

Bristol '96 and already has 300 confirmed entries, including 25 Tall Ships and over 30 naval ships ranging from HMS Victory to modern destroyers. The whole of the Naval Dockyard will be given over to the Festival. S&S owners interested in attending should register soon, mentioning their Association membership to ensure nearby moorings and easy exit for the racing. (For registration forms phone 01705 725000; fax 727560). **Western Australia** The S&S 34 Association of Western Australia report the end of another active season among their 50 or so yachts belonging to their members. The Association is now in its 20th year and organizes cruises, racing and social events. On April 5th they will be offering 12 to 14 S&S 34s for the annual Commodores' Race in which commodores of the numerous clubs around the Perth area race each other with scratch crews. Dick Newnham, their President and our Regional Secretary for WA, contributes a thought provoking article later in this Newsletter.

### ***Exchanges***

Many of you will know of friends who have exchanged houses so that they can enjoy a different part of the world for a holiday. You may even have done it yourself. But what about exchanging your yacht? The joys of cruising in another part of the world without having to flog for 10 days against gale force headwinds to get there - a no astronomical charter fee to pay for the privilege. Of course, if the two boats were of substantially different sizes some money might have to change hands. And it would be worth checking your insurance policy to confirm that it covers 'any person with the owner's consent'. But you and your exchangee could end up having a holiday on another splendid S&S boat in a corner of the world you might otherwise never get to. The Editor would like to hear from anyone who has had experience, or reliable reports of others' experiences, of boat exchanges that might be shared in a future Newsletter. And boat/home exchanges might also be of interest. But you don't need to wait to hear of others' experiences if you think it's an interesting idea. Just settle on your target area and contact the Association's Regional Secretary or individual members.

### ***Brokerage***

**Patrick Matthiesen writes:** The Sparkman and Stephens designed *Firebrand* (see Fig. 1 on page 5) was built by Clare Lallow's yard in Cowes in 1964 for Dennis Miller. Designed specifically for the RORC Rule and to be a member of the British Admiral's Cup team, she was intended as an out and out racing boat. She was built of the finest materials, with a teak main frame and centre line, teak garboards, mahogany planking and teak decks with bronze floors and reinforcements. Her dimensions are LOA 43.2 ft., LWL 30ft., beam 11.25 ft., draft 6.68 ft., on a displacement of ten tons, a 50% ballast ratio with lead keel of five tons and a sail area with 100% fore triangle of 725 sq.ft. At the time of her launch, it was remarked how similar she was to recent Nicholson-designed team yachts in her deep-veed midships sections and fine ends. Her fine pinched-in stern followed classic British designs reaching back to before the war, but these were largely dictated by the RORC Rule and were quite different from the broader, slightly shorter counters prevalent on American yachts and favoured for their increased buoyancy. If one compares *Firebrand* with *Quiver VI*, a contemporary Nicholson design for the Admiral's Cup team, one will see that the Sparkman and Stephens design has longer overhangs, while there is slightly less immersion of the counter. The bow profile, however, is somewhat similar. This was the beginning of

the abandonment of the spoon bow and the adoption of the modern straight raked bow, albeit with a hint of curvature. The sheer line to the bow is marked with high freeboard, allowing for an almost flush decked profile with a small doghouse. The bow is fine, the forefoot quite cut away below the forward water line, but the shape is still classic S & S equilateral triangle, and in this the American boats differed from many of the 50s and 60s British racing boats, such as those designed by Illingworth and Parker and Clark, which always had a pronounced toe to the keel profile.

**Firebrand** sports one of the contemporary *Constellation* style rudders rather than the classic rounded shape which had always been favoured in the past. The theory was that the wider chord of the rudder blade set deep provided better steering control downwind, and this form of rudder has generally been favoured ever since on full-keel profiles. **Firebrand** retains the classic aft raked counter, and it is interesting to compare this with the smaller, so-called S&S RORC off shore type, measuring just under 40 ft. overall, designed in the same year (see Fig. 2) . Here, the forefoot and keel have been marginally further whittled away, the counter adapts the modern forward raking style to reduce weight aft, but at the same time the underbody to the counter loses the characteristic classic S&S concave curve, which was the hallmark of all S&S vessels to this date. The smaller boat loses in looks as a result. These boats represented a major transition in design shape. Although appearing to differ only slightly from traditional earlier designs, they were increasingly a radical departure. Sparkman and Stephens had made their name first with **Dorade** and then with **Stormy Weather**, the latter being a new breed of ocean racer, inspired by an international metre class hull shape but with the load-carrying capacity, sail-carrying ability and brute strength capable of participating in major ocean races - and winning them. One should never lose sight of the fact that these S&S boats broke the pre-established mould that an ocean racer should either be large or chunky, like a pilot cutter. Bobby Somerset's *Jolie Brise* had until that date epitomised the heavy, seaworthy but slow British type of offshore boat derived from working craft. All S&S boats between 1934 and 1962 tended to be refinements on the original concept - they were all recognisable grandchildren of **Stormy Weather**. However, by 1962 a transition was taking place which was to culminate in the fin keel and skeg rudder designs that began to appear from 1965 onwards and which reached their culmination (and perhaps the happiest compromise between classic form and modern shape) in the **Swan 43** of 1968. The full keel boats designed in the early 60s showed an increasing veed section in the bows and sections forward of the mast with slack bilges and low wetted surface and a very much more U-shaped underbody amidships with a flatter run aft, where the curve of the bilge starts well above the waterline. One such vessel is **Inverness** , designed in 1962/63. She was by no means a light displacement boat weighing in at 34,000 lbs. designed weight. She originally sported a classic rudder shape (see Fig. 3). This was rapidly changed for the 1965 racing season to the new *Constellation* type of rudder, and her lead keel was pared down to a veed shape. One boat, **Palynodie II**, 39 ft. 6 inches, which conformed to the RORC off-shore type and which was built at this time, had drastic surgery carried out, altering her full keel profile to a fin and skeg configuration. This helped her win races in the Mediterranean in light airs. Shortly afterwards **Inverness** had a small bustle added to the *Constellation* rudder to fare in its top surface to just above the water line under the counter. Some people said that this was a rating rule cheater but effectively it seems more probable that this bustle was intended to simulate the newer fin keel and skeg rudder profiles appearing from '65 onwards where the bustle was said to improve the laminar separation of water flow aft and to cheat the flow into thinking that the boat's water line length and hence stern

wave could be further aft than it might have been. On *Inverness* we removed the bustle in 1994 on advice from Sparkman & Stephens. We could not believe that it was doing any good, and in any case, even when hard pressed and sitting down by her stern, *Inverness* draws no stern wave at all - Sparkman & Stephens' lines are so successful and the run aft so flattened that she leaves no wake and pulls no quarter wave even on a broad reach. Competition boats, such as *Firebrand* and *Inverness* with full keel design, were a doomed breed. Their stability and sea-kindly properties were, after 1964, no match in light weather or off the wind for the new keel profiles that were appearing. Although eminently more steerable, one tenth of a knot was all it took to win a race. The newer boats appearing after 1966 were often equipped with a trim tab at the aft end of the short fin keel. This was intended to give 'lift' to windward and was often used to control the vessel downwind. However, most owners found within a couple of years that the rating penalties and the added intricacy were not worth it, and these trim tabs were usually subsequently fixed on the centre line. Although we all pay homage to Olin Stephens as the premier living designer, now in his ninetieth year, one should remember that there were other great designers in America at this time. 1963, the year in which *Inverness* was built and a year before *Firebrand*, Bill Lapworth created the *CAL 40*, known as 'The Downwind Machine' (see Fig. 4). At 39 ft. 6 inches LOA with a waterline length as long as 30 ft. 6 inches, a beam of 11 ft. and a draft of 5 ft. 6 inches, this boat weighed in at only 15,000 pounds which was some 2,240 pounds or 15% lighter than the almost identically sized S&S RORC off-shore type of the period. *CAL 40* was the first of a new breed - the skimming dish which more resembled a flat bottomed dinghy with a streamlined fin keel and a high aspect ratio balanced spade rudder than a traditional yacht. This was the first production 'offshore' yacht to sport a separated rudder profile, though small dinghies and Thames Rater classes had experimented with this hull shape in the late 1890s, both with Herreshoff in the US and in contemporary British designs (the latter *Star* class is just one example). The result was a foregone conclusion. *CAL 40* carried all before her. The design 'went on to become about the most winning ocean-class boat of all times, and with the possible exception of the S&S yawl *Finisterre*, it has been the greatest influence on American yacht design'. From this point onwards, the shape of racing yacht underbodies was to change and to develop into the form that Farr has now made so popular. The full keel profile was only to be resurrected years later for its stability and comfort in cruiser races and long distance trans-oceanic cruising vessels. *Firebrand* is currently offered for sale in Florida. She is reputed to be in apple pie order with no expense spare on her cosmetics and upkeep, and the asking price is approximately £66,000.

### ***Further Brokerage***

*Samudra* was built to S&S designs in 1973 by W A Souter of Cowes with cold moulded mahogany hull and decks, the latter with a teak overlay. Originally intended as an IOR Racer, rating somewhat below a quarter tonner, she had some early racing successes, including the Ramsgate Gold Cup. LOA 25', LWL 21', beam 9', draught 4'10". With new rigging in 1993 and lots of other gear regularly updated, she has been well maintained throughout the current knowledgeable owner's keeping and is much admired. Described as a joy to windward, and wonderfully dry because of the fine entry and pronounced tumblehome, she has good directional stability downwind and gives one a great feeling of security at sea. Lying ashore in Portsmouth, *Samudra* is for sale for £15,000 with a complete inventory. Clive Egginton has further details.