

Sketching up a JR for a Nonsuch 30

I found this to be quite a struggle. The mast sits very close to the bow. The shortest boom I could use and still get 5-10% balance (with respect to mast), and the CE in the same position as the cat-rig (CR on the drawing), was 6.50m.

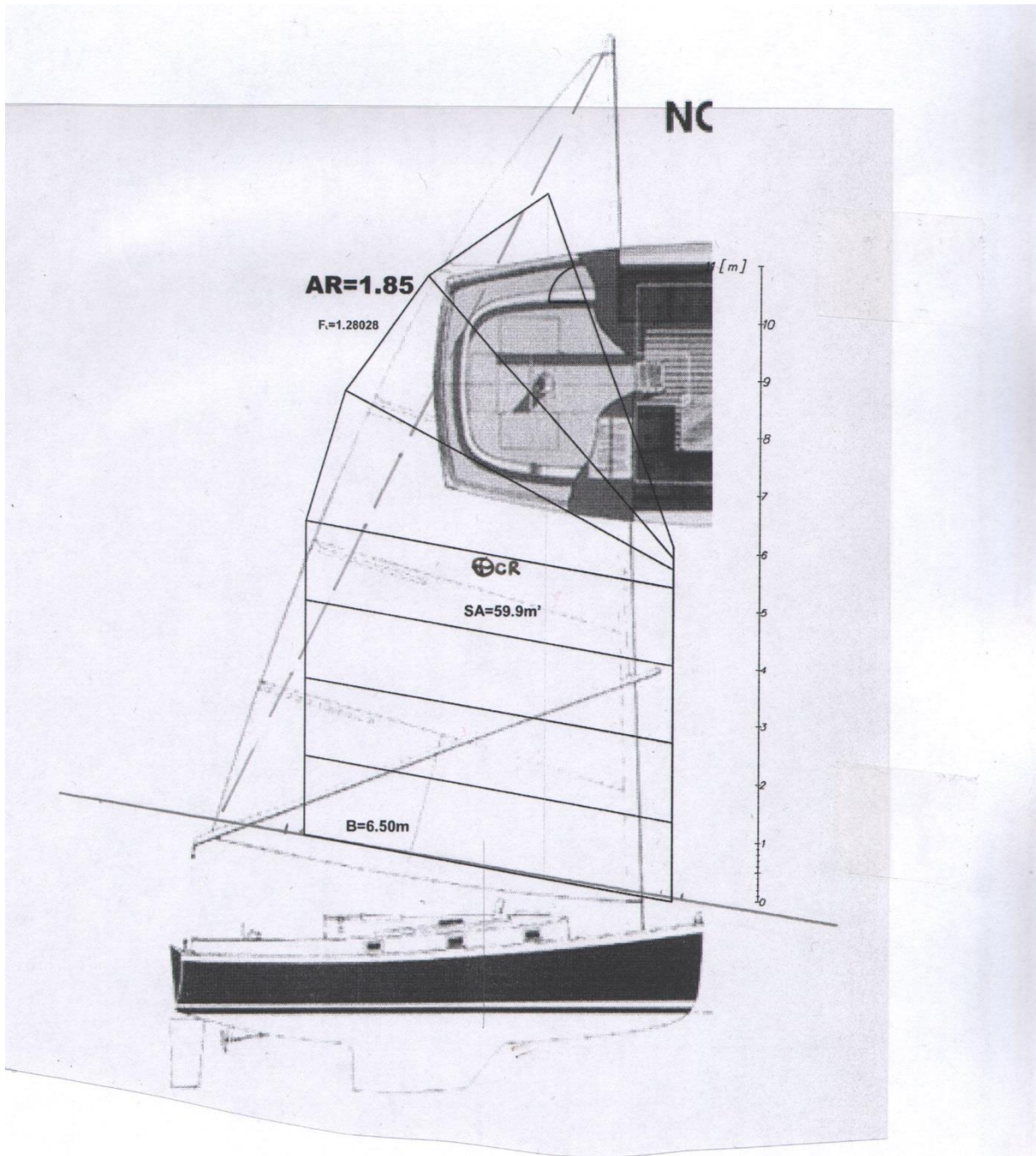
Then to my surprise, when I drew up a sail of 59.9sqm, by scaling up a master sail of $AR=1.85$, I found the sail to look quite small compared to the original. It appears to me that the given sail area of the original rig (540 sq ft/ 50.2 sqm) is just the net triangle, not counting the big roach at the leech (and even at the foot.). The complete original rig seems to around 60sqm (the triangle is about 52). That is quite some area in one pointy sail! Am I doing something seriously wrong here?

Anyway, see the sketch on next page. The sail is based on one of nmy master sails with $AR=1.85$, and just scaled up until the boom is 6.5m. This makes it easy to convert all the other dimensions in the sail, just by spending 30 minutes with a calculator.

The junkrig will be a lot easier to reef and furl, so I am not afraid of giving here about 60 sqm (646sq ft). I guess an electric halyard winch would be a welcome help, but otherwise she should handle OK. The minor mast rake of the original mast should be no problem. As you see, you can do away with several meters of mast, when you have tested out the JR.

Stavanger, 17. Mars, 2016
Arne Kverneland

PS: The original rig was said to have 540sqft sail. Could it be 640?



NONSOCH 30
WITH 59.9m² JR
17. MARS. 2016
Asme K.