

# Modifying a SKUD MkI gunwale and reinforcing the deck

August 2010

Following is a suggested procedure to modify the gunwales of MkI SKUD 18s to more closely resemble the gunwale shape of the MkII boats. Please note this is not a recommended procedure and owners proceeding with the modification do so at their own risk.

The early MkI boats had very little support under the side decks and are very soft. A stiffener was introduced from about boat 019. For these early boats it would be a feasible proposition to modify their gunwales and fit deck beams at the same time. Of these boats, 001 to 009 are particularly light and will benefit most from modification. Boats 010 to 018 will also benefit.

Access Sailing Systems has modified hull 033 but used a method (see diagram #2) which left the old flange attached and folded that back on and glassed over it to help maintain a straight and true sheerline. This method requires turning the boat over and is extra work. The method described below (see also diagram #1) is what we would employ if doing another boat.

1. Support the hull in its cradle.
2. Remove the cowling, bow fitting, spin sheet blocks, chain plate fittings.
3. Cut off flange from bow to stern and prop up hull aft if the topsides sag.
4. Mark where deck beams are to be fitted, sand to scuff bonding area.
5. Make deck beams, fit over length deck beams and bond in place with "plexus".
6. When cured, trim off excess deck beam and trim for new sheerline.
7. If possible, correct any faults at chainplates.
8. Fit aluminium strip to take spin sheet block saddles.
9. Power-sand glass to ready for filling and glassing.
10. Prop up hull and eyeball for a straight sheerline.
11. Refit chainplates
12. Temporarily screw hull and deck together with long tech screws 1m apart.
13. Bond join with plexus.
14. Masking tape perimeter of glass work, sand to remove glossy gelcoat.
15. Fill and sand into shape.
16. Redo masking tape, then layup 1 x layer of 300csm and 3 x 300 woven roving, all about 75mm wide strips.
17. Sand into shape, chasing a good sheerline, fill and sand.
18. Redo masking tape, then layup 1 x 300csm and 3 x 300wr, with staggered widths from 50mm wide to 120mm wide.
19. Shape the aft quarters and glass over them to make them look right.
20. Feather away glass edges, redo masking tape, white.
21. Sand into shape, flowcoat again.
22. Refit spin sheet saddles, bow fitting and cowling.

## Some notes on steps in the process.....

5.1. Making the deck beams. These are laminated in a mould which I can prepare. Beams would be approx 50mm square and have 30mm wide flanges both sides, have a gentle curve to replicate deck curve, and radiused at inboard end to suit radius of cockpitside/deck. The flanges are the bonding surface.

5.2. Fitting the deck beams. At 500mm centres there will be 3 or 5 beams per side. On some boats there will be styrene foam blocks tied up under the deck and in the way. Beams need to be held hard under the deck till the adhesive gels. Once gelled, trim off excess beam length. A simple custom clamp will do this job.

5.3. Beams need to be bonded with “plexus” or similar adhesive which “melts” or chemically bonds both fiberglass surfaces. It’s an expensive adhesive but essential.

7.1. What may or may not be done to the chainplates is unknown until inspected.

12.1. 60mm plus long tech screws right thru both surfaces close to the edge will hold things in shape. Their holes close to the edge will be filled later when glassing and finishing.

21.1. The finish will be a brushed gelcoat. If spraying to get a better finish, the whole boat and others nearby need to be masked against overspray. A reasonable sprayed finish is achievable if the skilled labour and equipment is available but it will require an extra day.

21.2. If an owner wants a perfect finish then that’s a couple of days additional work and comprises more sanding with the torture board, filling, sanding and spraying, sanding and buffing. The better you make the finish the more noticeable will be imperfections in the sheerline curve etc.

<b>Estimated Material Costs – per boat</b>	<b>\$ US</b>
1 gallon plexus	100
8m 300 gm woven roving	50
4m 30gm CSM	20
5kg polyester resin	25
2kg natural gelcoat	20
250ml MEKP.	10
“Q” Cells, milled fibre, aerosol	20
Consumables	50
Acetone	25
<b>TOTAL (approx)</b>	<b>\$320</b>

For enquiries, contact:

**Chris Mitchell**  
Managing Director  
Access Sailing Systems Pty Ltd  
Email: [chris@accesssailing.com](mailto:chris@accesssailing.com)

