Boom

The boom is assembled upside-down.

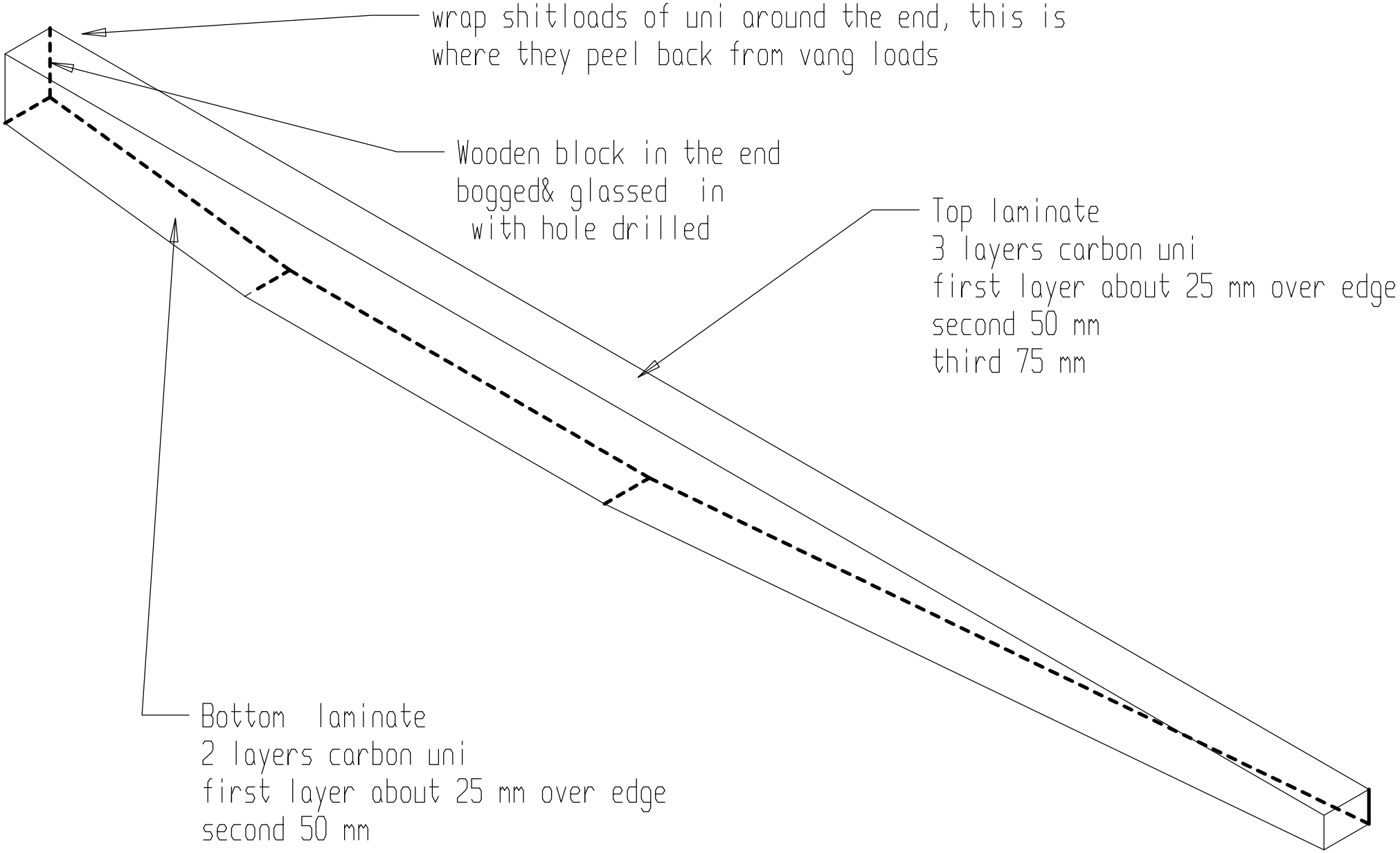
1. Laminate a 500x 2200 piece of 5 mm foam one side with 160 carbon matt cloth
2. Place template over top and cut out with Stanley knife
3. Place top on bench and glue sides to top in U shape, support sides with blocks, **laminate is on inside**
4. Fillet & Cove inside of boom with bog and glass
5. Glue three bottom pieces on top **laminate is on inside**

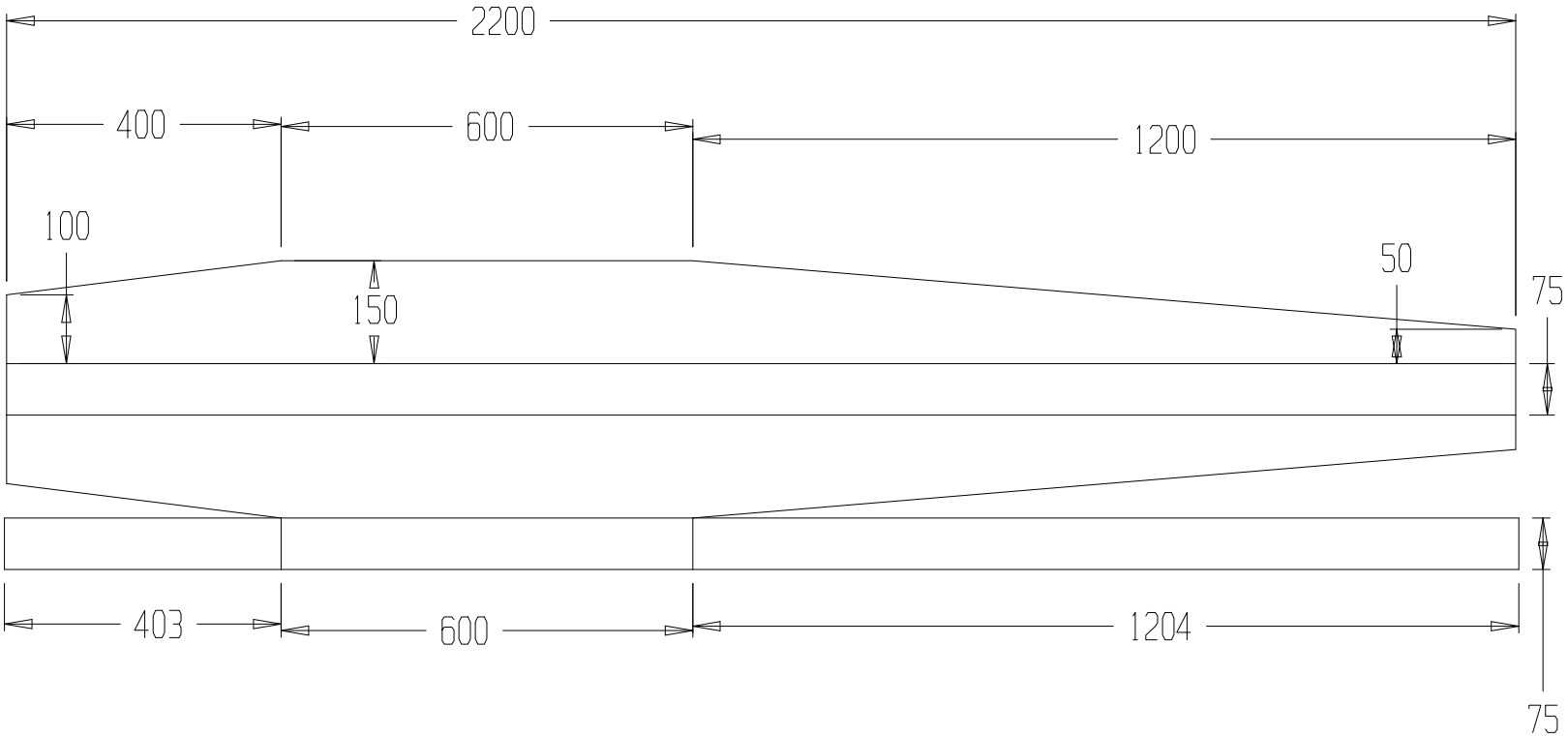
Now roll over

1. If you don't Add a strop at the end for the clew, you have to chisel out the foam and bog in a strip bit of high density foam for saddles for the clew.
2. Round the corners to a nice radius
3. Laminate 3 layers of carbon uni on top of boom, gradually extending them down the sides
4. Laminate 2 layers of uni on bottom gradually extending up the sides
5. Make sure the final layers of uni overlap and alternate between top and bottom
6. Wrap shitloads of carbon uni and matt around the front as there is heaps of peeling moment in this area.
7. Shape and fit block of wood into front for gooseneck, bog a laminate it in.
8. Wrap shitloads of uni and matt around the back
9. Add kevlar uni along sides to handle shroud crashing
10. Add carbon uni aligned with vang for vang loads
11. I added 3 small round bits of carbon plate and glassed them on so I could tap bolts into them for the vang, & mainsheet strops
12. Add a strop at the end for the clew

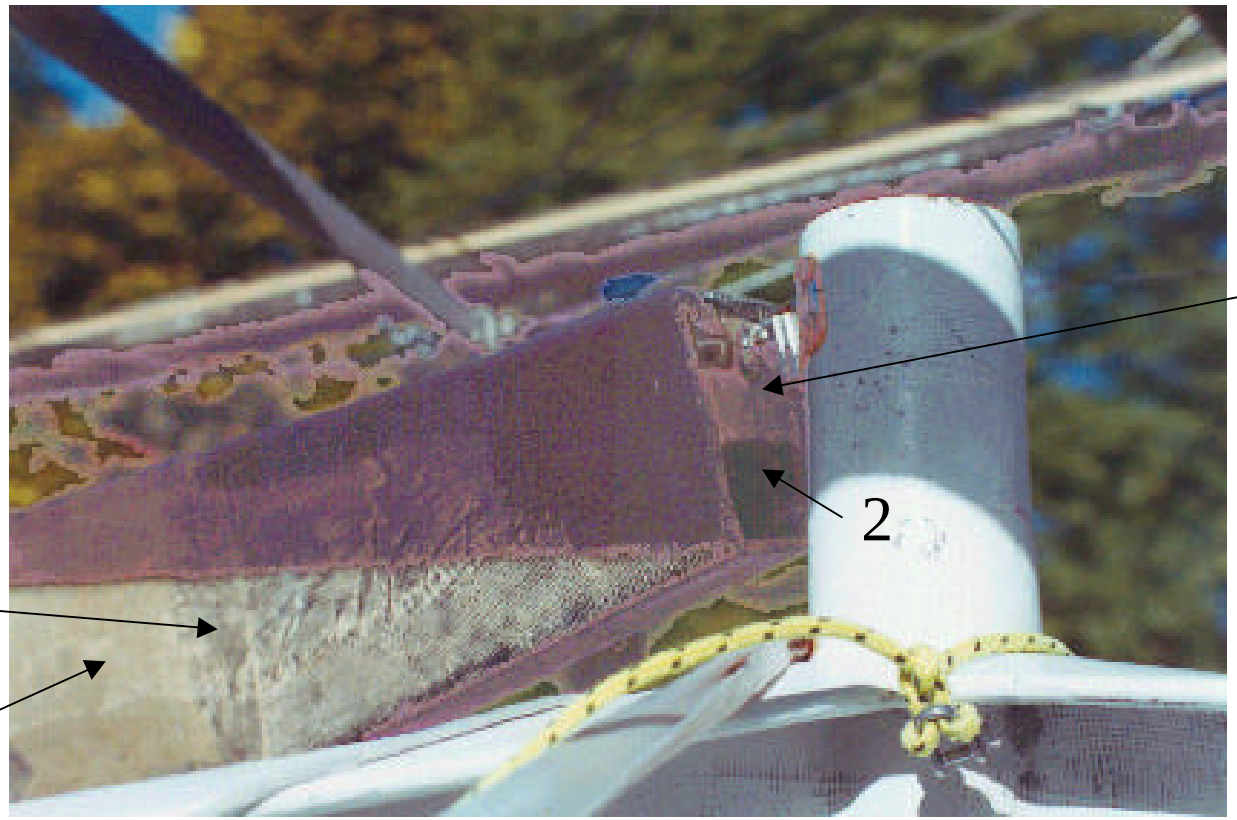
Kiss and thank wife

Should weigh about 2 kgs (not the wife)

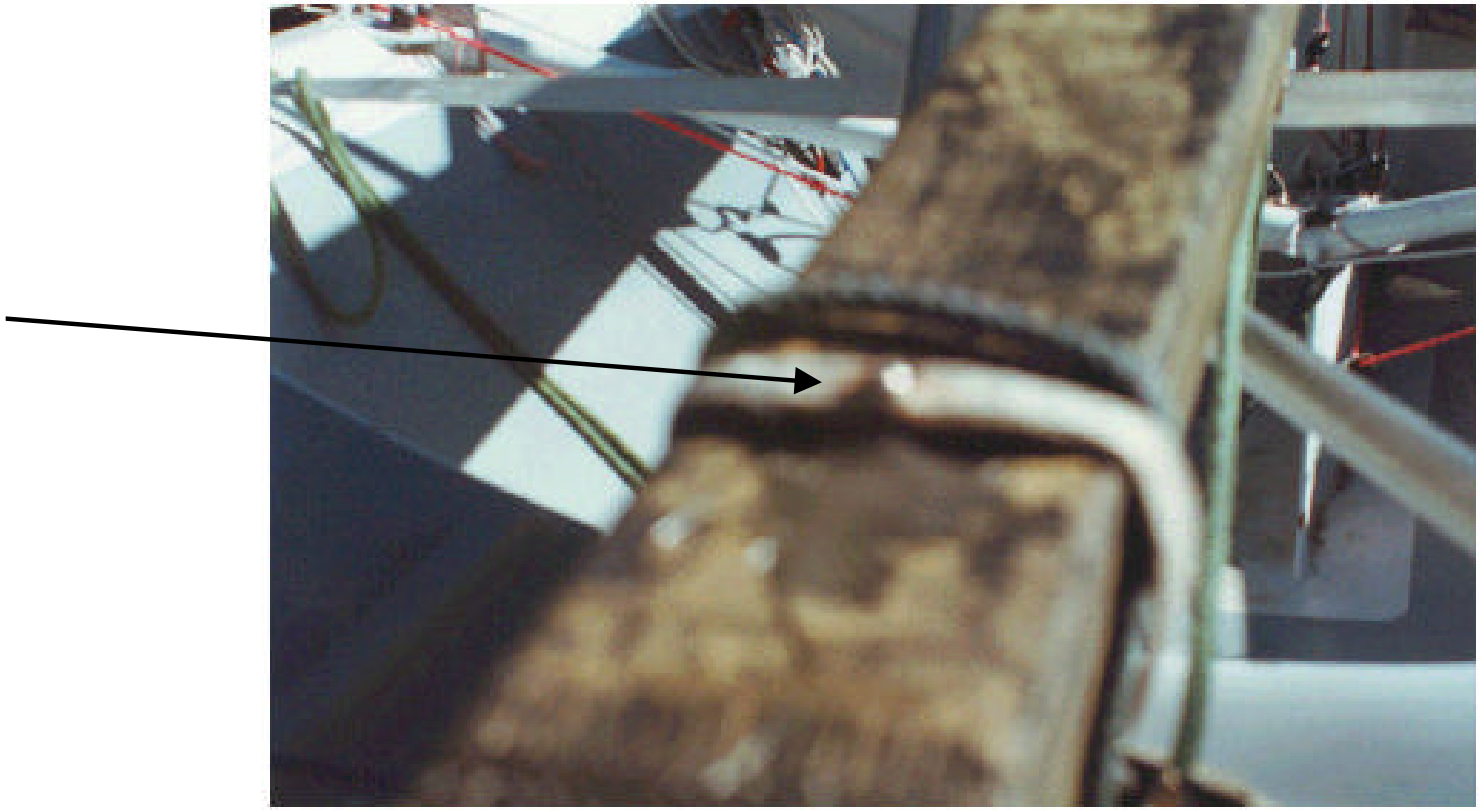

wrap shitloads of uni around the end, this is
where they peel back from vang loads
Wooden block in the end
bogged& glassed in
with hole drilled
Top laminate
3 layers carbon uni
first layer about 25 mm over edge
second 50 mm
third 75 mm
Bottom laminate
2 layers carbon uni
first layer about 25 mm over edge
second 50 mm


2200
400
600
1200
100
150
50
75
403
600
1204
75

- This is the front of the boom. You can see the wooden block in the front (1), with a hole drilled for the gooseneck, it is also laminated underneath to hold in place (2).
- Also this is the highest load in the up direction so wrap plenty of carbon around the boom and an extra 2 layers 2” back
- The picture is a bit funny as it had a shadow on it



- This is a shot of the back of the boom, out of focus (Sorry) You can see the carbon plate button glassed on with a 3/16 bolt tapped in to take the webbing strap for the blocks



- Another shot of the back, showing the 3 saddles for the main. You should be able to get away with one
- Also extra wrapping around the boom for reinforcing and the area where the faom was cut out and high density foam added (1) before glassing

- Side on shot of boom, showing kevlar reinfocing along side (1) and carbon reinforcing in line with van loads (2)
- Vang strap is held on with 2 1/4 bolts tapped into a carbon plate on top (3)
- Carbon uni runs for and aft along the boom (4) and is put on before the all the other reinforcing