

**Insight**  
MARINE SURVEYS LTD

**Steven Truss Assoc. IIMS**  
Marine Surveyor - Consultant



**Mobile:** 07717 186264 **Tel/Fax:** 01692 580119  
**Email:** boatinspections@yahoo.com  
**Web:** www.insightmarinesurveyors.co.uk  
Members of The International Institute of Marine Surveyors

## Condition Survey

On Easticks Yacht 'Swallowtail'

This is to Certify that the undersigned carried out a Condition Survey on the above vessel at UK on the 4/3/2013 at the request of Mr.

UK, for the purpose of reporting on the vessels condition subject to the limitations below. This insurance survey is 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.



**Steven Truss MIIMS**  
**Insight Marine Surveys Ltd**

## CONDITIONS / FACTORS LIMITING THE SURVEY

The reason for the survey was to carry out a structural and mechanical evaluation of the vessel for insurance purposes.

The vessel was ashore supported on chocks/slings. This allowing access to the hull bottom, apart from the chocking/sling positions.

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. None of these items were dismantled nor were specific test applied except in the case of electrical systems where simple switch tests were used.

Diesel engine examined externally only.

All tanks were inspected where visible but not internally and they have not been pressure tested; their contents have not been tested for contamination.

Windows hatches and external doors have not been tested for water tightness.

Skin fittings and valves have not been dismantled.

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.

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.

It was not possible to ascertain the maximum allowable load of the vessel. It is the owner's responsibility to ensure that basic stability information is placed on board the vessel and understood and that she is never overloaded.

## DEFINITIONS OF TERMS AND RATINGS

- 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).
- The use of the word *serviceable/adequate* indicates that particular system, component or item is sufficient for a specific requirement.
- The use of the word good *condition* indicates that the component /system is nearly new with only minor cosmetic or structural discrepancies noted.
- 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.
- 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.
- *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.
- *Urgent Recommendation* must be done urgently, preferably before re-floating and certainly before any use is made of the vessel.
- *Recommendation* should be done at the earlier of next docking or within six months or such other time scale as may be specified.
- *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.

This work was carried out in accordance with the following:

- a) Our Standard Contract of Employment.
- b) The Code of Practice for Small Craft Surveys published by the International Institute of Marine Surveying.

## TERMS AND CONDITIONS

A condition survey provides an opinion on the structural condition of all visible and significant aspects of the structure of the vessel as presented for the survey, with particular reference to hull condition.

Machinery, masts, spars, rig and sails, ancillary equipment, gas, electrical, electronic, pumping, and plumbing equipment, sewage treatment plant, refrigeration equipment, air conditioning, navigation aids, other sundry services and tankage are inspected only for visual appearance and installation standards, without dismantling or specific test. Where a mast is stepped only those parts of the mast that are visible are inspected in detail.

Hull condition is assessed by general non destructive examination and by assessment of the condition of sample areas where coatings are removed. Where hulls carry heavy layers of paint, pitch or epoxy finishes the condition of all areas of the substrate cannot be guaranteed and condition can only be estimated on the basis of the evidence gleaned from sample areas scraped clean. The survey does not provide an opinion on the condition of areas not presented visible, for example behind linings, beneath fixed flooring etc. unless these are accessible through visible portable traps, and should not be taken to preclude completely the existence of isolated damage or deterioration concealed by paints, fillers or other means.

The engine and generator installations are inspected visually, and (where possible in commission,) the engine is run up to assess its general running characteristics, vibration levels etc. No dismantling of the engine or associated equipment is carried out within the scope of a condition survey so no detailed comment upon the condition of internal parts is possible without separate full strip down and mechanical survey. It must be clearly understood that Oil Analysis reports requested, must not be construed as a guarantee or warranty as to the condition of the engine. It is always strongly recommended that a competent Marine Engineer familiar with the type of machinery onboard is employed to test and examine the engine(s) prior to purchase. Engine particulars including engine horsepower is not guaranteed and taken from the brokers particulars only.

Electrical, plumbing, heating and other services are inspected where visible but not operated unless presented in commission. Electrical wiring is inspected visually (only) in all cases.

The bottled gas installation is inspected visually only and pressure tests are not undertaken within the scope of this survey. All gas systems should be regularly tested as part of a normal preventive maintenance routine, and the installation of a bubble leakage tester, which permits simple non-invasive regular checks on the integrity of the system, is strongly recommended.

Tanks are inspected where visible but not internally, and are not pressure tested. Windows hatches and external doors are not tested for water tightness. Hull fastenings and skin fittings are not withdrawn for inspection.

Any estimate on value provided is based on known average retail values achieved by craft of similar type and condition in the same location and should not be confused with the replacement value, which may be substantially higher, particular in the case of a rare or unusual boats. Particulars such as registration numbers, tonnage, build year and dimensions are normally stated as advised or as exhibited aboard the ship, and are not authenticated. Dimensions, if checked, are measured by means of steel tape measures and should not be relied upon as to total accuracy. This survey does not seek to establish that clear title to the vessel exists or that it is being offered for sale free from all debts and encumbrances. Unless specifically instructed to the contrary the inspection, and any comments made relative to the design, performance or suitability of the vessel, are based on the assumption that the vessel will be used as a private pleasure boat in the waters for which it was designed. Unless specifically stated to the contrary this inspection and report does not seek to address compliance with any national codes, standards or regulations. This report is prepared solely for the benefit of the client to whom it is addressed and by whom it was commissioned and no responsibility is accepted to any third party to whom the report may be passed or sold. This survey contract shall be governed by and constructed in accordance with English law. Any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the Courts of England and Wales. No responsibility is accepted for any consequential losses arising, including but not limited to loss of profit, loss of use of business interruption

## VESSEL PARTICULARS

**Name of vessel:** Swallowtail. Sail number: 222.

**Hull ID Number:** Z201.

**Intended use:** Recreational/ private/ racing.

**Navigation Limits:** Category D. Inland Waters.

**Date of Survey:** 4/3/2013.

**Type:** Broads Cruiser Yacht.

**Construction:** GRP hull with timber top.

**Builder:** Hull moulded by Easticks Yacht Station, Acle, Norwich, England.

**Engine:** Nanni two cylinder inboard diesel engine on folding prop.

**Year built:** 1985 Circa

**LOA:** 28'0" **Beam:** 8'2" **Draft:** 4'.

**Rig:** Bermudian.



## DESIGN AND CONSTRUCTION

A precise specification for the structural layup 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 four adults in one main cabin. The displacement hull was heavily rounded through to a deep ballasted keel.

The hull was fitted with a separate fibreglass reinforced deck moulding of similar construction bonded to the main hull with the bottom and sides of the hull strengthened internally by encapsulated stringers. The superstructure was constructed from timber. The scantlings may be considered to be average and typical for this type and size of vessel. The vessel 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 ashore on a hard stand at the above site. There was good external access except in way of the supporting structures. There was reasonably good internal access except in way of the fuel tank 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. The stem and transom quarters were particularly examined and no significant contact gouges or abrasions were noted.

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.

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. Where this process has exposed the epoxy on the hull no significant osmotic defects or gelcoat damage was seen.

There were a number of small isolated blisters found more predominately around the higher sections. The type of blisters seen ranged in appearance from minute protuberances which appeared as a general surface roughening of the epoxy coat up to small blisters of about 3mm. The observed state could represent the early stages of other types considered later or the condition could remain static for a considerable period without any further development in either size or extent of the blistering. The condition was not considered by the Surveyor to have any significant effect on the strength of the hull laminate at this stage, or on the protection afforded by the gel coat and no remedial action is considered necessary or is recommended. Warranties of the epoxy coating are usually provided by the person applying it, and that if there are any questions about existing warranties, this person should be consulted.

#### **Advisory comment**

- Its good practice to carry on taking the vessel out of the water over the winter periods and storing her in the dry, out of thus reducing the possibility of further osmotically induced epoxy/ gel coat blistering.

#### **INTERNAL STRUCTURE**

The internal hull structure consisted of plywood bulkheads, floors, partitions and joinery bonded to the hull, and deck moulding. Where visible, the bondings, bulkheads and partitions were properly secure and free of defects and the laminates all appeared to be fully and satisfactorily 'wetted out'.

## **SUPERSTRUCTURE**

**Wheelhouse/coachroof:** Was of timber construction.

The superstructure was formed from hardwood timber. This was specially examined and found generally weather tight, free of timber 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.

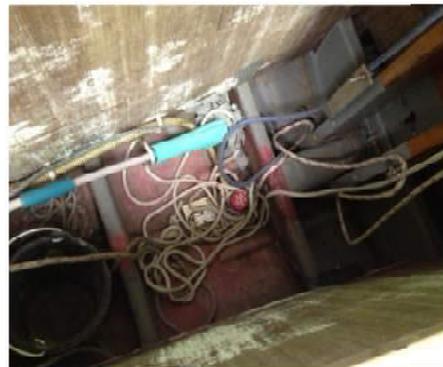
The fibreglass deck was tested in a number of places with the Surveyors weight and no undue flexing of the side structures was noted.

## **BILGE PUMP INSTALLATION**

**Manual Pumps:** Electric type with float switch.

**Electric pumps:** None observed.

The electric bilge pump was installed below the tabernacle and was visibly inspected and found in good order 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.



## **DECK FITTINGS / DECK GEAR**

Each mooring cleat was hammer tested and found in good condition, structurally secure and without undue rope wear. The remaining deck gear was examined and these were of an adequate size and type for the yacht and as far as possible to establish without dismantling the fittings were securely fastened and suitable.

## **BALLAST/KEEL**

All lead ballast was contained at the base of the fin keel which was constructed from timber and in turn was secured to the hull structure with steel bolts. It appeared in way of the keels attachment that the hull was reinforced on the interior. No signs of any undue movement was noted and the keel was thoroughly secured to the hull moulding. The steel keelbolts were not drawn for examination but were visibly inspected from the interior and they appeared to be secure and in a good condition.

I would suggest raking out the keel to hull joint and re-caulking with a Sikaflex type sealant prior to re-launch.

## ELECTRICAL INSTALLATION

**Ship's system voltage:** 12Volt.  
**Batteries:** 2 x lead acid batteries.

There were two heavy duty lead acid type batteries which were adequately secured against any movement and their terminals were covered. The area of installation was 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 bulkhead glands and crimped end fittings and all found in good order. 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 two way 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 navigational lights appeared to comply with the appropriate regulations.

### Recommendation

- Remove flammable items such as paraffin lights away from the batteries. This battery locker should not be used for storage.

## ENGINE INSTALLATION

**Main engines: make:** Nanni diesel **model:** Not verified **no. cyls:** 2 **hp:** 18.  
**Serial/engine numbers:** Not observed.  
**Engine cooling:** Raw water.  
**Engine bed:** Fibreglass wood cored stringers.  
**Pan under engine:** Divided bilge area.

Note: Inspection of the engine was restricted to 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 crankcase oil was checked and appeared to be clean and at the correct level. It was not possible to check the compression of the engine nor was it practicable to remove the injector and check the actual cylinder pressure; however the machinery was superficially

clean, free of significant rust and excessive oil leaks and appeared to be in a good serviceable condition.

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 manifold the exhaust system was fully supported.

### **Recommendation**

- Engine throttle and gear controls should be adequately secured to prevent any unnecessary movement.

### **SEA VALVES & SKIN FITTINGS**

**Material:** Bronze.

**Valves:** 1 x engine strainer valve.

**Hoses:** Reinforced PVC.

**Transducers:** None.

The skin 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. The engines cooling through hull fitting was fitted with a ball valve on the inside of the hull and this was examined without opening up for seizure, position and corrosion. The valve appeared to be in good order, accessible and satisfactorily operational with no signs of water ingress in way of the seals or gland.



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 topsides were fitted with a number of non-ferrous and plastic skin fittings, all of which appeared to be sound where examined externally and were considered to be a reasonable height above the water line.

### **FUEL TANKS AND FUEL SYSTEM**

**Fuel type:** Diesel

**Tanks:** 1 x 10 gallons estimated.

**Material:** Steel.

**Manufacturer's label:** Not observed.

The vessel was fitted with one free standing fuel oil tank of steel construction which was hammer tested and examined as far as practical (but not pressure tested) and found externally in a good condition. There was no corrosion visible to the accessible parts of the tank. 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 at any of the joints or fittings. It was not possible to open up the tank and inspect its interior, however the material of construction was considered suitable for the fuel contained therein and appeared to comply with the 30 minute fire resistant requirement of BS 476/20 and the tank appeared to be properly secured and no sign of movement was observed.

The tanks filling and vent pipe material was visibly inspected and was in a good condition and firmly clamped at the tank ends. The filling pipe was taken to deck level and was so arranged that it was not possible for fuel to overflow into the vessels hull or bilge.

The fuel piping ran clear of the bilges and was properly secured and supported. The piping all appeared to be in a good condition with no signs of mechanical damage. The fuel was drawn from the top of the tank with the correct stop cock installed.

Flexible fuel hoses were in a good condition and were of the correct fire resistant BSISO7840 type.

The fuel filter was of the marine type and appeared to be fire resistant, and non corrodible.

A flame arrestor on the fuel tanks vent pipe outlet was fitted on the exterior and the end of the pipe was fitted in a position where no danger would occur from escaping fuel or vapour

## STEERING GEAR

**Rudders:** Spade type.

**Material:** Fibreglass.

**Rudder stock:** Stainless steel.

Steering was by means of a directly connected fibreglass tiller. The steering was free; no wear or damage to the steering mechanism was detected and the tiller was tried hard over and found in good, smooth operational condition.

The rudder blade was scrape tested and sounded and there was no sign of deterioration.

## FIRE FIGHTING / SAFETY EQUIPMENT

**Personal Flootation Devices:** Various seen.

**Life ring/horse shoe:** None observed.

**Life sling:** None observed.

**Life raft:** None observed.

**Flares:** None observed.

**Fire extinguishers:** 2 x 8A/55B 1Kg dry powder.

The vessel carried adequate firefighting equipment, and the extinguishers were kept in readily accessible positions adjacent to fire risk points, and were properly maintained in good condition ready for immediate use.

A fire blanket marked as complying with at least the "light duty" requirements of BS 6575, and ready for immediate use, should be kept near the cooker.

## Recommendation

- 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 personal safety equipment suitable for the type of cruising and size of crew intended.

## ACCOMMODATION

The accommodation provided four berths in one main cabin. The interior was found to be in a good cosmetic condition overall. Mahogany hardwood joinery work showed good care and maintenance. The floors were of timber board construction and the drawers and locker doors appeared to be functional.

## FRESHWATER INSTALLATION

**Tanks:** 1 x steel tank.

**Capacity:** N/a.

**Pumps:** Pressure pump.

**Dockside connection:** N/A.

**Pressure regulator:** None.

**Water heater:** None.

The vessel was fitted with a freshwater tank of steel construction which was examined as far as practical and found externally in a 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 and 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.

## GROUND TACKLE

One mud weight, rond hooks, mooring ropes and warps were examined and considered sufficient and in good order.

## GALLEY INSTALLATION / VENTILLATION

**Stove:** Marine type.

**Cylinders:** 1 x 5.5 Kg Propane.

**Fuel:** Butane LPG.

**Refrigeration:** None.

**Locker:** None.

**Location:** Foredeck locker.

**Drain overboard:** Yes.

**Pressure gauge:** Test point seen.



A two-burner 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 and the gas was supplied from one gas cylinder secured in a locker located on the fore deck. The locker was examined and found to be properly drained and dedicated for its use.

The flexible gas pipe fitted to the cylinder was of minimum practical length, and conformed to type 2 BS EN 3212, and it was found in a good condition and properly clamped with no

lumps, blow holes or cracks, or signs of brittleness. The supply tubing was visually inspected where accessible and was soft drawn copper piping and found in a good condition and properly secured at regular intervals. The main gas line was run clear of the bilges. It should be moved away from the electric cabling in the main cabin.

The regulator was of the non-externally-manually adjustable type and secured to the gas cylinder and adequate protection was provided against mechanical damage. It was checked for gas type and matching to the system and found satisfactory.

The timber nearby the source of heat were specially examined and no charring or scorching marks were noted. The ventilation in the main cabin was calculated and considered sufficient.

The bottled gas installation was inspected visually only and pressure tests were not undertaken within the scope of this survey.

### **Recommendation**

- Clearly label the gas lockers position.

### **MAST STEP SUPPORT / MAST AND SPARS /RIGGING /SAILS**

The mast was bilge stepped and support was provided by an oakwood tabernacle. There was an area of timber deterioration noted at the base of the tabernacle and this should not be overlooked. The two 'thru bolts' at the lowest position should also be replaced.

A solid spruce timber boom was examined unstepped and no damage or timber deterioration was visible.

The aluminium main mast was examined, and no damage or deterioration was visible to the accessible parts of the spar.

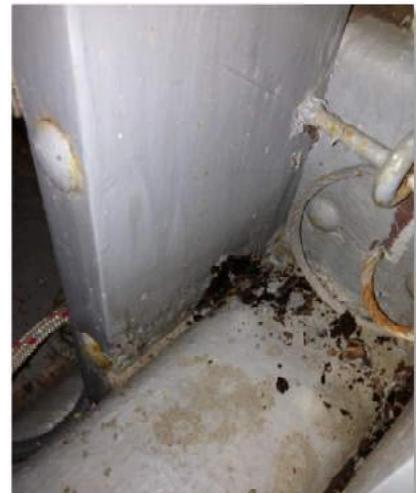
Standing rigging was of steel wire and this was examined with the mast un-stepped and found to be in a good condition with no signs of corrosion or dezincification in the metal. The running rigging was of synthetic fibre and was in a good condition.

Where the topside mounted stainless steel chain plate reinforcements were visible on the interior, they were considered adequate and secure. The bowsprit and forestay tensioned positions were considered adequate and firm.

The sails were not observed but were thought to be in a generally clean and serviceable condition.

### **Recommendation**

- Repair and restore the base of the tabernacle to its original condition. This will involve removing all degraded wood material and filling with epoxy fibreglass. Reinforcing with a new base block and fibreglass over to allow water to run off and not to accumulate. Replace the through bolts at the base of the tabernacle.
- Replace the bent bottle screw. (Starboard aft chain plate).



## STERN GEAR

**Propellers:** 2-blade folding.  
**Struts/P bracket:** Steel 'P' type bracket.  
**Thru hulls:** Rubber gaiter gland.

The propellers dimensions were not checked for matching with the machinery power and revolution output and this cannot be guaranteed, however 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 a snug fit to the shaft and properly secured. The stern gland/stuffing box was visibly inspected and considered satisfactory and effective with no signs of significant leakage noted. However the vessel was ashore during this inspection and it is not known when this gland was last repacked.



The P brackets securing was slightly loose and I recommend this is not overlooked. The rubber cutlass bearing was firm and tight.

The propeller shaft was not drawn for inspection nor the tail ends examined, however no signs of surface flaking, fatigue or fretting corrosion to the shaft could be seen.

The drive flanged to shaft coupling was examined on the interior and the bolts hammer tested and these appeared sound and well tight. It was not practicable to 'break' the coupling and test the alignment.

### Recommendation

- Secure the 'P' bracket that supports the propeller shaft so as to prevent any movement. This will involve either drying out the joint and running around an epoxy fillet on the exterior or removing the encapsulated bracket internally and re-fitting.

## HATCHES AND PORTS

The access hatches and port holes were visibly inspected and were found secure and lockable and 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 river areas for which the vessel was apparently designed. No escape hatch was fitted, however access could be gained through the roof curtain in an emergency and the dimensions would comply with the EU Essential Safety Requirements as a visible means of escape from the accommodation area.

## SUMMARY / OBSERVATIONS

This document is a General Condition Survey Report for insurance purposes on the Yacht Swallowtail 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 an Easticks 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 good standard out of good quality materials.

The vessel appears to have been very well maintained, was well equipped and was found in a good, clean condition, and in our opinion, was worthy of insurance for the stated intended use as a Broads Yacht for general pleasure and racing use within sea areas laid down by European Directive (94/25/EC) class D, inland waters, 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.

## LISTED RECOMMENDATIONS

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

- *Urgent Recommendation* must be done urgently, preferably before re-floating and certainly before any use is made of the vessel.
- *Recommendation* should be done at the earlier of next docking or within six months or such other time scale as may be specified.
- *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.

### Recommendations

1. Repair and restore the base of the tabernacle to its original condition. This will involve removing all degraded wood material and filling with epoxy fibreglass. Reinforcing with a new base block and fibreglass over to allow water to run off and not to accumulate. Replace the through bolts at the base of the tabernacle.
2. Replace the bent bottle screw. (Starboard aft chain plate).
3. Secure the 'P' bracket that supports the propeller shaft so as to prevent any movement. This will involve either drying out the joint and running around an epoxy fillet on the exterior or removing the encapsulated bracket internally and re-fitting.
4. Engine throttle and gear controls should be adequately secured to prevent any unnecessary movement.
5. I would suggest raking out the keel to hull joint and re-caulking with a Sikaflex type sealant prior to re-launch. Check the keel by hand for movement once the vessels lifted for relaunch.
6. Remove flammable items such as paraffin lights away from the batteries. The battery locker should not be used for any storage items, unless the batteries and wiring are covered first. Remember the batteries need to vent when charging.
7. 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 personal safety equipment suitable for the type of cruising and size of crew intended.
8. Clearly label the gas lockers position. It is recommended that the marking should have lettering, minimum 10mm high, be clearly distinguishable e.g. red letters on a white background, not become illegible through cleaning, fading, or normal usage.

## 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 )* **£28,000.00 (Twenty Eight Thousand Pounds).**

## SURVEY PRACTICE STATEMENT.

This survey report is for the benefit of Mr. \_\_\_\_\_ 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*