The interior layout also came in for a lot of variations, both in the Mk 2 and Mk 3. Quarter berth for the former and two berth for the latter were standard arrangements but they were also offered as three berth and four berth. The Mk 3, particularly, had at one stage five different variations; two berth, quarter berth, three berth - having two quarter berths, four berth - as the Mk 4 turned out to be and a 'five' berth. The five berth version had a berth extension, something like the Mk 2's but sliding right across the floor and turning the starboard berth into a double bunk. This layout is an incredible concept when one considers that the boat is only 17 feet 3 inches long. Also in the interior there were many variations of cooking arrangements. The quarter berth version had the advantage of having a separate space upon which to carry out the preparations of food etc. All the other versions however, had no definate space allocated except the Mk 5 (see R. Curnow brochure). One idea was to have a sort of fold-away galley that went under a bunk when not in use. Another method tried was to make a cooking kit that folded away in a box and was stowed when not in use. The favoured position for cooking and one that brought about many ingenious innovations from owners, was creating an area under the step leading into the cabin. This had the advantage of fresh air for the cook and the fumes going up through the hatch, the disadvantage was the the wind tended to blow the stove out.

Built by

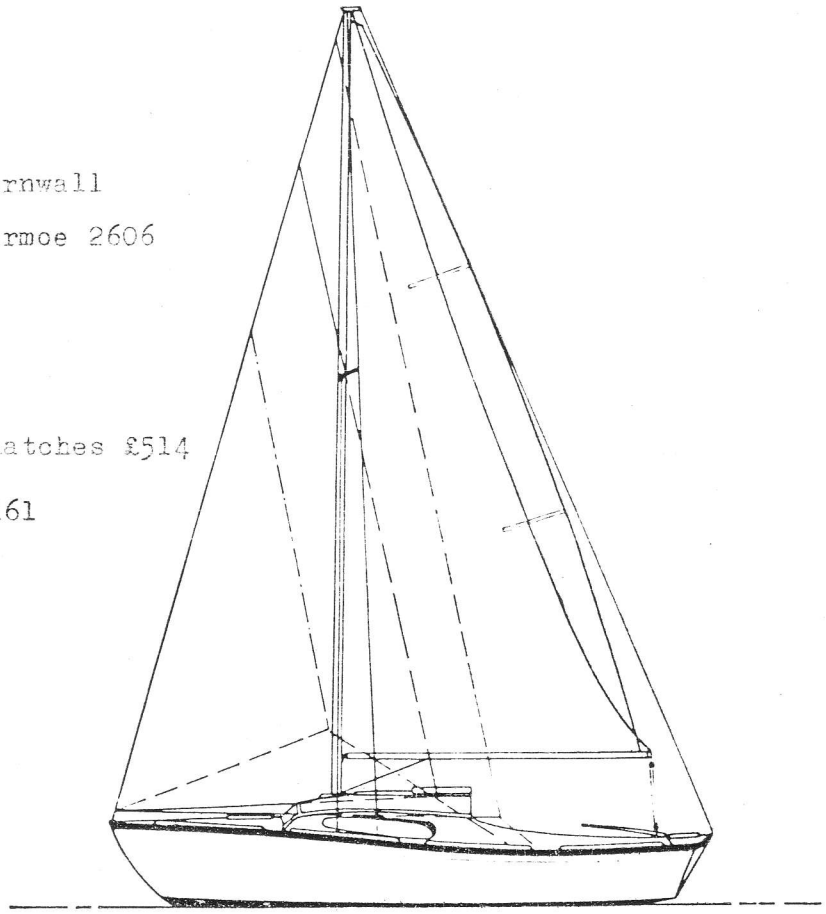
R. CURNOW
Boat Builder
West End Rosudgeon
Marazion PENZANCE, Cornwall

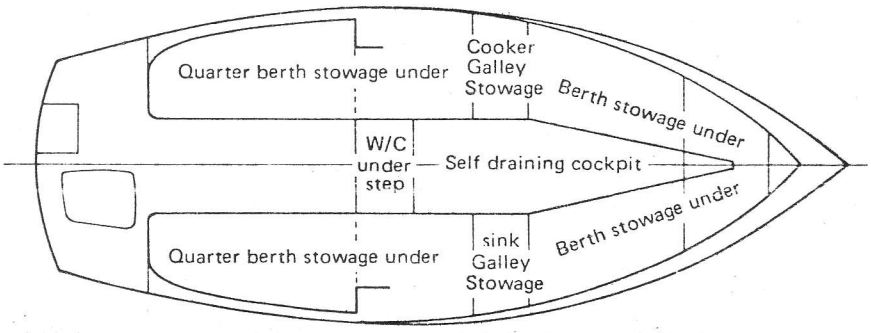
Telephone Marazion 710711 Germoe 2606

Price, including VAT:-

Complete £2413

Mouldings: Deck with hatches £514
Hull £495
Interior £161





STANDARD EQUIPMENT

Terylene Mainsail, Working Jib and Sheets with battens and sail-bag. Running rigging in Ulstron. Aluminium Spars with stainless steel fittings and standing rigging. Gunmetal Deck Fittings, including stemhead roller. Roller Reefing Gear, Mainsheet Track and 'Tufnol' Blocks. Self-draining Cockpit.

SPECIFICATION

Length, Overall	17′ 3″ (5·25 m.)
Length, Waterline	14′ 0″ (4·27 m.)
Beam	6′ 7″ (2·00 m.)
Draft – Bilge Keel	2′ 1″ (0·63 m.)
Tonnage	2·3 tons TM
Ballast	450 lb. (204 kg.)
Displacement	1,288 lb. (584 kg.)
Headroom	45 in. (1·15 m.)
Number of Berths	4
Construction	G.R.P.

SAIL AREAS

Mainsail	99 sq. ft. (9·20 sq.m.)
Working Jib	66 sq. ft. (6·13 sq.m.)

OPTIONAL EXTRA SAILS

Genoa	110 sq. ft. (10·23 sq.m.)
Spinnaker (2-oz. nylon)	115 sq. ft. (10·68 sq.m.)
Storm Jib	30 sq. ft. (2·79 sq.m.)

We reserve the right to amend or improve our specification without prior notice, in accordance with our policy of constant improvement.

Numerous sail changes were tried; areas altered and shapes changed. A SII was designed with a sail area of 240 sq ft, so that it would sail on a lake 4500 feet above sea level. Sail area alterations created trouble when organising races. To overcome this the Silhouette Owners Association had to bring out rules about sail areas.

The hull shapes have not come in for much modification except of course, the design in keel configuration. Hull material have, on the whole, stuck to wood for the home builder and for the early production boats and GRP for the later factory produced boats, however, there is reported a steel SII in Africa (S10A Journals No 190 February 1977) presumably an attempt to beat the worm which is rampant in such areas.

Silhouette's, although changed to keep abreast of the changing market requirements, were effected more by the changing methods of manufacture. Ernie Miner built the first production boat in a similar way to that used by Robert Tucker when building 'Blue Boy'. But the similarity ends there as production methods were developed. Production methods and materials are discussed in the next chapter.

Chapter Two *Production methods and materials.*

The production methods used during the development of the range of Silhouette boats is almost a chronological list of the development of yacht building: from the days of 'wood-ships' to the present popular methods.

The Silhouette Mk I's were built from plans as individual boats, each boat is different in detail if not in overall form, each builder putting his own touch into the finished product. Even the boats built by boat yards have individual ideas incorporated in them, to suit each individual customer. In Norfolk the SII's continued to be built on a similar basis the only difference being that the builder did not know, necessarily, the individual owner as the boats were built for a selling agent - John Caunter. To this end a degree of standardization was beginning to creep into the production of the boat.

On moving to Plymouth standardization became important; the market was wider and prices had to be kept down; however, the boats were still being built individually. In 1956 a Mk II would have its hull built upside down in the traditional boat building fashion. The hog, stem and transom frame being set up in jigs, with frames and bulkheads screwed and glued into position. Once the framework had been completed (the two men building the hull would cut out all the parts from raw materials) the outer skin was fitted. To the out-side of the finished hull would be fitted the pads to take

the keel, the bilge keels and the skeg. The keel weight would be fitted finally and the outside of the hull primed. Once complete the hull would be turned over and the interior deck, cabin and cockpit would be completed piece be piece: each piece of timber or ply being cut and fitted individually.

This method of individually building each boat from scratch was slow and it became obvious to Mr. Hurley and others, Mr. Bowers for instance who was then building foreman in the Grands Theatre, that to meet the demand for the boat, methods would have to be improved. Initially a system was devised whereby the hulls were made in one part of the building while the deck and cabin were made in another. Where the two parts came together the men building the boat would fit out the interior, fit the cockpit out them join the hull and deck together. This method increased production to nine boats each per week. This figure was achieved by three gangs producing three boats each per week. To encourage this target a bonus scheme was introduced and Hurley's men became some of the highest paid boat builders in the West Country.

This form of mass production, elementary as we know it today, led to more thinking on methods of speeding production. Although the hull and the deck were being made separately they were still being made individually in the sense that

the men making the sub-assembly was building it from scratch - cutting their own parts; hcg, stem, bulkheads and the panels for the bottom, sides and transom of the hull or the deck sheeting and cabin sides etc. To eliminate this individual cutting out process a machine shop was set up, a foreman, Mr. D. Brenton, was put in charge, to pre-cut all the individual parts from the raw materials. The builders of deck and hulls, and the men finishing the boats could draw these parts as and when they needed them. As each boat was identical to its neighbour in the 'production' line the cut parts could be cut in quantity. The plywood for the skin of the boat need not be cut individually. By nailing together six sheets of ply and marking out the shapes on the top sheet a batch of six parts could be cut all at once.

From this advance in speeding production there came the next major break-through. The interior design consisted, as outlined in the previous chapter of two bunks, a galley area, floor, main bulkhead and cockpit area. The interior lay-out was assembled inside the hull/deck assembly from pre-cut parts. A serious study of the interior was undertaken and the interior lay-out broken down into unit sections; galley unit, floor supports/bunksides and forward bulkhead, bunkframes, shelves, main bulkhead and cockpit unit complete with aft bulkhead. These sub-assemblies

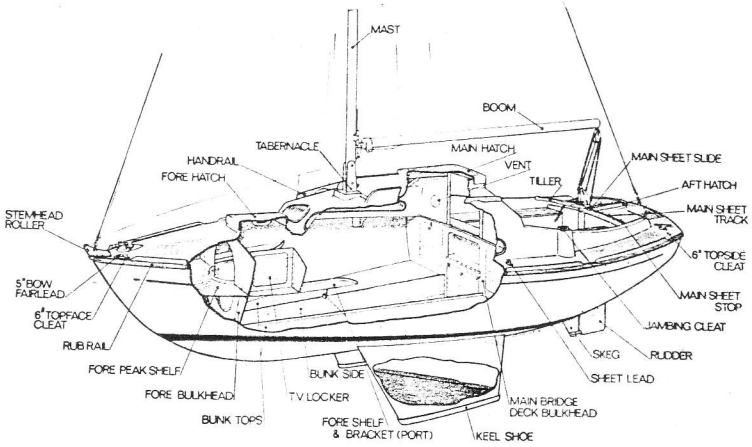
were then built in jigs, not by boat builders but by joiners, away from the production line. All these parts were stored in racks enabling the boat builders to draw a full set of sub-assemblies and parts from which they could assemble the completed boat. This ease of construction increased numbers and men found themselves relieved of the need to work late into the evenings to reach production targets and earn bonus.

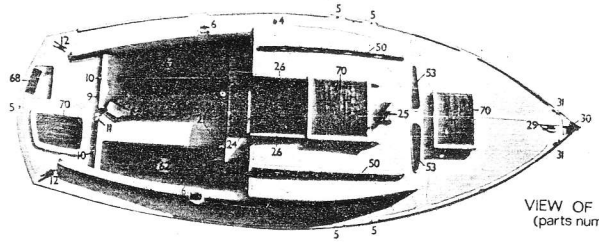
It is worth noting at this point that during the late 1950s and early 1960s labour relations within the small company were very good. It was not unusual to find men working until 10 pm or sometimes 2 am to finish off boats that were to go away the next day. Also it was not unusual to find Mr. Hurley bringing a supply of fish and chips for these men working late. He would also bring bottles of beer for the men loading Silhouettes onto the lorry and trailer, at night by the light of the street lamps in Richmond Walk.

Due as much to the good labour relationship between Mr. Hurley and his workforce as to the inventiveness of any particular member of that workforce the production system of Silhouettes became very efficient. The development of the 'kit-part' system of building, as this sub-assembly method came to be known, opened up the possibility of the amateur builder doing what the factory was doing.

This possibility led to the introduction of Silhouette in kit form being offered on the market. The home builder was supplied with a hull, a deck and a set of parts for his own construction. A construction that could be done without jigs or templates just as the builders did on the production line in the factory. The success of this type of boat construction, on the market, was quite considerable and continued into the Mk III glass fibre kit boat. (See photographs)

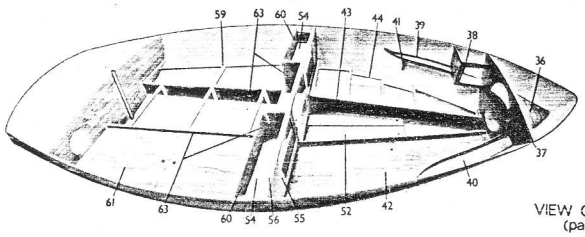
Glass fibre was the next step in the production of the little boat. About 1955-1956 the company had a contract to make wooden, canal type, cruisers for a company that would charter them on the Norfolk Broads. The specification for the cruisers had in it the need for a glass fibre sheathing on the cabin roof. As no one at Hurley's knew anything about glass fibre it was arranged that two men from a company in London would travel down to Plymouth each weekend and sheath the finished boats. The first weekend was so disorganised that they could not finish the first boat before having to set off back to London. They left their equipment and materials with the intention of finishing the job the following weekend. For some reason they did not get to Plymouth that following weekend and sheathing of the Broads boats fell further behind. As a





VIEW OF DECK
(parts numbered)

LAYOUT AND DETAIL OF SILHOUETTE MK III



VIEW OF INTERIOR
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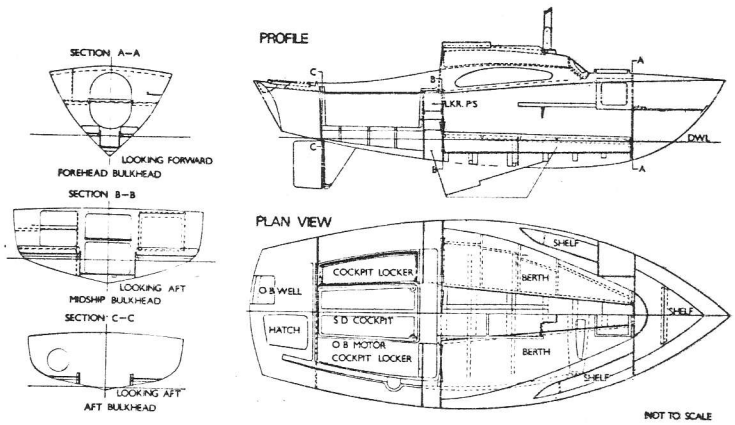
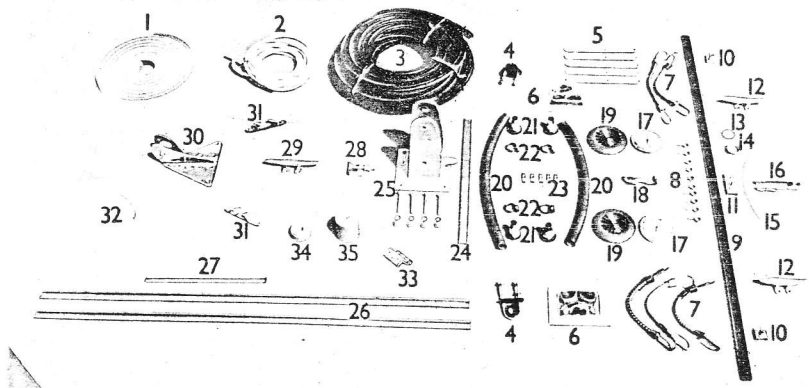
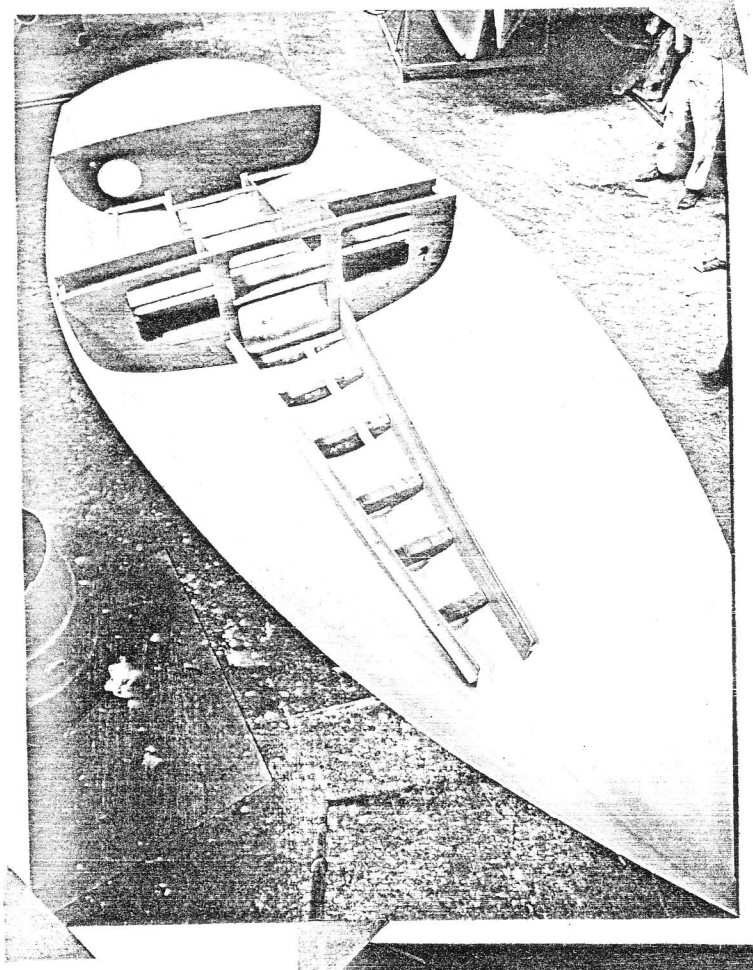




result of this hold-up Mr. Bowers along with another employee Mr. Don Giles began experimenting with the materials left by the London men. After several unsuccessful attempts they managed to get the resin to set. This success led to them doing one of the Broads cruisers themselves.

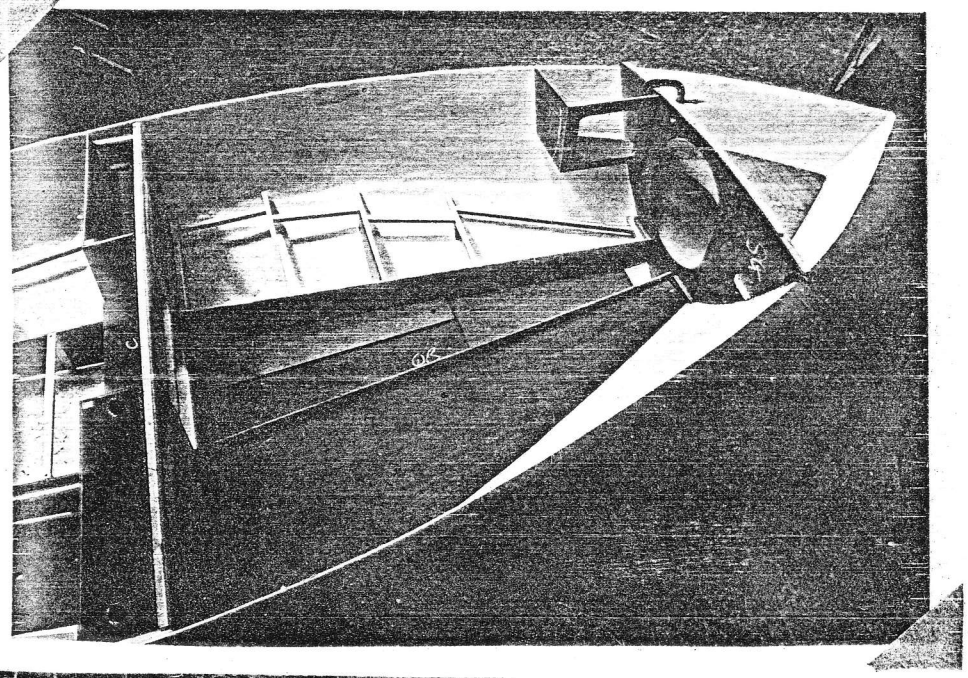
After this Mr. Hurley became interested in GRP and set up a small GRP department to make sinks and bowls for the boats and for caravans. As the interest in this new material grew Palmers Plastics Limited, a small company specializing in glass fibre, was contracted to make Silhouette decks and cabin tops. These decks were fitted onto wooden hulls with the cockpit fitted out as the wooden boats, the new GRP part ending at the aft end of the cabin.

Very few of these 'mixed' boats were produced. Shortly after Hurley's started to make their own hull mould under the supervision of Mr. Pat Hallam. Mr. Hallam was a very careful and thorough person as was everyone in those days of quick setting resins (once mixed the early resins would set in about three minutes) and a plug was made very carefully. A Silhouette Mk II wooden hull was made, all the corners rounded-off and pads for keels and skeg fitted. The hull was painted and a long process of rubbing down the surface carried out: from fine sand paper to the finest



Kit-parts layout in the hull of MK III.

Two berth version showing floor unit, main bulkhead and cockpit unit.

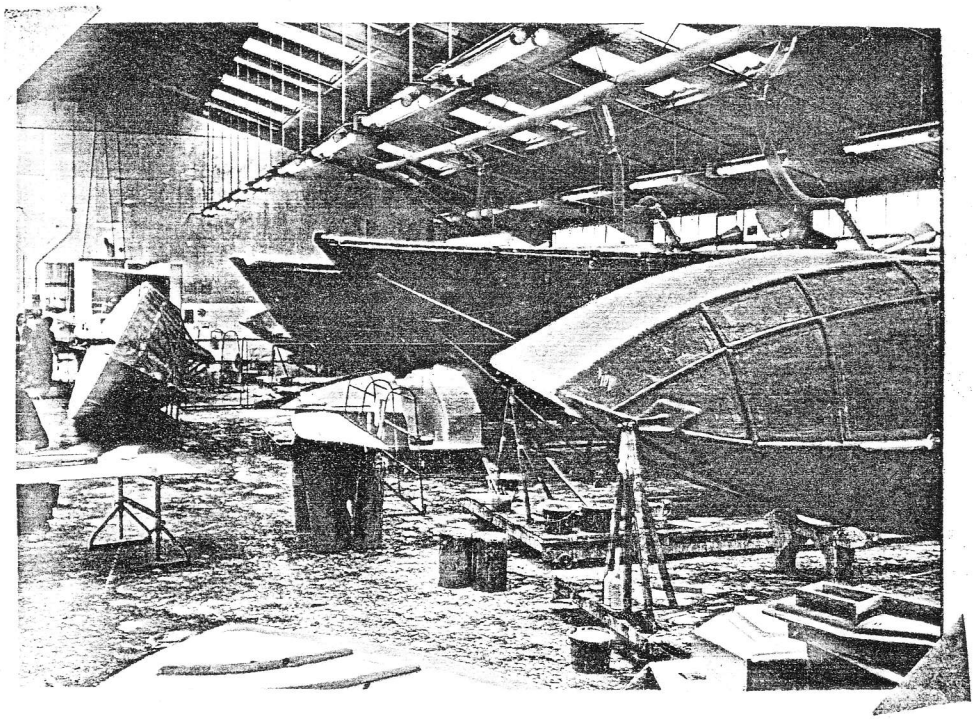


Two berth version with bunk frames, bunk tops and forward bulkhead.

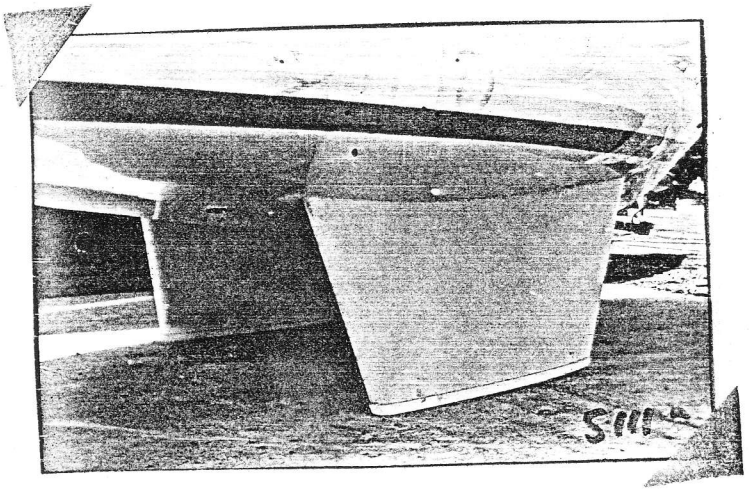
Quarter-berth version with galley unit in position. Note hole in aft bulkhead to take outboard motor shaft.

wet and dry paper. The hull was then polished with wax furniture polish and a mould layed-up over it. After releasing the plug (the wooden hull) from the mould surface of the mould was again rubbed down with wet and dry papers and again polished. The first Silhouette glass fibre hull was so good that it fell out of the mould and the mould was so perfect that 'Mirrorglaz' the polish company used a photograph of the mould as an advertisement for many years after.

With a hull mould (mounted on spindles, another 'first' claimed by Hurley's, see photograph of Valley Road Mould Shop) and their success under the watchful eye of Mr. Hallam the company began making their own GRP hulls and decks. The lay-up of the parts was, at first, a slow and careful operation: Gelcoat first backed with a tissue then the moulding was layed up with pieces of mat 9in square, then 12in square, then 18in square and finally 24in square. This process was due partly to the fear of the quick setting resins and partly due to lack of experience. The relatively slow process of laying up the hull resulted in more experiments. These experiments led to the conclusion that much larger areas could be covered and large cloths of glass mat were cut to the shapes of the bottom, sides and transom and applied in one operation. It was found that by adjusting these shapes of mat over-laps could be created to put strength into the hull just



Mould Shop Valley Road.
Hull mould, nearest to camera, is the MK III hull mould: Note the spindle supporting the mould. Note also, the keel mould to the left of the two drums, in the middle of the photograph.



Bilge keels fitted. Note GRP shoes along bottom of keels. These could be replaced when worn thin from constant grounding at low tide.

where it was needed, the bilge area for instance and along the keel line. From these early successes Hurley's mouldings went on to be some of the best in the country. The production of Silhouettes in GRP increased to seven boats per week. This figure being achieved from one set of moulds by working a split shift system and working on Sundays.

After the move to Valley Road and the development of the Mk III the Silhouette turned into a true glass fibre boat. Production methods did not change basically from those worked out before the move. Hull and deck were moulded separately, wooden 'kitparts' were made separately and the whole boat assembled on the production line. The hull and deck were glass fibred together after completion of the interior and the interior parts were 'glassed' to the GRP boat. An unusual way of doing this operation was tried at Richmond Walk - a legacy from the old methods of boat building - building upside down.

The upside-down method of assembling the SII's was that the interior was assembled, with the aid of jigs, on the upside down deck moulding. The hull in the upside down position was fitted with the keels. On completion of this interior/deck assembly the hull was lifted by the keels and lowered over the interior to join the deck. The need for this strange method was that men could 'glass' together

the hull and deck along the inside joint working 'downwards'. To work overhead with the rather primitive resins of the day was extremely difficult, indeed not easy with modern resin. This practice, although modified in that the interior was built in the hull, continued onto the production of the Mk III. In the production of Mk III's the boats were built in building jigs held on spindles. These jigs held the hull in shape whilst the interior was fitted. After the deck was put into place it was clamped down into the hull and the whole boat rotated into the upside down position for 'glassing' the hull/deck joint.

A difference in the Mk III from the Mk II apart from its round-bilge configuration was the fitting of the keels. These, on the Mk IIIs, were separate mouldings, set into position on the hull through a hole cut into the hull moulding. Once in position the keel, or keels, were fitted with a weight. In the early days this interior weight was made up of 'stampings' (waste steel from the stamped out rivet holes in steel plate) put into the hollow keel and set in with casting resin. This method of fitting keels enabled the hull to be moulded regardless of whether the boat was to be a fin keel or a bilge keel version. The hull for either version came from the same mould. Also with the skeg fitted in the same way a variation could be incorporated to fit an inboard engine when required.

Before 1958 all Silhouette masts and booms were made of spruce. In 1958-1959 there began the change to aluminium spars. Aluminium masts were bought in from Sparlight Limited. The rigging wire also changed; the early SI's and II's had galvanized wire with cast steel rigging screws and brass shackles. The ropes were of cotton and hemp. The very early boats had cotton sails. By 1960-61 all the rigging wire had changed to stainless steel as had the rigging screws. The sails were now in terylene. After a brief use of Sparlight masts A. G. Hurley started to make their own spars. The company bought mast extrusions from such manufacturers as British Aluminium and Alcan Limited and assembled their own, making and fitting their own mast accessories ie. shroud tangs, masthead fittings, spreaders etc. Sails were also made on the premises and in Valley Road a large area was designated as a sail loft.

The Mk III Silhouette was almost totally a product of the company; mouldings, woodwork, mast, boom, sails and trailer. The latter being made at Richmond Walk by the now engineering company of the group A. G. Hurley Limited.

The Mk V version of the boat will take the use of glass fibre on a step further toward speeding production and keeping down building costs. The Mk V will have a moulded interior including the bunks, the floor, the cooking area and the sink. The use of this major sub-

assembly comes a long way from the old wooden methods of boat building. The use of the interior moulding makes the Mk V virtually a three-piece assembly needing only the mast, sails, fittings and a few cushions to complete what is a fine small cruiser.

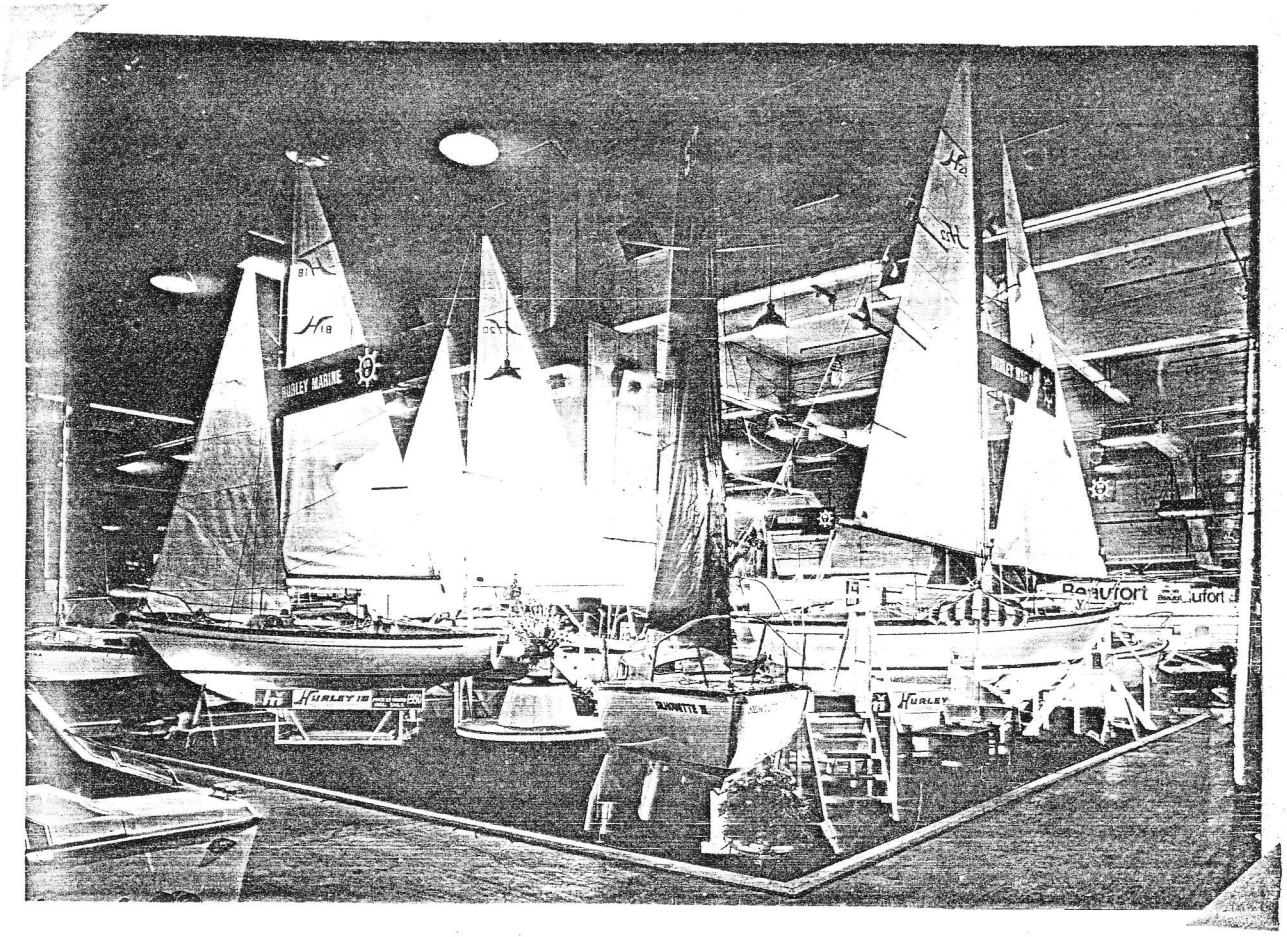
Chapter Three Owners and Users.

In 1966 294,167 people visited the London International Boat Show at Earls Court. In 1971 the number of visitors had increased to nearly three quarters of a million and with subsequent years the figures have increased. Not all of these people are potential buyers of course, many have boats of their own and others just come to look. They have however, a common interest, in sailing, motor boats or boating. This island race it seems has an unquenchable thirst for 'messing about in boats.' At the Earls Court boat shows between 1961 and their last attendance in 1974, Hurley Marine's stand became a 'mecca' for Silhouette owners, both past and present. At the shows ~~in 1969, 70, 71 and 72~~ a special corner of the stand was set aside for the affairs of the Owners Association. Alongside the desk would be the very latest Silhouette 'hot off the production line' and crowds of friends and enthusiasts would gather. At no other boat or stand in the show would be found such an assembly (in 1970 the show organisers asked Chris Richardson, then Sales Manager of Hurley Marine, if he could please control the crowds as they were blocking the gangways). This large crowd that gathered daily - different people each day during the fortnight of the show - showed two things. Firstly the popularity of the boat and secondly the type of people involved with it. Friendly, enthusiastic, caring people who were always willing to help each other; where necessary offer advice.

The Owners Association is only one aspect of the story of the users and owners of the Silhouettes. They do possibly have the distinction of being the first such organisation linked to a small cruiser, and an association unattached to any particular sailing club. One aspect of the association is that they have probably had the most effect, although indirectly, upon the manufacture and changes to the boat during its development, much more influence than the individual owners who after buying their boat vanish into the faceless sailing public.

The Silhouette Owners Association was founded in 1957. It had a very chequered career and was due to close down on the 31st October, 1960. The fold-up did not happen, the association struggled in into the early 60s. At the annual general meeting held in January 1963 it was proposed, and carried, to change the title to the 'International Silhouette Owners Association.' This change, it seems, was brought about by an interest being shown in the association by a few overseas owners linked to a sense of over enthusiasm on the part of some of its UK members. From November 1960 the association has published a journal, known simply as 'The Silhouette Owner', which is published monthly and sent to all of the registered members by post.

The early days of the association were centred upon London and the SE of England. This localisation tended to



Hurley's stand 1970 Boat Show, Earls Court, London.

Silhonette Bilge Keel Version in foreground. To the right of the boat was the Silhonette Owners Desk around which many many owners did congregate.
Other boats on the stand are; from L to R.

Hurley 18.
Hurley 20.
Hurley 22
Hurley quin.