

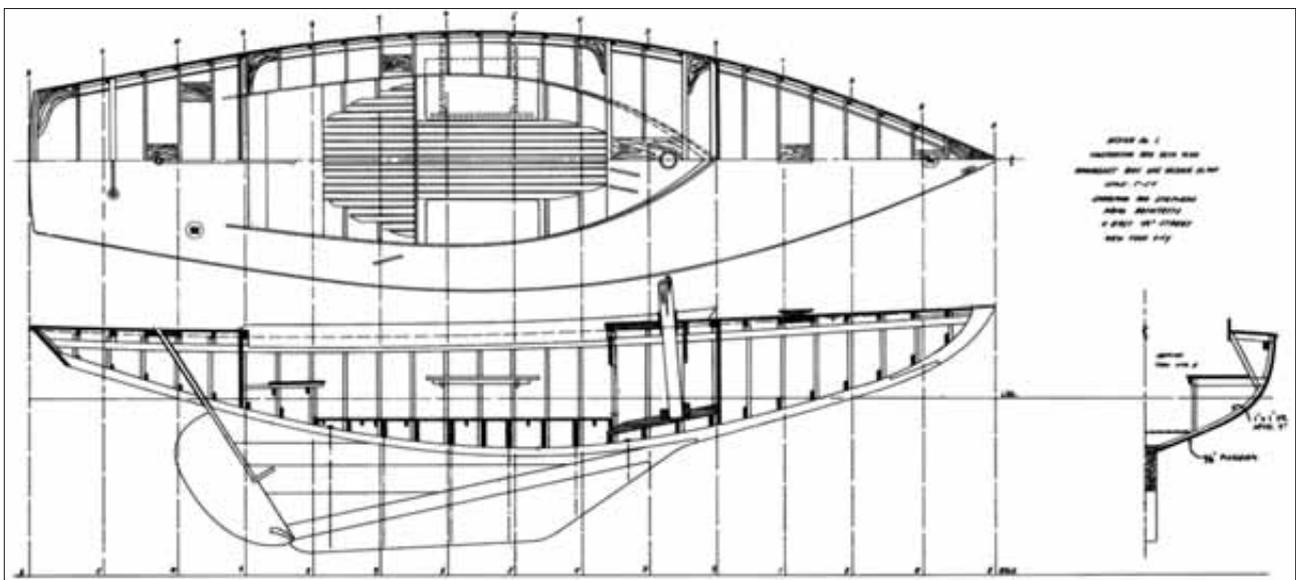
# ‘SPRATS AND MINNONS’

SOME S & S SMALL FRY

BY

PATRICK MATTHIESEN

Last year I touched on the ‘pocket cruiser-racer’ of approximately 30ft LOA which many had considered to be the smallest practicable size for minimal comfort and safety, particularly with the vastly more Spartan early designs. Yet, as has often been pointed out in the past, there is an equation which simply does not work and it is this:  $\text{Enjoyment} + \text{HCF}^1 = \text{LOA} + \text{Beam} + \text{SA} \times (\text{£} + \text{\$} + \text{E})$ . In fact there are many able mathematicians who would argue the converse and that is that maximum enjoyment experienced when sailing is the  $\text{LCD}^2$  of  $\text{LOA} \div \text{Cost}$ . Thus, wise sailors have long known that they are faster onto the water, spend less time commissioning and therefore enjoy more sailing closer to the water if their boats are small. The headaches are lessened, equipment costs a fraction of that for larger vessels and most jobs can be executed on a ‘do it yourself’ basis<sup>3</sup>



Manhasset Bay O.D. Construction plan

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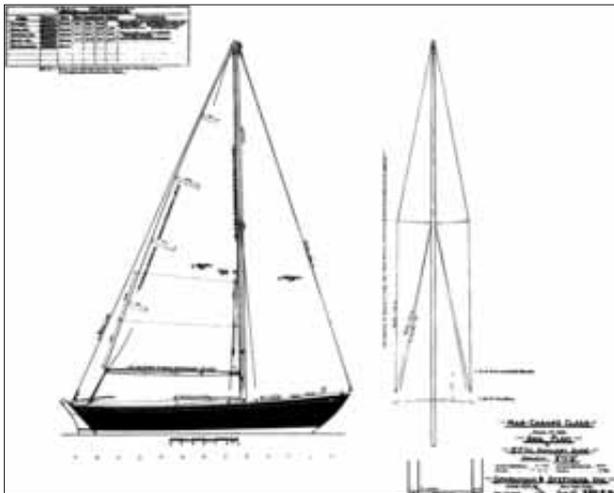
The very first S & S design #1, *The Manhasset Bay O.D.* falls into this category. The contract was arranged by Drake Sparkman, Olin and Rod’s future broker partner (the partnership was not formed till the following year) at the Larchmont Y.C. The boat is a daysailor/racer rather than a cruiser, but she was the first of the breed and S & S never lost sight of the impecunious family man who, by buying a pedigree product, might later move on to bigger, and some would say better, things. This One Design was commissioned for use by clubs on Long Island Sound by the Junior Yacht Racing Association in 1928 and was initially built by the Buckhout Boat Corporation of Poughkeepsie, NY for around \$1000 and measured LOA 21’6”, LWL 15’, Beam 5’10” with a Draft of 3’6” and SA 230 sq.ft. She was built of copper fastened cedar for lightness with mahogany trim. It was hoped at the time that the class would be accepted along the whole Atlantic Coast on account of its seaworthiness and reputation as a ‘dry’ boat with wide side decks and a large cockpit, solid bulkheads, attractive sheer, flaring sections and what was then considered moderate overhangs. When first launched Olin was pleased to note that the hull floated precisely to the designed water line an unusual enough event. It is interesting to note that in this early design Olin still adopted a pronounced ‘toe’ to the keel with some drag, forms much favoured by other designers in the 1920s and 30s and that would later be totally uncharacteristic of his design

<sup>1</sup> Highest Common Factor

<sup>2</sup> Lowest Common Denominator. To use another fifties mathematical term the HCF (Highest Common Factor) might be retranslated to mean Highest Comfort Factor and then of course the equation would be re-jigged to work in favour of sheer size!

<sup>3</sup> The best recent discussion relating to the virtues of small size was recently published as ‘A Matter of Balance: to upgrade or supersize.....that is the question’, an article by David Buckman in *Good Old Boat Magazine*, no.50, Sept-Oct.2006, pp. 18-21.





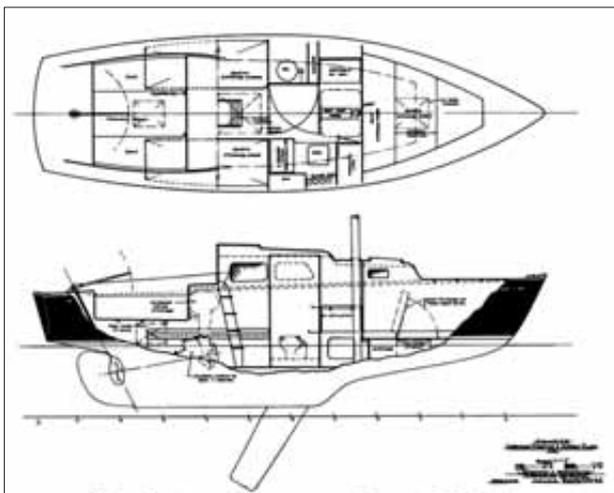
MarCasado Class #696

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which had been written up in the yachting press before the war and the first batch were to be built for a client in Sao Paulo in Brazil where they had to compete with the open Atlantic.

*Temperance* had shown admirable speed and sea keeping ability and it was hoped that this offspring would emulate this. The boats were extremely pretty with exceptionally slack bilges in a V'ed form. The galley was aft by the companionway with two pipe cots over the settees with sitting headroom amidships with a wc just abaft the mast. The foc'sle accessible through a fore hatch on deck was for stowage. The cockpit was large for a boat of this size, a twin cylinder auxiliary was provided, and construction was of the finest single plank mahogany on white oak with bronze fastenings,

lead keel, and stainless rigging, masthead single spreader rig with standing backstay and spruce spars. LOA was 25'21/2", LWL 19', Beam 7'6", Draft 4' and sail area a plentiful 324sq.ft. A few of the boats were built in the US, I believe by Derecktor. There was an alternative plan with a doghouse to allow more headroom and this became significant later as we shall see.



New Horizon Class #1235

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The next important milestone design in this size range followed a decade later in 1957 and was of great significance. The design was commissioned by Ray Greene who had built his own designs in Toledo, considered by many to be the father of glass fibre boat construction as he had started experimenting with GRP construction during the early war years circa 1942 and had built small batches of rudimentary dinghies and small day sailors. In fact the *New Horizon* was probably only the third series production boat to be built using GRP so that S&S were only a short neck behind Philip Rhodes. She was less pretty than her wooden forefathers with higher freeboard and a rather overpowering doghouse to obtain standing headroom within. Indeed she was later criticised by *The Skipper* for lacking the design

flare expected from S&S. The interior layout was unconventional and dare one say unsuccessful with the galley and wc compartment amidships, two quarter berths aft and the 'saloon' forward with a rudimentary table. The boat was pint sized centreboard design which had none of the elegance of a *Finisterre* or *Nevins 40*, yet the boat had a most un S&S – like reverse sheer similar to comparable British designs of the period, a modern high profile centreboard and a straight raked bow. The rig was masthead carrying 324 sq.ft of sail again on a lighter hull, LOA 25'3", LWL 21'3", Beam 7' 9" and Draft 3' with the board up allowing for close approach to the shore in shallow water. The boat was sold for under \$12000 very well equipped with Atomic 4 engine, monel tanks, winches, had the then very innovatory feature of sandwich cored decks and became an immediate runaway success so rather than the initial dozen that Greene anticipated building the final run was closer to 120 units. Greene must have had a considerable input into the design since the boat featured then advanced features unheard of elsewhere such as fibreglass tanks and galley components built in. Boats were sold to locations as far a field as Alaska, all round the US and even to the Med. And at the time was considered the most affordable, liveable midget cruiser/racer on the market.

Three years later glass fibre had evolved by leaps and bounds, boating was being popularised and several builders including Yankee and O'Day saw a niche market for sailboats. Bill Shaw, who had designed a very similar boat called the Shaw 24 or *Trina* was then working for S&S – he was later to found Pearson yachts and become a prolific and successful designer in his own right. Shaw's MORC design which had proved exceptionally fast and maybe a little more radical was adapted with broader aft sections and an elegant S&S sheer to replace Shaw's flattened line and the result was the O'Day *Dolphin Class #1497* which retains a passionate following to this day and which is a little masterpiece of its type, elegant, pleasing on the eye and fast for her size. Some boats are built with a wood deck and house the result of a fire at O'Day's which destroyed the deck moulds.

The rig is rather lofty but in accord with the conventional thinking of the period. The interior layout is not so different from #1235 though slightly simplified with the heads to starboard. LOA was 24'2" LWL 19' Beam 7'8" and Draft 2'10" or 5'2" with the board down while displacement was 4250 lbs with 1650 lbs in ballast and SA 297sq.ft. The boat was thus slightly smaller than #1235 though almost as beamy and with almost 10% less sail area. An alternative version was soon being built by Yankee Yacht in California, who also later produced their own versions of the smaller Tartans and a clone of the Swan 38. Yankee's products are always very nicely constructed and have a far higher standard of finish than the norm particularly in the interior where they

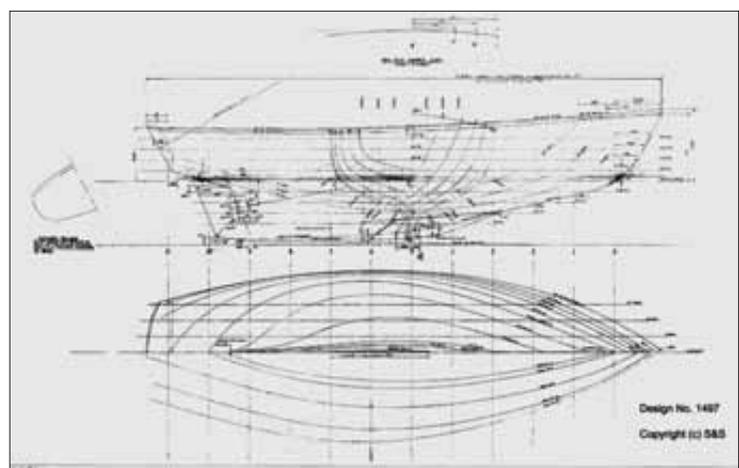


*Dolphin Class # 1497*

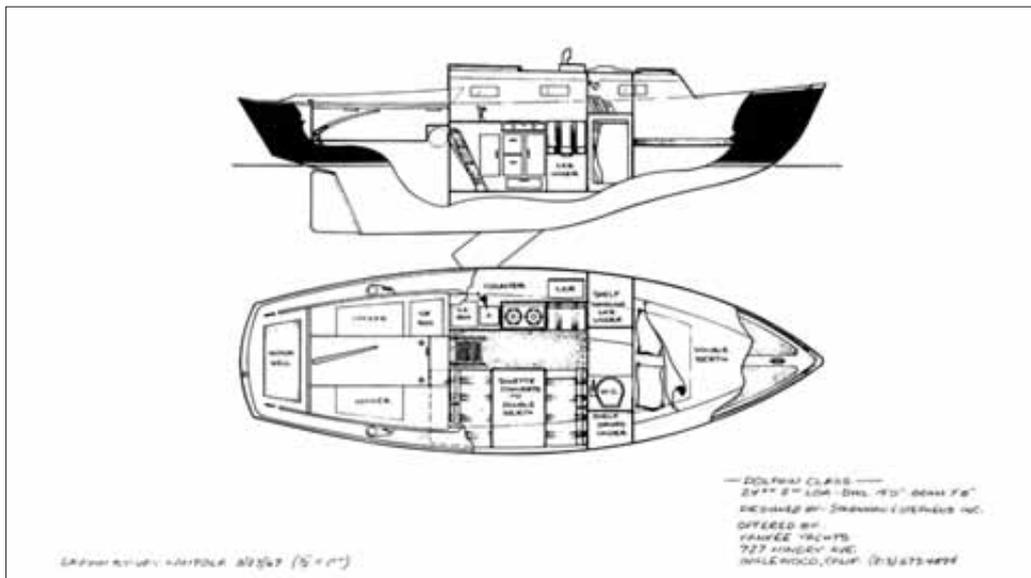
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made extensive use of wood veneers rather than the usual 1960s rather refrigerator-like glass fibre interior practiced by others. Indeed a fully fitted *Yankee Dolphin* would appear to be a wooden boat inside the cabin and is a delight to see if well kept. In the Yankee version there is a full double bunk in the forepeak, a better design of the galley and heads areas and a dinette to starboard. The quarter berths are dispensed with and intelligently the space is used for stowage in the cockpit lockers and loading access to the icebox from the cockpit. In all this seems a shipshape layout and a handy little vessel and the sales literature proclaimed 'her trim, graceful lines are pleasing to the knowledgeable yachtsman....design is the key to her sparkling performance and cruising comfort.' The designers commented about the later Yankee version 'the recent revisions to centreboard and hoist and rudder profile should assure improved performance downwind without impairing her windward ability.'

A further variant was #1497.1 called the *Mermaid Class* built for various owners but effectively this was similar to the Yankee version and other builders called their versions the *Pacific Dolphin* or *Shaw Dolphin*. All boats shared the same slightly hollowed bow, perhaps an inheritance from the *MarCasado* had a motor well in the transom for an outboard, were designed to rate for MORC and raced and thus had 'husky' handrails on the house roof and toe rails at the deck. Talking to a Dolphin owner I am told that the moderately cut away



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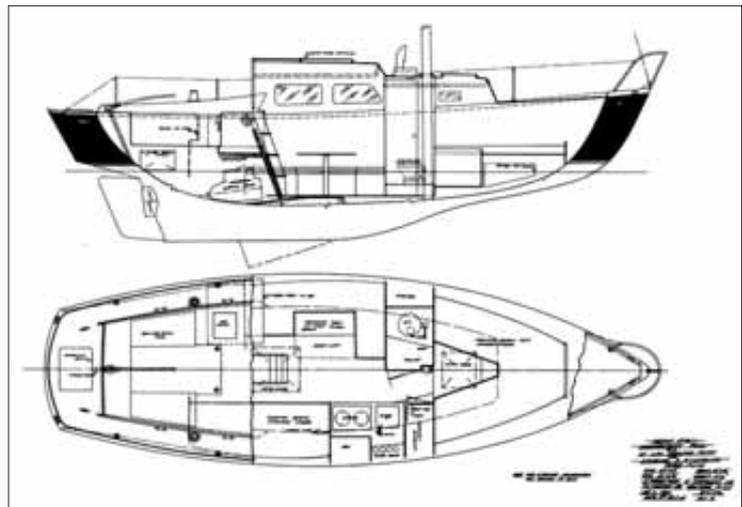
Yankee Dolphin #1497

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forefoot and flat run aft results in an exceptionally easily handled boat with more than a discrete turn of speed enough to surprise the unwary even today. Almost 300 examples of this design were built and some of the success of this design may be put down to the fact that she could be put on a trailer.

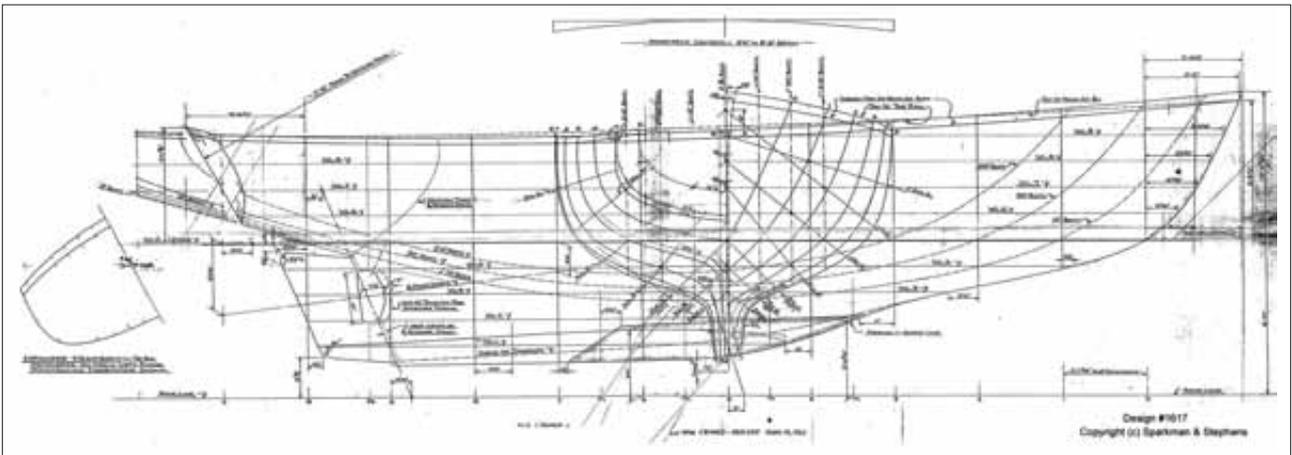


Tartan 27 #1617



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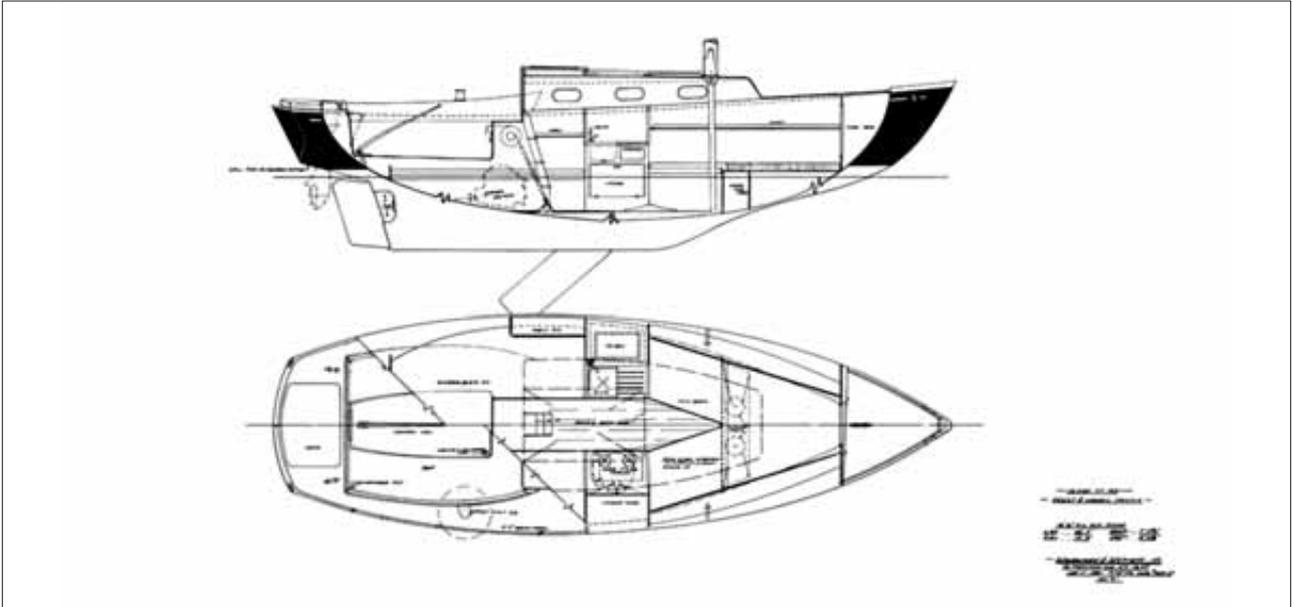
These were the early boom years for popular yachting in the US so almost immediately within a year the newly expanding Tartan Yachts wanted a slightly larger design. The result was the *Tartan 27 #1617* which Ray Greene was much chagrined to observe was a closely enlarged clone of his old *New Horizon* though one cannot help noting that the finish detail of the fibreglass, the rounding of edges, the tapering of profiles and even the hint of a knuckle to the rake of the bow all serve to make this a much more pleasing and less crude vision which is, after all, only to be expected as the designer become familiar with the material in hand. The boat measures LOA 27', LWL 21'5", Beam 8'7" and Draft 3'2" and a displacement of 7400 lbs. Again this is a K/CB boat and one has to consider that after *Finisterre* and the *Nevins 40s* K/CB was all the rage until about 1962 despite Olin's personal misgivings about the ultimate stability of the type. Indeed, I have no doubt that Olin would personally have preferred the almost contemporary *Lotus Class* deep keel design of virtually identical size which was described in last year's Yearbook in my article *Pocket Cruisers and Racers*. The design was reviewed in *Offshore* in February 2004 and described as having a stellar reputation despite perhaps not being the fastest boat around yet it was immense fun to sail, and its longevity depended on fine construction, good looks and equally good manners. She has the



Tartan 27 #1617

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reputation of being able to track without a hand on the helm but needs to be sailed on her feet to windward for best results and develops a heavy weather helm if over pressed. Indeed partly on the basis of this success – almost 700 were built - S&S remained the designers of choice for Tartans until the early 80's when Olin had retired. For those who wanted it there was even a yawl alternative. With the passing years there was some evolution such as 360lbs increased encapsulated ballast in 1966 a revised deck layout in 1973 and a raised sheerline in 1977. The review comments on the depth of the cabin once inside and a comparative feeling of roominess – well for a 27 footer! The boat generally rates about PHRF 235 for racing. The boat was supplied with a 30hp petrol Atomic 4 which gave quite a lot of horsepower per ton of displacement. At the time that these boats were built hand layed up glass fibre was the rule and the Tartan is no exception. In fact all early tartans including the 37 and 41 have a reputation for being 'bullet proof' and strong and this is no bad thing even if they are heavier than modern equivalents.

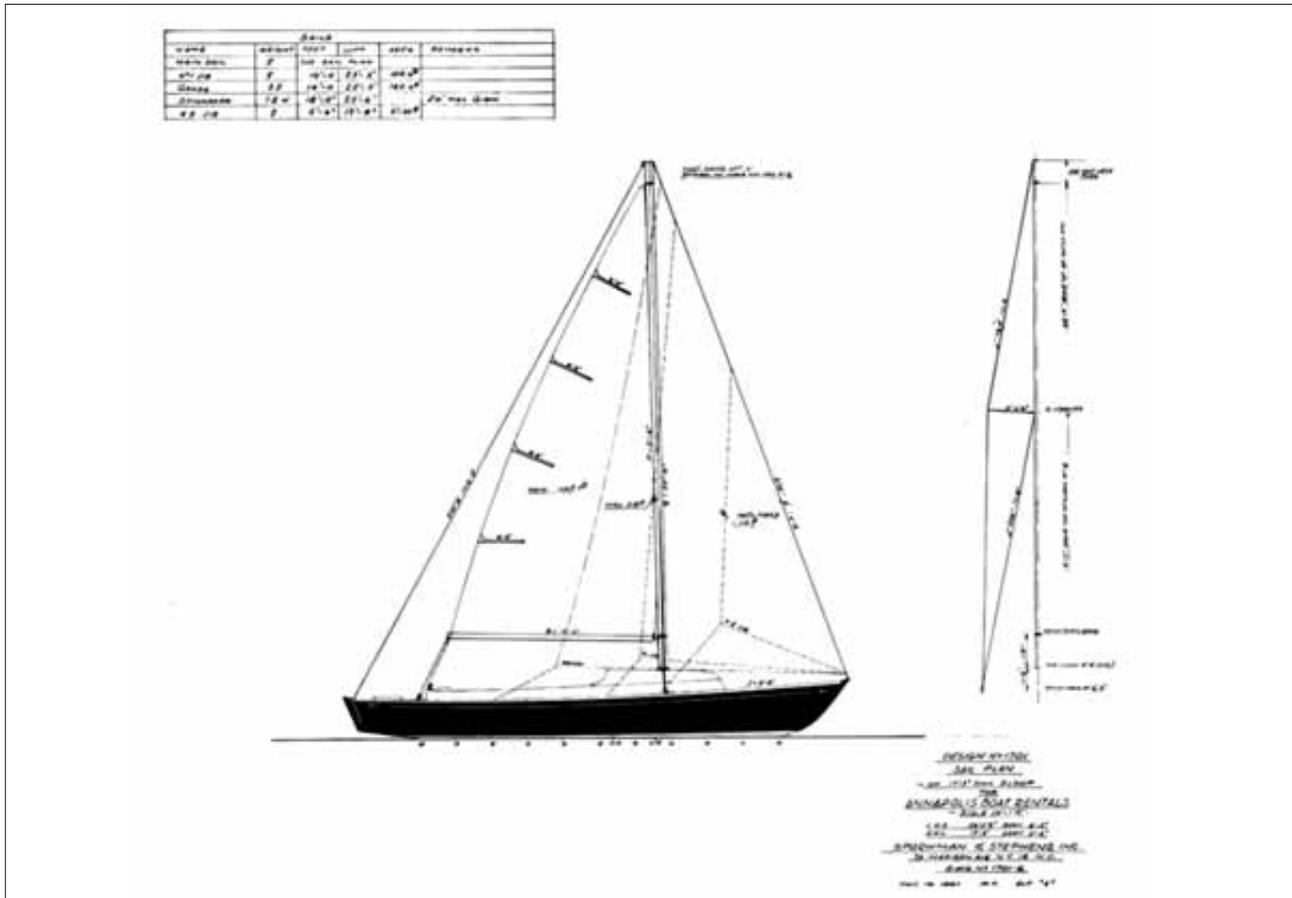


Kestrel Seafarer Yachts 22' Sloop #1631

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Almost contemporaneous with the T27 is *Kestrel* commissioned by Seafarer Yachts who the same year had commissioned the 45' sloop/yawl design #1618 and 1619.1 which was also marketed by Sailmaster Inc in the US though built in Holland and probably the largest GRP yacht of its day. The management of Seafarer must have had an eye for a gracious hull because *Kestrel* is a classic S&S from the balanced sheer to the curve of the partial spoon bow, a descendent in miniature of *Finisterre* and the heir in K/CB form of the *Pilot* breed #1219. She eschews the foretaste of modernity of the T27 in favour of classic proportions while retaining the long favoured layout of galley amidships. The design is perhaps a more gracious though substantially smaller update of the

*Dolphin* which it closely resembles with the outboard housed in a locker in the transom. LOA was 22' LWL 16'6", Beam 7' 1/2" and Draft 2'4" with SA 228sq.ft and ballast of 1003 lbs iron. The heads were forward in the foc'sle while since there was limited cockpit locker space on account of the quarter berths sails could be stowed behind the companionway under the cockpit floor. There was sitting headroom only in the cabin of 4'7". In effect the boat was about as small as one could get at the time for four berths with limited beam and S&S masterfully managed the lines and proportions without making anything seem ungainly. Again the boat was intended to be a hot MORC competitor.



Rainbow Class #1701

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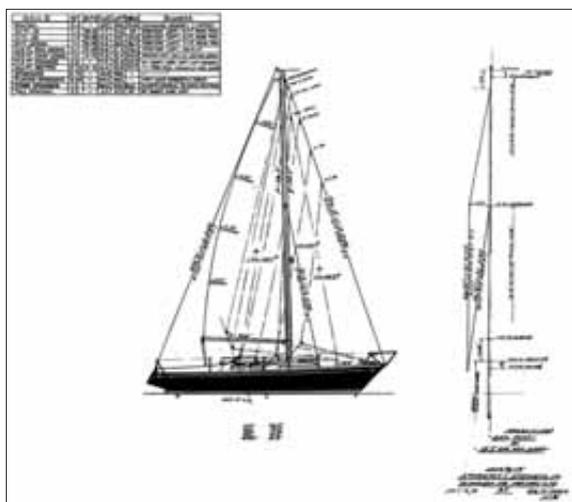
The next period is the most prolific in S&S design history with new designs emerging by the hundred. Design #1701 the *Rainbow Class* for Annapolis Boat Rentals was denominated as a day sailor and measured LOA 24'2" LWL 17'3" Beam 6' 3" and Draft 3'6" and demonstrates to perfection an ability to produce a ravishing looking hull which is every bit as pretty as a *Shields Class* though less sophisticated and consequently costly. Displacement was 1750 lbs with a high ballast ratio of 810 lbs – almost 50%. SA was 218 sq.ft and the boat was priced a shade under \$2700 and built in fibreglass in 1964 and was intended to become a national class. *The Skipper* criticised the boat in 1964 for having ‘rushed into production’ before being thoroughly tested. Apparently on early boats the rudder lost grip when heeled or running and the boat broached or spun out of control. After much testing cavitation plates were affixed to the rudder to control the water vortex just as one sees on an outboard motor shaft. The design seems to have had more than its fair share of problems and many modifications were called for to hardware and fittings and the boat was even found to be overpowered in strong air regions so that cheek plates totalling 150lbs could be fixed to the bulb. Naturally only similar boats so fitted could race against each other and so this was a drag on the national diffusion of the class. On the plus side was a deep cockpit with good back rests though crew weight up on the weather side and forward was essential for trim. The boat was noted for an early cut off transom and flatter sheer than normal and sold well – 160 in the first two years - especially on the west coast as a ‘weekender’ version was offered as an alternative with basic amenities for four. A quarterly class newsletter called *Spectrum* was also published.



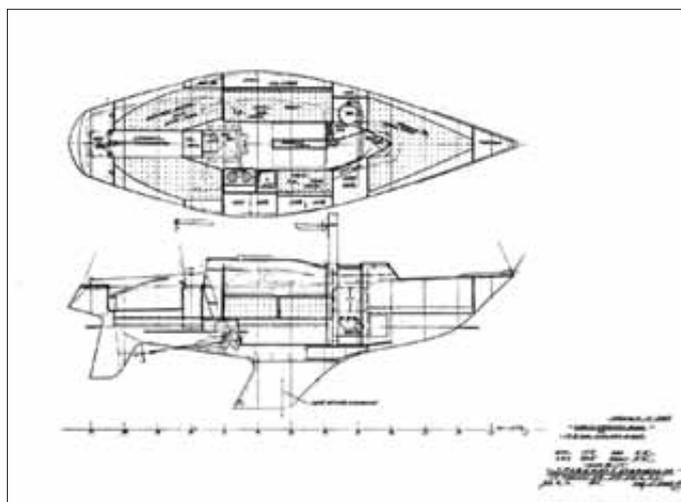


The accommodation was reworked for 5 in the best modern traditions of shoehorning as many sardines as possible into the can and she was proclaimed as having the latest advances of fin keel and skeg rudder since the profiles had been reworked. Deck gear was of the finest and one quarter berth was retained while a dinette and double were shoehorned in amidships, the head being moved up forward and the foc'sle double as far to the bow as it would go. Displacement in consequence went up marginally to over 4000 lbs and ballast to match. The boat was marketed at \$5995.

The next design chronologically is #2065 the redoubtable *SHE 27* undoubtedly, in my opinion, the best looking of the lot and dating from 1970 almost contemporaneously with the *SHE 31* and *Tartan 30*, both larger boats and not eligible for consideration here, this size range having been addressed last year. We are now in the period of S&S's finest output for Swan Nautor and the 'knock on' effect can be seen in this smaller offering. It is not for nothing that the smaller SHEs have been considered 'baby Swans'.



She 27 # 2065



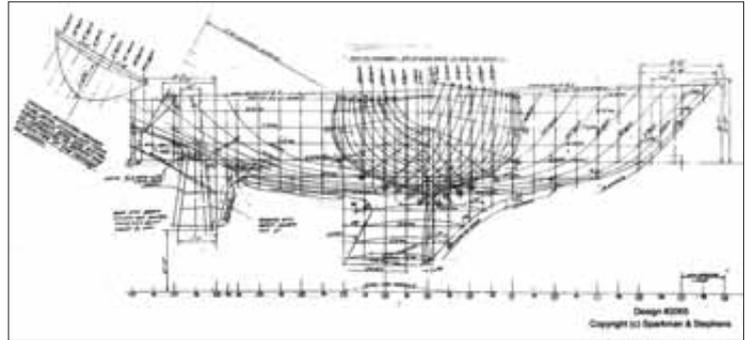
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The boat which was designed as a IOR Mk III 1/2 tonner measured LOA 26' LWL 19'3" Beam 8'6" Draft 4'9" with a displacement of 5255 lbs and SA 287 sq.ft. The ends are markedly pinched to meet the rule in contrast to S&S practice on all the earlier designs, the fin is raked aft which was later found not to be the ideal aerodynamic form and the skeg placed aft so that the rudder protrudes above the waterline but would be immersed when the boat began to 'squat'. The raked bow shows the hint of concavity which was to mark the Swans and 70s designs from S&S. The elegance of the profile is perfection, the single spreader masthead rig is now high aspect with the boom only 8.75', J 10' and I a relatively lofty 32.5'. Accommodations are closely worked with five berths and a midships galley, full heads compartment but sacrificed stowage as there is nowhere for sails with a full compliment aboard. The boat is well known in Europe and is renowned for its agility.

The *Tartan 27* version slightly predates the SHE and retains a traditional American style straight house roof line. There are other small differences – Beam is 2 inches more, LWL 17 inches longer the aft overhang being shorter, SA 11 sq.ft greater. The interior is entirely different with the heads aft, the galley to port, sail lockers on one side of the cockpit a quarter berth on the other – a

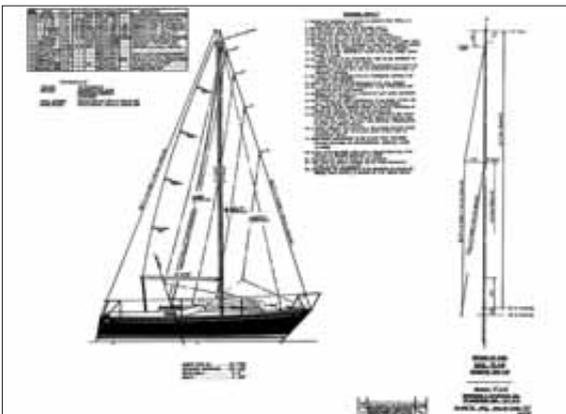


*She 27*

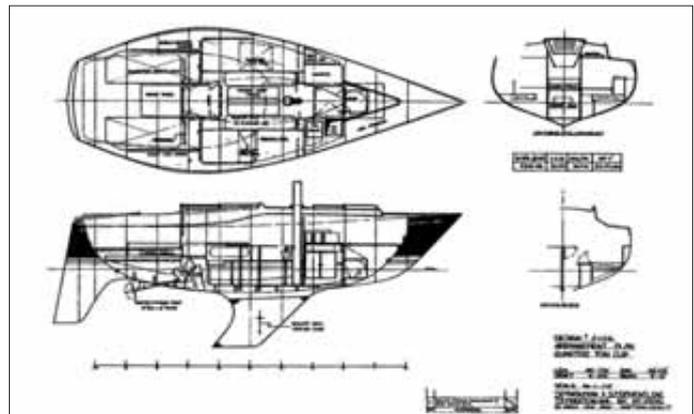


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perhaps more liveable arrangement. A considerable innovation on such a small yacht and one of some brilliance is for the settees to sweep round the forward end of the saloon to form a U shape round the table, a raised double berth being squeezed under the foredeck discretely hidden by curtains where, in the best traditions of a Japanese ‘Love Hotel’, a second berth underlies it with the sleepers head and shoulders lying in the saloon on the settee below the double whose privacy is discretely assured by the curtains! No other designer has dared squeeze so much into so little! Much was made of this innovatory layout and the brochure showed two gorgeous brunettes in bikinis lounging in the cockpit – no doubt they had felt the need to stretch their legs after a night in the double-decker forepeak berths. The boat was hand layed up as unitary construction and sported an elliptical mast. In Yankee tradition the interior is fitted with a wood finish and is a little superior to the SHE though without lining the cabin sides so this is not as much a ‘woody’ inside as the best *T27s*. After a night in the double-decker forepeak berths (see p. 19).

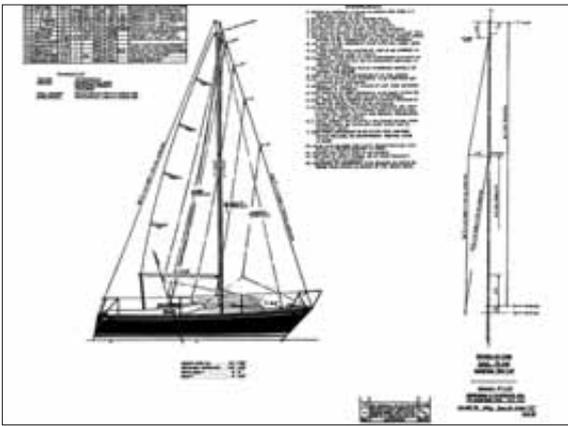


*Indigo #2106*

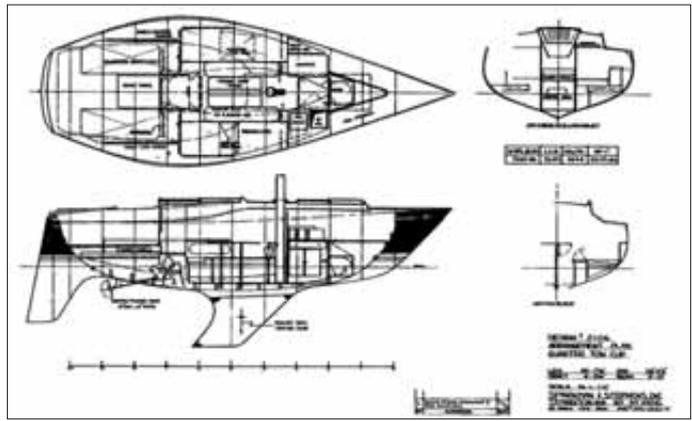


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The next design chronologically dates from 1972 and brings us into the modern IOR era as she was conceived as an out and out competition boat. *Indigo #2106* for Sandell & Mantymaki was LOA 24’8” LWL 20’ 3” Beam 9’ Draft 4’ 10”. The pinched bow and increased breadth pushed aft gives this boat a typical IOR ‘pregnant’ look and the lack of buoyancy forward sometimes made these boats a handful with spinnaker in a blow and in consequence the rudder and skeg are pushed to the most aft extremity of the hull. The interior has 6 berths for a racing crew with the galley pushed forward of the mast and the wc under the forepeak berths. The boat is semi flush decked and this resulted in a slightly ungainly increase in freeboard, a flatter sheerline aft and a feature borrowed from the Swan 43 miniaturised – a streamlined short doghouse. The *Northstar 500* followed straight from this design numbered 2135 in the same year with marginally increased draft and a



Alpa 27 #2241

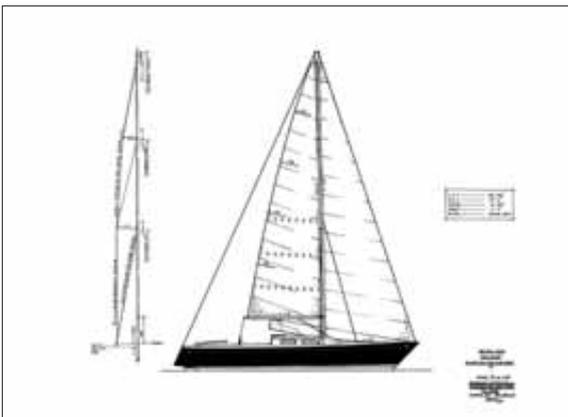


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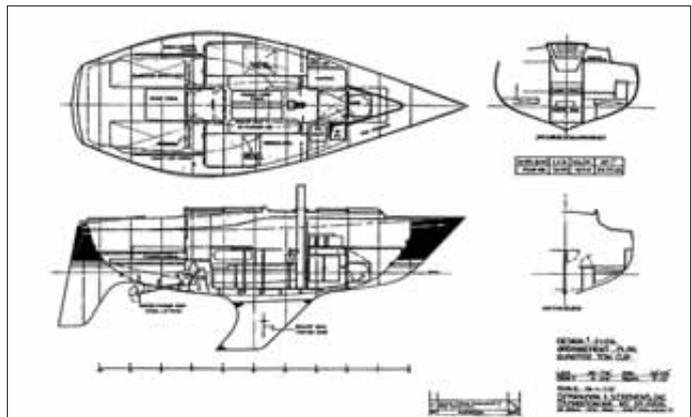
more cruiser orientated interior with the galley aft and retaining the ‘Swan 43’ profile. The boat displaced 4294 lbs. Anodised aluminium toe rails were introduced, niceties such as removable fiddles on the saloon table dorades, and a 30 hp V drive for the engine to push it aft. The hull was a one piece moulding with balsa longitudinal stringers and the deck was a one piece moulding also with non slip pattern moulded in also balsa cored while hatches slid into moulded covers. Exterior trim was in Burma teak no less, and plentiful deck gear and Barlow winches made the boat race ready.

In 1974 ALPA Yacht in Italy commissioned the Alpa 27 an update on the aforementioned design for the increasingly popular 1/2 ton class in the Med. LOA 26’ 9” LWL 23’3” Beam 9’ 7” Draft 5’3” SA 355 sq.ft. The tendency towards ever expanding beam and shorter overhangs is evident.

The deck profile and house roof is ‘turtle decked’ while the head is expanded athwart ship to satisfy Italian sensibilities for comfort while the galley is diminished aft no doubt because the intended customers proposed to have a decent dinner ashore in a local *trattoria* where the pasta could be properly seasoned and served ‘*al dente*’. Interestingly the rudder has reverted to being hung outboard for simplicity while the J measurement has increased as has the I of the ever more high profile rig. The experimentation with a V drive was probably too costly on so small a series boat and so a standard prop arrangement is adapted.



Quartet #2284

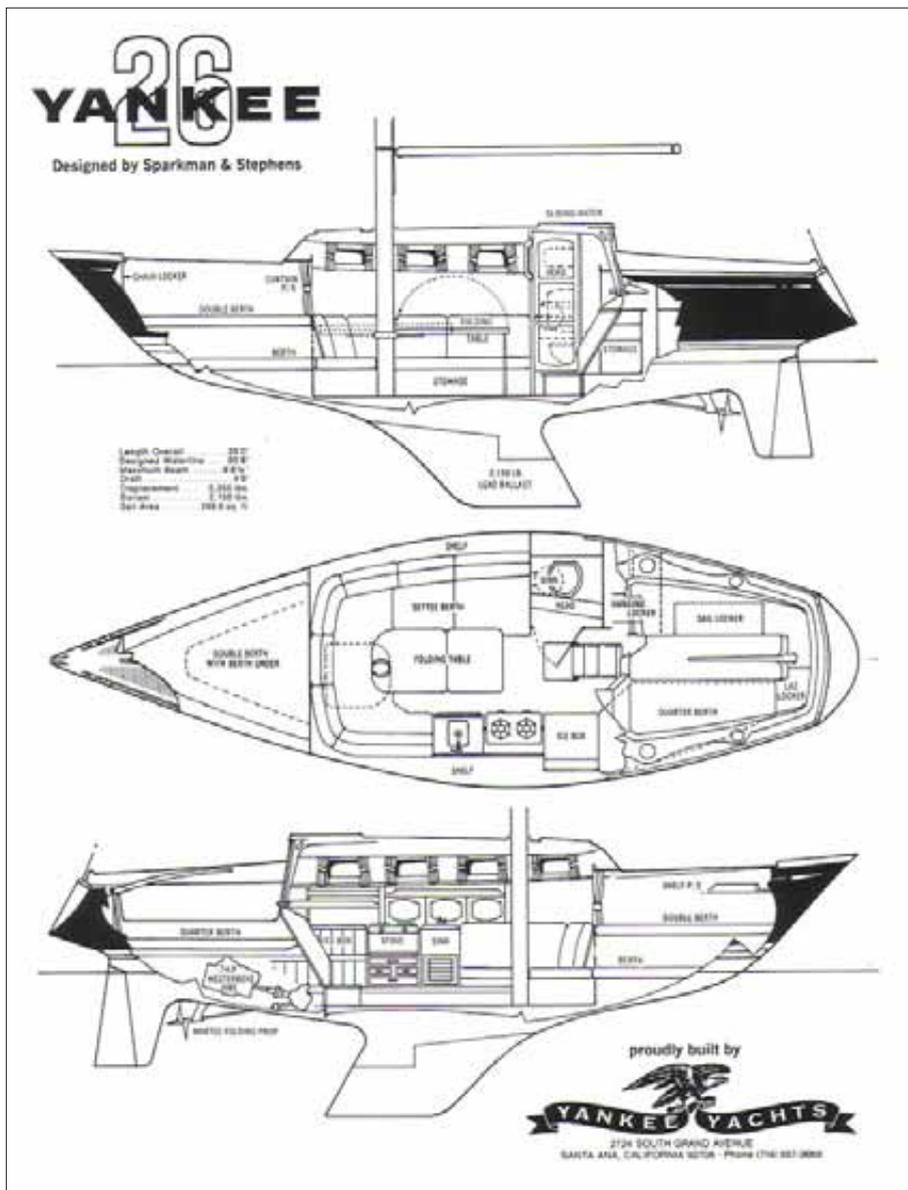


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The last small boat design executed during the ‘classic’ S&S period up to the 1990s was #2284, another 1/2 tonner for Peter Frazer called Quartet and with this boat until quite recent times S&S involvement with ‘micro-boats’ ended. Again the reason was the same as for their slightly larger sisters examined last year – clients were trading up in size, economies of scale and production, a huge recession in the boatbuilding industry and a move towards ‘in-house’ designers and production control all made the services of a specialised firm of Naval Architects seemingly too

much of a luxury or at least one where costs were deemed could be saved rightly or wrongly. This move also coincided with Olin Stephen II's retirement. *Quartet* was designed in 1977 and interestingly enough was built by our old friend of Nautor fame, Eino Antinoja. LOA 26' LWL 19'6" Beam 9'11/2" Draft 5' SA 341 sq.ft Displacement 3400 lbs with ballast of 800 lbs. The boat was single skin GRP with stringers and had an 8hp auxiliary, spars by Sparlight, Navtec rigging, North sails and tiller steered. This was intended as a performance fun boat. The canoe body was shallow, the fin pronounced with a straight aft edge and less swept leading edge, and the engine was pushed forward of the mast to maximise its effect as ballast with the shaft and folding prop exiting just aft of the fin. A moderate skeg and balanced rudder completed the package. This boat has a high aspect rig with a boom shortened to 7'9" and a J of 9'6" while I was 31'. As a lightweight with accommodation for 4 in tolerable basic comfort for those Spartan Scandinavians, this boat was intended to perform. An interesting idea was the ice chest under the saloon table but knowing some of our Scandinavian members this is more likely to have been full of Aquavit to ward of the cold late in the season! The shape of the boat is somewhat reminiscent of a cruising dinghy and one imagines the boat might have been induced to semi-plane.

It would be interesting to know what S&S might propose today in this size of sailing vessel.....something akin perhaps to the Thames Rater 'skimming dishes' of the late nineteenth century where the stress on the keels and the torpedo bulbs tended to make the boats break up after one or two seasons – but carbon fibre and composites would make that a different story nowadays.



The Yankee Dolphin 26 arrangement plan