

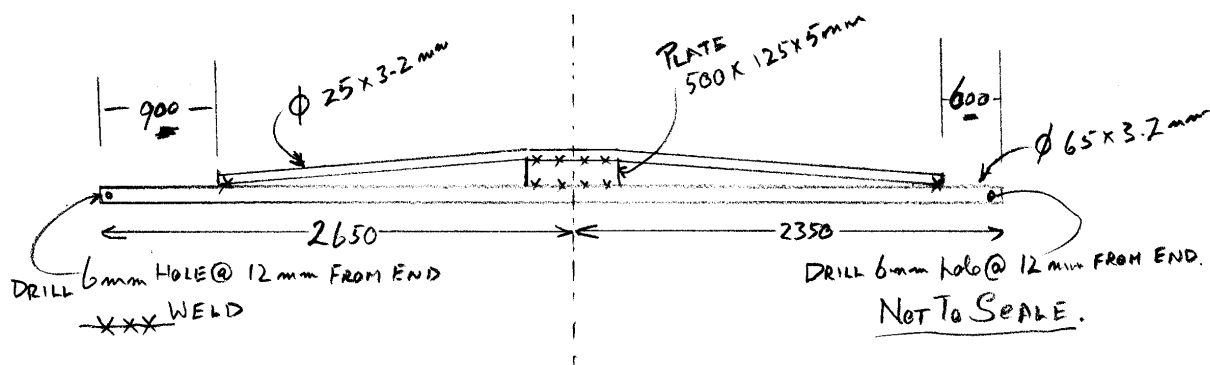
## Chapter 9.

### The Yard and Battens.

*From the models there appeared to be no reason why the bottom batten should be any stronger than any of the ones above. Also from the models it was clear that the yard was going to have quite heavy loads so would have to be quite strong. This will be discussed later in more detail.*

Before contemplating the split junk design in detail I was fortunate in being able to sail Arne Kverneland's current boat Johanna. The sail area of Johanna and Poppy are similar, and as Arne has a very practical approach to rig design there seemed to be every reason to copy as many details as possible for Arne's successful rig. Thanks to his generous attitude the spars on Poppy are almost identical to his so a lot of effort was saved at this stage of the building process.

On Poppy the yard was made 30 cm longer than required for the rig to make sure it would not foul the lazyjacks when hoisting sail. On a more recent sail with only the top two panels tapered the sail is that little bit longer so the extra 30 cm are used to attach the longer sail. All the aluminium tube was specified as 6082. The sling point was one of 5 holes drilled along the top of the plate near the middle so the shackle had to slip over the 25 mm tube. In the diagram the luff is on the right.



All the battens, including the bottom one were 50 mm outside diameter with 1.5 mm wall thickness. As the lower battens were just 6 metres long and the standard tube length was 5 metres, it was necessary to weld a metre on to the end of each length.

When it came to end fittings for the battens and yard the aim was for simplicity. Arne had put bolts across the end and left the end open, but on Poppy we ended up simply with small D shackles slipped over the edge of the tube and the pin screwed in from inside the tube through a hole in the wall of the tube. All attachments were then lashed to the D shackles. This was a rather temporary setup and a better method would be used in another rig.

### Batten and Yard fendering.

To prevent the metal of the yard banging on the mast fendering was made from two lengths of thread reinforced clear plastic water hose. The lengths were screwed to the yard at the two o'clock and the 4 o'clock positions to stop the mast striking the yard at the 3 o'clock position. To prevent wear on the batten/ mast contact I simply used some 2" / 50 mm white plastic plumbing

pipe, slit it down one side and popped over the batten in line with the mast. It clipped over the batten pockets as well and seems to do the job quite well.