SPARKMAN & STEPHENS ASSOCIATION

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The Tartan 41

A number of owners of S&S

She's and **S&S 34's** often dream of moving upmarket to one ot the smaller Swan designs but are daunted by the high resale value of these boats. Valid alternatives are S&S designed boats from the early Tartan range, built in the US, ranging from 22' to 42'. Of these the **Tartan 41** had a remarkable impact on the ocean racing world. Built from 1972 to 1976, when S&S were the dominant design firm, the production run was 86 boats. The 41 was conceived as a flat-out racing boat under the IOR rule and was commissioned by Charlie Britton in order to compete with the first Nautor boats which were being imported by Palmer Johnson Yachts into the US. Thus the Tartan 41 closely resembles the Nautor Swan 43, also by S&S, with flush deck and small deckhouse, good freeboard and moderate ends. But the Tartan was designed to fit more precisely into the new IOR rule. The second series of Tartan 41's, stretched to 42', were re-introduced from 1980 to 1984 with the shoal keel, heavier cruising interior and new larger deck structure, losing some of the good looks in the process. By this time the 42's pinched stern looked out of keeping with current, broader-sterned vessels, while the reverse transom and flush deck of the earlier 41 were decidedly better looking. The Tartan 41 is no longer as fast as a a more modern IOR boat such as the C&C 41. Although these designs have similar wetted surface and sail areas, the Tartan is much heavier. The design specifications called for 17,850 pounds on a waterline length of 32'5" (the C&C is 2,500 pounds lighter), but the Tartan is still a fast boat with a PHRF rating as low as 96. To put this into perspective, it is some 15 seconds per mile faster than the first epoch-making displacement cruiser-racer which swept the board - the Ca1 40. In 1972 the Tartan 41 was cutting edge (the early boats were not the easiest boats to handle). A few years earlier S&S had begun separating the rudder from the back of the keel, cutting wetted

area and increasing the lever arm of the aft-mounted rudder while at the same time reducing keel size, making them smaller, deeper and more efficient. However, the ealry rudder and keel of the Tartan 41 were very small and on a close reach the boat was slightly tender and the rudder was hard-pressed to generate sufficient turning moment, particularly in a puff. Several of the earliest boats were re-equipped by S&S with a lead shoe at the bottom of the keel, weighing several hundred pounds, increasing the draught by 6% and the righting moment by 8%. In 1974 S&S designed a new keel for the boat, which fitted onto the old bolt pattern, making the draught 7" deeper and the boat 700 pounds heavier. This keel was offered as an option from 1974 to 1975, but most of the last 20 boats adopted this profile; earlier boats were retro-fitted. It is therfore important for a prospective purchaser to track the history of a boat, as the differences are subtle. The rig remained unaltered, with a a big, heavy bullet-proof mast and single spreader, as favoured by S&S at the time, with single lower in-line shrouds. The size and weight of the rig is the equivalent to that of a 50-footer

today and it was designed to be raced extremely hard. The boat was well-equipped for the standards of the day, with Barient 32 primaries, Barient reel halyard winches; most have subsequently been uprated with new booms and roller furling. Despite being tender, IMS calculations estimate a 124 degree limit of positive stability, well above the minimum and with the revised keel, tall sail plan and heavy rig, the boat is stiff by contemporary standards. In twelve knots of breeze in calm water the Tartan tacks through 84 degrees, according to IMS predictions (the C&C 41 is estimated to tack through 80 degrees). Under most conditions the Tartan's VMG is roughly a third of a knot slower than the lighter C&C. The orginal engine was small - the 20 hp Esterbeke diesel. This was later changed to a Farymann. Many have since been replaced by larger engines and since the machinery sits directly under the companionway this is easy to achieve. The original aluminium fuel tank is relatively small at 26 gallons. Tartan boats were ruggedly built and in 1972 GRP construction was not extremely sophisticated. Heavy laminations, rather like the early Halmatic hulls, resulted in the boat tipping the scales 3,000 pounds heavier than designed. During the production run, considerable effort was put into reducing weight: all of the boats have some balsa coring but the amount varies according to the build date. Later boats had changes to the hull layup in order to save weight. Seven stretched versions of this boat were built, known as the Tartan 44. The hulls of the 44 were 20% lighter than the original 41s. The longer waterline and lighter displacement of the 44 resulted in a faster boat downwind. There are actaully three hull configurations for the Tartan 41. The original tooling was for a 43-footer with a conventional transom but most were built with a reverse transom to 41 feet. An extension on the back of the hull resulted in the 44. The boats were so well-built that most, despite being twenty-five years old, show no structural problems. The interiors of the original 41s were simple and not particularly lavish and so can benefit enormously from easy upgrading. Although the Tartans' hulls were ruggedly built to similar specification as the Swans, they lack the elegant on-deck and below-deck joinery for which the latter are famous. The deck layouts are typical of S&S functionality, all the leads properly positioned and the winches and hardware adequately sized. Nothing gives the impression of being lighweight, or likely to give way in a blow. There is full headroom in the interior - 6'2" even in the forward cabin. The original water tank, which includes a pressure water system, has a capacity of 60 gallons, but usually has been augmented. The main bulkheads in most boats are teak-faced ply; the furniture is plywood, faced with plastic laminate, trimmed with teak. In the bubble-type deckhouse, which extends over half the main cabin, there is 6'7" of headroom, 6'4" in the galley and

nav-station. Most boats have had an addditional opening hatch fitted to the forward end of the deckhouse. Aft of the galley and nav-station there is a euphemistically labelled "aft state-room". It is a bit of a 'hole' and on most boats this area is used for sail storage when racing. The boat's interior is well designed for its original purpose - racing. With the exception of the rather coffin-like quarter-berth area, there is lots of volume and headroom. The Tartan 42, of course having a similar accommodation plan, has volumes of extra space owing to the revised deck moulding. The boat's moderately heavy displacement and deep sections result in an extremely sea-kindly motion, and this is a real plum point when either racing or cruising. When looking for a Tartan 41, check for old engines, sails and rigging which may have been used fairly hard. As the fore triangle is large, a new Genoa is expensive, and a fully battened main would be a good idea for cruising. There are usually a number of Tartan 41s on the market in the US at varying prices, from $50,000 to $75,000. You buy the boat

according to its condition, not its age. Since there were a variety of construction techniques used on the boats during their history, as well as different keels or rudder moulds, the provenance of an individual boat is essential; a check with the factory may be advisable. Tartan, in conjunction with S&S, have produced a number of boats with excellent reputations, such as the 27, 30, 34 and 37, but of them all the 41 is probably the most exciting and it will almost certainly still be around long after today’s generation of "hot" ultra-light-build boats have begun to crack up.

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