

KELSALL CATAMARANS

Bonefish

2009

Designers Report on this KSS Expedition Catamaran

Another example of the versatility of the Kelsall design office and of the KSS (Kelsall Swiftsure Sandwich) build system takes to the water.

As a go anywhere, long range power catamaran, I like the way she looks. She is purposeful, practical and with elegant proportions. There is a fine standard of finish, fittings and furnishings, where many cats in this style tend to look heavy, cumbersome and over stylized.



KSS 82 Bonefish, in Tauranga, NZ

Bonefish is afloat, in Tauranga, for final fitting out and checking of systems. She was too high for the boat shed and the top of the upper saloon and flybridge were put in place after moving to the water. To give an idea of the size of this vessel, a friend came with us on one visit. We went into the factory. She looked around and asked—where is this big boat you talked about. We were standing underneath the bridge-deck.

This 82 ft. x 36 ft., KSS design began as a power sailer. A power catamaran design, which also carries a substantial sloop rig. With plans for operating a lot of the time in shallow waters, the hulls are designed as power cat hulls, with the props and the rudders within the 1.4m depth of the hull and long low aspect ratio keels. The overall beam is wide and has heaps of stability to support the rig. This is just one of the many advantages of twin hulls. There is no rig at the present time but all is in place to install at a later date. Another very important catamaran advantage is the initial stability. Compare the motion in harbour of the conventional mono power yacht with that of the power catamaran. Relatively small waves from passing boats will start a rolling motion on the mono which does not happen on the catamaran.

The project started a long time ago and it has not been without incidents, set backs and many time consuming additions and changes along the way. No work was done on the boat for a number of years.



Bonefish is the project that brought me to NZ, for which I will always be thankful. She was built in Mount Maunganui, after being moved from the initial build location N of Auckland. Two hulls, up to the knuckle and the majority of the panels of PVC foam and fiberglass to complete the structure were moved by road. That is where I got more closely involved in the day to day build and employing an entirely new build crew.

After the move, I and the American owner, John Tucker, ran the project for four months. To quote the owner, “The move halved the wages bill and doubled the production”. We had an enthusiastic, happy crew, most of whom were boat building for the first time, who learnt quickly, doing a great job. The owner took over and I moved on, in order to concentrate on design work.

As designer, it is good to see her afloat and being prepared for her roll on the water, despite of the extended time and some unusual circumstances between first panel making and launch. She is an example of what can be achieved on twin hulls, with KSS and the skills of NZ boat builders. As designers we enjoy the challenge of custom design for the owner who is looking for something a little different, combined with an efficient building technique. I congratulate the owner on the standard of finish. In normal circumstances, KSS can compete with the series producers with their high initial investment in tooling.

For all catamarans, weight is one of the most important factors. When afloat, as designer, we always look first at the WL. Without the rig in place, a heavy item has been removed from the weight list. The three fuel tanks each side are large and spread to forward in the hulls for true long range, but also allowing fuel transfer between tanks if needed for trimming of the weight distribution. As expected at this stage, the bows are riding high and the floatation line at the transoms is slightly higher than the designed WL. She does have an unusual feature. The owner chose to put in an extra transom step which is below the designed WL. It allows easy access to the water but looks a bit strange to the experienced eye.



Twin 425 hp diesels will give close to 20 kts., on the slim displacement hulls, driven by variable pitch propellers.

A bonefish is a fighting sports fish for the sea fly fisherman. I understand that the taste is good but with too many bones to be enjoyable eating. They are found in shallow waters such as the Bahamas and some islands in the Pacific. Bonefish carries two smaller boats and a crane to lift them on board, which will be used to reach the shallows where the fish are found.



The Layout

Bonefish is laid out as a private owners yacht, with exceptional facilities for the owner and guests. Port side is the owners private cabin with lower saloon and circular stairs to the upper level, to starboard. The skippers cabin is forward on starboard side, opposite the galley and dining area. Two three berth guest cabins are forward in each hull.

The second level saloon/and helm station is exceptional, with spiral stairs to the flybridge.

A neat feature is the high coaming which surrounds the second level, accessible through a sliding door beside the helm. From there, there is access forward.

There are numerous layout options on this size and style of catamaran. The ability to carry an efficient sail plan on a power catamaran provides the best of both worlds for ocean crossing. That means sail when conditions are good, such as on trade wind routes and turn on the power when conditions are less favorable for utilising the power of the wind.

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