

News

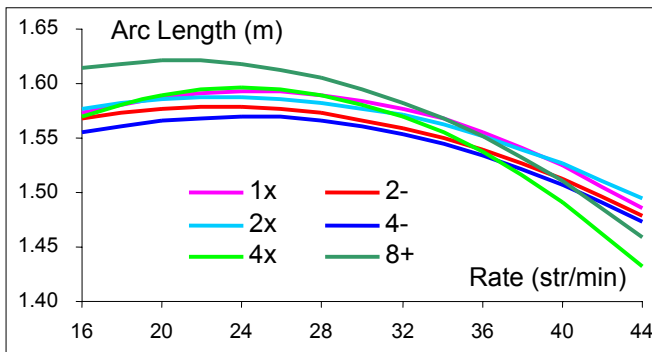
☺ RBN is now turning two years old now. Upon request you can obtain the collection of previous 24 Newsletters by e-mail (2mb).

Q&A.

These are answers to another two good questions asked by Ian Taylor of Melbourne:

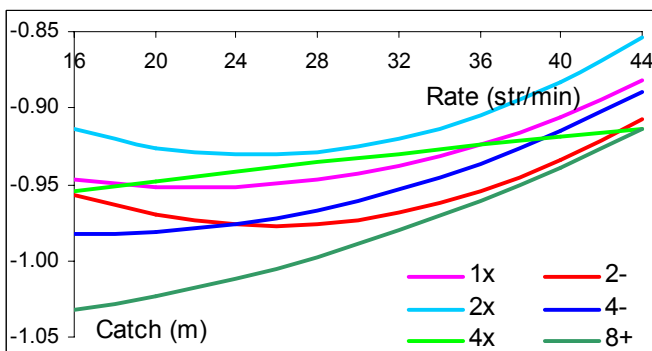
? **Q:** How much stroke length reduction occurs at higher rates?

✓ **A:** To be able to compare sweep and sculling boats, we took length of the arc, which draw the middle of the handle. Then we built prognostic lines of dependence of the arch length on the stroke rate. Here they are for each boat type:

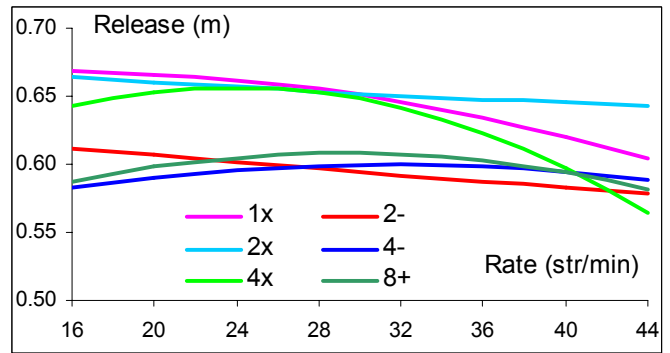


You can see that in all boats the maximal stroke length occurred around 24 str/min. The length is 2-3cm shorter at low rates and much shorter at high rates. It is interesting that **reduction of the stroke length is more significant in bigger boats**. In 4x and 8+ it was 10-11cm shorter at the stroke rate 40 relative to 24 str/min, but in other boats it was only 6-7cm shorter at the same rate.

✓ It could be interesting to find out where shortening of the stroke length happens: at catch or at finish? Below are similar prognostic lines for both:

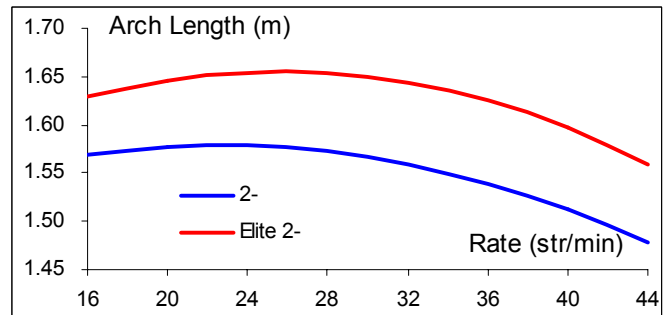


You can see that shortening at catch was a bit more significant in sweep boats (6-10 cm between 24 and 40), than in sculling (4-6 cm).



The opposite trends were found in release length. The shortening was noticeable in sculling (4-6cm) and was nearly zero in sweep boats. **Decreasing of the stroke length at higher ratings occurs mainly at catch in sweep boats and at both ends in sculling.**

✓ Another interesting point, is guessing if better rowers have less shortening of the stroke length at higher rates. When average data of two elite 2- was compared with the rest of the pair's sample, no difference was found in the shape of prognostic lines. However, the only difference was that elite rowers had 10-12 cm longer length at any rate.



Analysis of catch and release angles also didn't show any significant difference between elite and average rowers.

? **Q:** What is the best way to record a rower's stroke length? (note – no access to mechanical devices that you guys have).

✓ **A:** In RBN 11/2001 an easy method was given to check the stroke length. Use that wire markers in conjunction with video from the bridge to produce more accurate measurements. Also, John Driessen of Tasmania produces a good and simple mechanical protractor, which can mark an angle with a pencil.

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