress in way of the seals or glands noted. The drive was secure with no sign of corrosion or dezincification in the metal.

Recommendation

1. Although the engine appeared to be in a good/ serviceable condition, carry out a thorough test of the engine and gearbox once the vessel goes afloat prior to voyaging.
2. Sufficient emergency engine spares should be provided, including a spare water coolant impellor.
3. A complete on going maintenance programme should be set up for both the vessel and engine and detailed records maintained.

FUEL TANKS AND FUEL SYSTEM

Fuel type: Diesel

Tanks: 90 litres.

Material: Aluminium.

Manufacturer's label: Yes.



The vessel was fitted with one free standing fuel oil tank of alloy construction which was examined as far as practical (but not pressure tested) and found externally in a good condition. The tank was not filled up and it was not possible to check fully its oil tight integrity and this is not guaranteed. There was however no 'obvious' signs of leakage from any of the joints or fittings. The tank appeared

to be properly secured and no sign of movement was observed. The vent pipe was properly protected with a single flame arrestor. The tanks filling pipe was not completely accessible, however the filling hose appeared to be taken into the cockpit and was so arranged that it was not possible for fuel to overflow into the vessels hull or bilge. The fuel was drawn from the top of the tank, with the correct stop cock installed.

The flexible fuel piping was in a good condition and firmly clamped.

INTERIOR/ ACCOMODATION

The interior was found to be in a good cosmetic condition overall considering the use the vessel, racing etc. The saloon, and berths were fully lined and fitted out to a good standard. Soft furnishings remain in fair order. It is not known whether the foam used in the soft furnishings was fire retardant. Bulkheads and joinery work were in good order, and the majority of the drawers and locker doors appeared functional.



STEERING GEAR

Rudders: GRP encapsulated long fixed fin.

Material: Fibreglass.

Rudder stock: Steel.

Auto pilot: Yes.

Emergency tiller: Yes.



The vessel was fitted with a mechanical type steering system with a large spoked wheel fitted at the helm. This was tried hard over to hard over (3 full turns of the wheel) and found in good, smooth operational condition and to sit correctly on the stops. The drag links, cables, pullies and quadrant were examined and found secure and in good order. It was not possible to test the steering under any load as the vessel was ashore at the time of the inspection.

The rudder was constructed from fibreglass. The rudder was showing no signs of damage or cracking. The hangings were found good without undue wear.

FIRE FIGHTING / SAFETY EQUIPMENT

Personal Floatation Devices: Various observed.

Life ring/horse shoe: One observed.

Life sling: Warps, fenders, horseshoe, drogue & light. inflatable danbuoy.

Life raft: None.

Flares: Various in date.

Fire extinguishers: 2 x 2Kg dry powder plus engine auto.

The vessel carried adequate dry powder fire fighting equipment and the extinguishers were carrying approved certifying marks and they were kept in readily accessible positions adjacent to fire risk points. They appeared to have been well maintained and were in a good condition ready for immediate use. An automated fire extinguishing system appeared to have been competently installed in the engine space.

DOMESTIC WATER INSTALLATION

Tanks: Stainless steel.
Capacity: 145 litre (approximated).
Pumps: 3.8 pressure pump.
Pressure regulator: None.
Water heater: Calorifer tank.



The vessel was fitted with a freshwater tank of free standing steel construction which was examined as far as practical and found externally in generally good condition. The tank was not filled up and it was not possible to check fully its watertight integrity and this is not guaranteed although no signs of leakage from the joints or fittings were noted. It was not possible to open up the tank and inspect its interior. The quality of the water inside was not tested.

The plumbing was of the plastic flexible piping fitted with a pressure pump and was examined as far as practicable and found generally in good order with the worm drive clamps in a good condition. There was a small leak noted on the freshwater pump.

Recommendation

1. Rectify the leak on the freshwater pump. (below saloon seating S).

GALLEY /GAS INSTALLATION

Stove: Marine type.
Cylinders: 1 x 1.75Kg Butane.
Gas Locker: GRP cockpit opening locker.



A two burner gimbaled stove was securely mounted in the galley. A satisfactory flame picture was present at each LPG appliance burner when all burners in the system were operating at their maximum setting at the same time.

The system was powered by liquid petroleum gas. The gas was supplied from one small cylinder situated in a vented GRP gas locker located in the cockpit. The locker was adequately vented overboard. The locker was examined all over and found to be in a good condition, and dedicated for its use. There was good access to the main shut off valve.

The flexible gas pipes fitted to the cylinder and stove were of minimum practical length, and conformed to type 2 BS EN 3212, and were found in a good condition and properly clamped with no lumps, blow holes, cracks, or signs of brittleness. The copper supply tubing was visually inspected where accessible and appeared to be in a good condition and properly secured and the pipework appeared to be protected, to minimise the possibility of damage where it penetrated bulkheads.

The GRP, timber and soft furnishings nearby the source of heat were specially examined and no sign of heat damage, charring or scorching was noted.
Note: Permanent and measurable gaps around the hatch when the hatch was fully closed were taken into account as part of the total fixed ventilation provision.
Note: The responsibility for the safety of anybody onboard your boat lies with the

owner or skipper. I advise strongly that boats have enough fixed ventilation to feed all the appliances on board that use LPG, or other carbon-based fuels. Inadequate ventilation will starve the burners of vital oxygen resulting in poor burning and that can produce highly toxic carbon monoxide.

Recommendation

1. The bottled gas installation was inspected visually only and pressure tests were not undertaken within the scope of this survey. All gas systems should be regularly tested as part of a normal preventive maintenance routine. Have a competent person use the built-in test point.

GROUND TACKLE

Anchor: 2 x sea anchors and chain.

Anchor windlass: None.

The anchors were found in their dedicated positions under the saloon seating. The size of the anchors did comply with the recommendations of the RYA Yacht Safety Document number C8/02.

Recommendation

1. The amount of chain cable to carry onboard your boat depends on your cruising area and the depth of water you are likely to anchor in. 100M of chain or 150M of warp should be sufficient to anchor in depths of 25m at high water.

HATCHES AND PORTS

Hatches: 2 x Alloy type emergency escape hatch forward.

Portholes: Alloy framed Perspex.

The escape routes and hatches were examined and found to be secure and in a good condition. The hatches dimensions comply with the EU Essential Safety Requirements as a visible means of escape from the accommodation areas.

The vessel was fitted aft with a sliding hatch of GRP construction. This was examined and found to be in a good condition, secure and lockable. The hatches and access doors appeared to be strong enough to withstand the point of load of a normal beings weight and the load to be expected from the water in the sea areas for which the vessel was apparently designed. The hatches and similar openings were of such a size and placed in such a position that it was considered that they would not be likely to allow serious down flooding of the vessel, although this cannot be guaranteed.

The Perspex windows which were examined and found in a fair condition. The windows and shuttles appeared to be strong enough to withstand the water pressures likely to be encountered within sea areas for which the vessel was apparently classified.

HEADS/SHOWER INSTALLATION

Head: One dry bowl sea toilet.

Holding tank: None.

Sump: None.

The heads were fully lined and fitted with a Marine type sea toilet and sink unit. The heads were plumbed in reinforced hoses found in a good condition. The heads flushed directly overboard. The seacocks which were found, as stated as *above*, accessible and examined without opening up.

MAST STEP SUPPORT / MAST AND SPARS

Mast: Fractional rig by Nordic Spar carbon mast, carbon boom, carbon spi pole.

Rigging: Rod standing rigging, triple spreader.

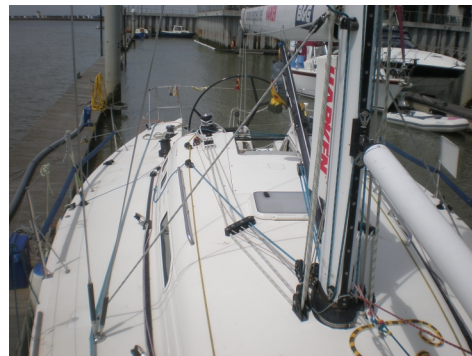
Rope handling / sails: Harken upgraded 56.3 primary winches. Harken 44.2 secondary winches. Harken spinnaker winches. Harken tracks, blocks, turners.

The mast and rigging were examined to head height only. The mast should be un-stepped before voyaging so that the presently inaccessible parts of the spars and its rigging can be examined.

The mast was coach roof stepped and support was provided by an internal spreader and no sign of movement was observed and the support sections were firmly fitted and in a good condition.

A main mast, and boom with tabernacle support were examined up to head height only, and no damage or deterioration was visible to the accessible part of these spars.

Standing rigging was of steel rod and examined up to head height and found to be in a good condition overall, with no signs of corrosion or dezincification in the metal. The running rigging was inspected and found adequate and in a good condition.



CHAIN PLATES

Where the deck mounted chain plate reinforcements were visible on the interior, they were considered adequate and secure. The headsail furling system, forestay tensioned positions, back stay fitting were considered adequate and firmly attached.

SAILS

Full Quantum wardrobe in carbon and kevlar all recent and in good order: light #1, #1, large #2, smaller #2, large #3, smaller #3, #4, storm sails, light symmetrical kite, general symmetrical kite, asymmetrical kite. Also complete suite of training / club sails in carbon Kevlar. The comprehensive sail wardrobe was partially examined by opening up and was found generally clean and in a good serviceable condition.

SUMMARY / OBSERVATIONS

This document is a General Condition Survey Report for pre-purchase, mortgage or insurance purposes on the Yacht *Cracker* carried out by the undersigned Surveyor whilst acting as a Director of Insight Marine Surveys Ltd.

The vessel appeared to be a standard production version of a IMX40 Yacht, no unusual modifications or changes were observed and she was found to be in a good structural condition overall and she has been constructed to a high standard out of good quality materials. The vessel appears to have been well maintained, was well equipped and was found in a good, clean condition, and in our opinion, was worthy of purchase for the stated intended use as a Yacht for general pleasure use within sea areas laid down by European Directive (94/25/EC) class A, OCEAN, provided that all recommendations as given later within this report are carried out within the stated time limits.

With the recommendations related to industry standards and other safety issues in this report properly implemented, the vessel should be suited for her intended purpose. Recommendations concerning maintenance and upgrades should be considered normal maintenance or improvements to be done by a prudent owner and are not intended to detract from the vessel's overall condition or value.

Valuation

The Fair Market Value given herein is defined as the highest price that can be obtained by a willing seller from a willing buyer, with neither being compelled to sell or buy, and the subject vessel having been offered on the open market for a reasonable time. The guidelines used for the valuation are as provided by industry pricing guides. Estimates based on currently listed asking prices, along with market conditions were also considered.



Fair Market Value: (in Pounds Sterling) £115,000 (One Hundred and Fifteen Thousand pounds).

Within this report principal repair recommendations are graded for your information according to priority as follows:

1. *Urgent Recommendation* must be done urgently, preferably before re-floating and certainly before any use is made of the vessel.
2. *Recommendation* should be done at the earlier of next docking or within six months or such other time scale as may be specified.
3. *Suggestion / advisory comment* for information and consideration, or may be necessary to comply with waterways standards or regulations on inland waterways, but not of particular significance to safety or insurability at this stage.

Urgent recommendations.

1. None.

Recommendations

1. Employ a competent boat builder to repair the fine cracks observed in the gelcoat around the head of the keel and around the lower ballasted sections on both the port and starboard sides (see page 5, Fig 2 and Fig 3). These fine cracks were of no structural consequence, but it is advisable to have them ground out, dried, sealed and rectified as soon as possible. (Morgan Marine quoted £1500 Sterling for repairs on the day of my Inspection, this will include the craning out of the vessel).
2. Secure the steel safety rail around the anchor platform. (2 x nuts missing/ access via chain locker/ see page 7, Fig 4).
3. The mooring cleat on the port aft quarter requires removing sealing and refitting (rain water ingress observed through steering gear compartment).
4. Tidy the wiring in the forward end of the domestic battery space and refit the cover over the junction box mounted on the bulkhead at this position.
5. Although the engine appeared to be in a good/ serviceable condition, carry out a thorough test of the engine and saildrive once the vessel goes afloat prior to voyaging.
6. Sufficient emergency engine spares should be provided, including a spare water coolant impellor.
7. A complete on going maintenance programme should be set up for both the vessel and engine and detailed records maintained.
8. Rectify the leak on the freshwater pump. (below saloon seating S).
9. The bottled gas installation was inspected visually only and pressure tests were not undertaken within the scope of this survey. All gas systems should be regularly tested as part of a normal preventive maintenance routine. Have a competent person use the built-in test point.
10. I recommend that the owner obtains a copy of the Royal Yachting Association booklet C8/02 "Boat Safety Handbook" and use their recommendations as a checklist when outfitting the vessel with equipment suitable for the type of cruising and size of crew intended.
11. The amount of chain cable to carry onboard your boat depends on your cruising area and the depth of water you are likely to anchor in. 100M of chain or 150M of warp should be sufficient to anchor in depths of 25m at high water.

SURVEY PRACTICE STATEMENT

This survey report is for the benefit of Mr. Linnarsson and is not transferable except for the named Owner's purpose and may not be used for other purposes and may not be relied upon by any other person without written consent by the surveyor. The surveyor warrants that this report is a true and unbiased opinion of the vessel, based upon a visual inspection on the date of the survey. The findings, opinions and conclusions are based upon the best professional judgment of the undersigned surveyor. If this survey does not discuss a specific item, equipment or machinery, it is not covered by this survey. While every effort has been made to conduct a thorough survey, there can be no guarantee or warranty, express or implied, as to the condition or suitability of the vessel and her equipment or machinery. This survey makes no representation and does not purport to describe any condition which may have changed since the date of the survey and the recommendations herein are limited to those that, in the opinion of this surveyor, are reasonably necessary and appropriate, based upon the conditions and circumstances as they existed at the time of the survey.

Respectfully submitted, *Signed Steven Truss* SM TRUSS MIIMS

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