

ROYAL CRUISING CLUB /YACHTING MONTHLY DINGHY DESIGN COMPETITION

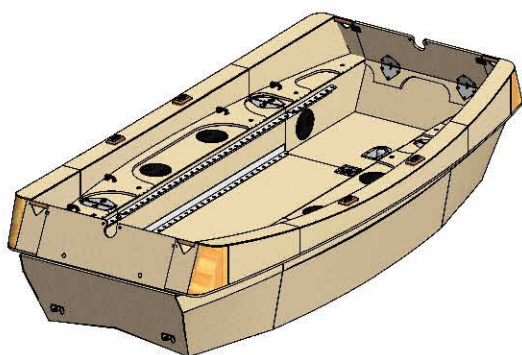
REPORT OF THE JUDGES

Five entries were received by the closing date on 1st October 2012 and have therefore been considered by the judges. In alphabetical order they were as follows:

FRANKTON by Martin Walford and Michael Howard.

This was a very detailed design for a folding dinghy 10 feet in length and constructed in plywood joined primarily by means of epoxy fillets. The judges were impressed by the quality of the presentation with excellent three dimensional representations of the overall design and the inclusion of much well thought out detail. One judge described FRANKTON as 'an intelligent piece of engineering'.

However, a number of concerns were raised. It was felt that although it might have attractions for volume production perhaps as a kit, it would be extremely complex and expensive for one-off amateur construction. Although when folded the dinghy only required approximately 5 feet by 5 feet of deck space, the box created would stand about 3 feet high the consequence of the hull folding rather than nesting. Finally, there were general concerns about FRANKTON'S appearance and potential handling qualities. Comments included 'once again we seem to have more of a sophisticated raft than a dinghy', 'confrontational looks', 'won't look attractive in service and it won't melt into my coachroof when it's collapsed'.



FRANKTON
Stripped and folded



THE MULE by Gordon Davis

This design has the benefit of having been constructed and demonstrated in use, it was developed specifically for the designer's 31-foot sailing yacht and is intended for stowage in a cockpit locker. The consequence is that as presented, it will only carry a maximum load of 150 kg and is not suitable for an outboard. The design was well presented with good photographs to explain the details. The dinghy is constructed in ply using jointing techniques that include stitching with nylon fishing line and the waterproof integrity is obtained by an outer skin of PVC cloth.

Whilst the judges recognised the stated success of the design for the specific requirements on the designer's yacht, there were major concerns about its wider applicability. The chief of these were the robustness of the MULE as a serious yacht tender, its inability to cope with any degree of choppy sea and its load capacity. The design brief states 'the standard load will be the two owners plus shopping' the owners together are given a weight of 125 kg combined including waterproof clothing and life-jackets. Unfortunately as was repeatedly pointed out the majority of the judges do not conform to this specification. As one judge put it 'While this is a delightful day dream, I fear that for many of us the reality is somewhat different. Taken alone, I weigh in at 110 kg, never mind the lifejacket'.



THE MULE
Loaded and unloading



PAN by John Pennefather

This design from Australia has also been constructed and demonstrated in use. The designer describes the way in which his thinking was influenced by reading of the use of Sampans as tenders for Junks on the Yangtze River in China. The result, a rectangular and shallow draft hull, was praised by the judges for its stability and load carrying potential. As built PAN is just over 8 feet long with a beam of about 4 feet. Stowed on deck with ends nested in the hull, she would take up just over 5 feet of deck and would sit suitably low. These dimensions were obviously set to suit the designer's requirements but could clearly be adapted to for bigger boats with more deck space. Problems with rowing and sailing have been treated pragmatically for instance by placing the dagger board beside an off centre mast and compensating for the resulting weather helm with a balanced rudder and for rowing the position of the rowlocks has been raised to minimise flexing of the oarsman's back.

Judges' comments were positive 'a well-thought-out design', 'stability and load carrying seem to be good' and 'eminently practical and do-able for the amateur builder'. However, whilst recognising the designers concern to minimise draft, there was a belief that some modest modification of the lines could improve the sheer and sea kindliness of the hull. One judge experienced in dinghy design suggested 'a much softer cutaway curve to the bow and may be 2 or 3 inches of rocker in the bottom'. But overall the potential of PAN was recognised and commended.



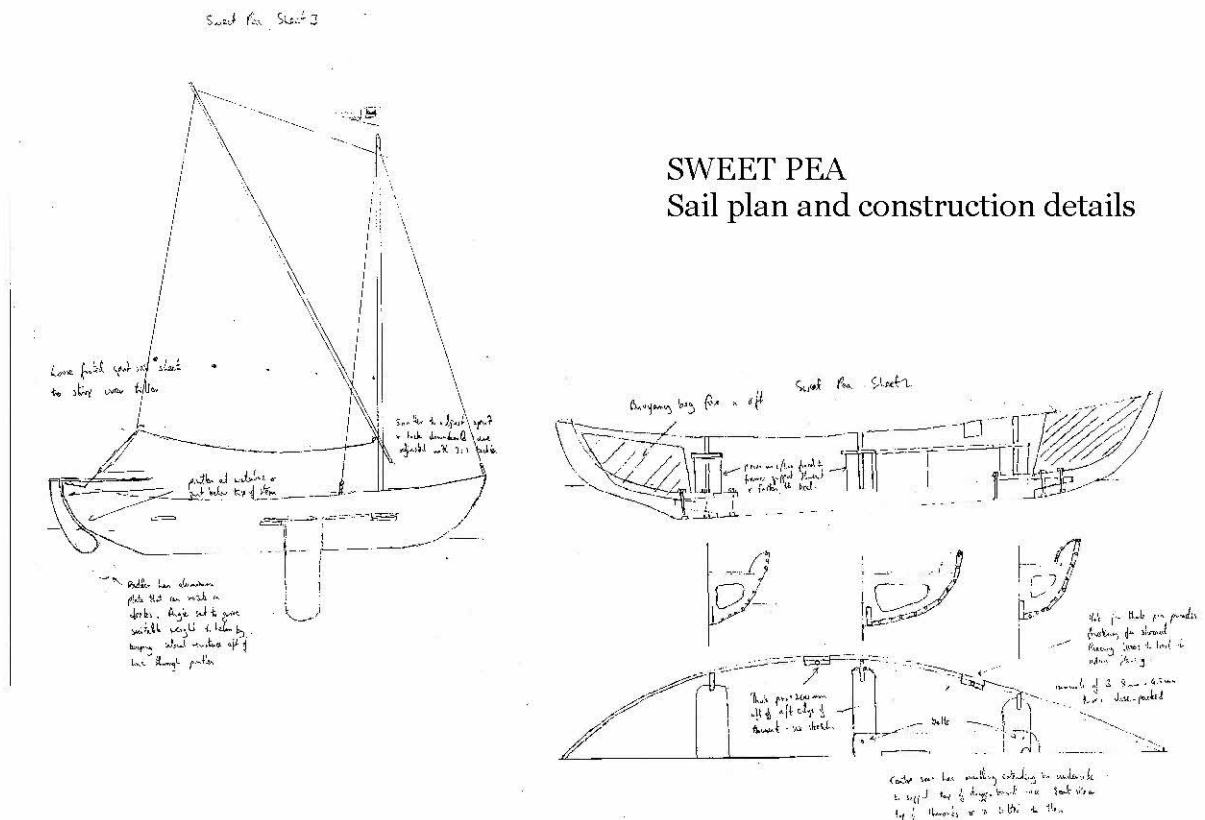
PAN
Sailing and with ends nested ready for stowing



SWEET PEA by Henry Clay

Described as 'a twelve foot long skin and frame dinghy designed for stowing in a locker with the stringers and keel, which are straight, stowed with the spinnaker pole' SWEET PEA offered a very different solution to the problem posed. The designer envisaged her as being suitable for 'an experienced cruising couple sailing a 38ft boat in coastal waters who will use the boat to explore rivers and anchorages'. The essence of the design is the use of 24 stringers made from 8mm fibreglass tubes which run over 3 frames constructed in fibreglass and epoxy over a foam core, although it is acknowledged that wood stringers and frames would be an alternative. This basis is then supplemented with components for the keel, mast step and dagger board. Over the resulting frame a PVC skin is attached and the hull is further stabilised with external inflatable buoyancy tubes. Detailed building instructions running to three pages were provided but the supporting drawings and diagrams were somewhat difficult to decipher. Whilst it was possible for judges with professional experience to supplement the detail given, it was more difficult for others to assess the full potential or pitfalls of what was being proposed.

Never-the-less the opinions on SWEET PEA were positive, 'a very versatile boat', 'looks very seaworthy, directionally stable and she sails, rows and motors', 'I fancy SWEET PEA could be exactly what I am looking for'. However, concerns were expressed as to the ease of assembly on deck and the view of more than one judge was that she would end up being towed much of the time. This might be a suitable solution for some - a boat that could be stowed for longer passages but once assembled would open up coastal exploration though she had to be towed.

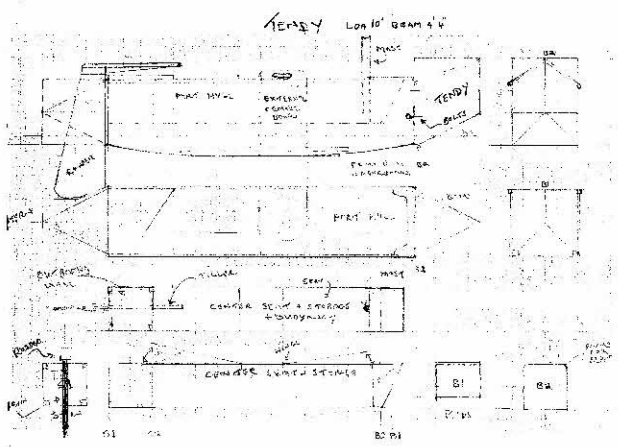


TENDY by David Mark

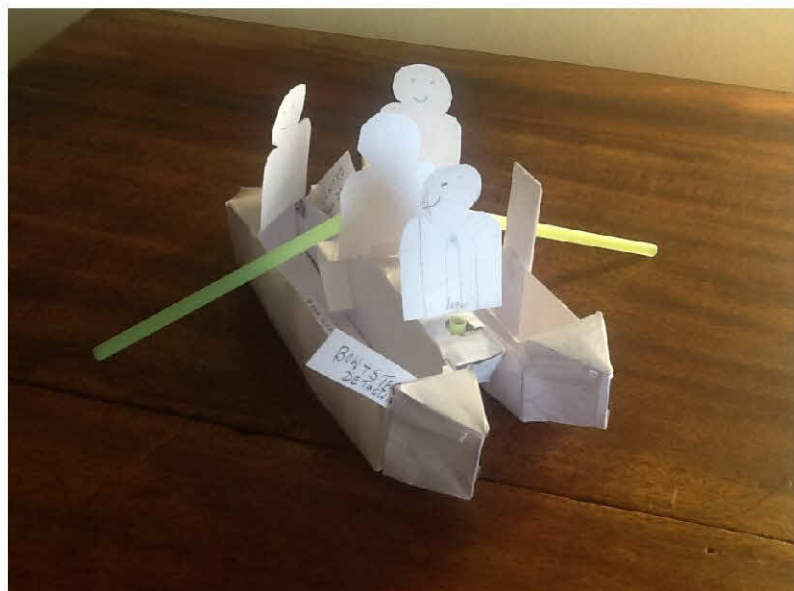
The designer stated his brief for TENDY quite specifically – ‘she is designed for a 38ft cruising yacht which is doing a cruise of 6 months in summer from UK to Turkey with frequent stops at anchorages along the way’.

A catamaran design was chosen for its ability to be dismantled and stowed in small parts. The result is a craft 10 feet long with a beam of just over 4 feet. Dismantled the largest component would be 7 feet long and would weigh no more than 22 kg. Construction is envisaged to be in plywood with planks joined using stitch and glue. The written outline of the design and description of construction were supplemented by basic drawings and a folded paper model.

The judges felt that much had been sacrificed to obtain a vessel with the benefit of minimal stowage requirement, as one judge put it ‘perhaps limited seagoing ability is, for the purpose, accepted as the cost of unobtrusive stowage on board’. The high initial stability of the catamaran design is recognised but the lack of aesthetic appeal of the design was a general concern. The strength of the joints in the construction given the weight of the load was questioned. As one judge summarised ‘the boat will be unhandy and unresponsive’.



TENDY
Construction and model



SUMMARY

It has to be acknowledged that the fact that only 5 entries were received was disappointing and it is perhaps worth pausing and asking why a problem that once appeared to be of great significance to cruising yachtsmen has apparently now become of less interest. There is no doubt that with modern mechanical aids and their greater reliability, the tendency for those engaged in serious cruising has been to move to larger yachts. The problems of dinghy stowage on a 35-foot yacht diminish when the LOA increases to over 45-feet. For the majority a RIB of ten or more feet and a powerful outboard ticks all the boxes particularly as you plane past the purist paddling laboriously ashore against a head wind and foul tide swearing loudly about your wash. But those in the RIB will never enjoy the peace and quiet of exploring under sail and oar the muddy creeks and rocky crevices where so much of the fascination of coastal cruising lies.

These five designs all demonstrate serious attempts to meet this challenge and the judges are grateful to the entrants for the time and effort they have given to the task. The difficulty in selecting a winner was compounded by the fact that if there was a perfect solution it would have been found long ago, as a consequence assessment has had to be made between widely differing concepts. There is also the problem of evaluating a dinghy that exists only on paper against one that has been built and fully tested.

RESULT

In the opinion of the judges the prize should be awarded jointly to John Pennefather for PAN and Henry Clay for SWEET PEA. We believe that both dinghies, although very different concepts, exhibited innovative ideas and offer well thought out solutions with potential for their further development.

Dr Stuart Ingram (Chairman)
Chris Beeson
Tom Cunliffe
Nigel Irens
Iain Oughtred