

# ROWING LONG



**Robin Williams** assesses the technique of a student eight from Oxford Brookes

PHOTOS: **DON SOMNER**

In the last issue I had a look at an Eton College junior boys' coxed four and discussed some of the technical aspects of their rowing stroke based on a sequence of still shots. It was clear that not only were they doing some quite good things (posture for

The amount of leg compression and body lean is more than it was with the Eton crew, so it seems that they have targeted this as a goal. The blade work is decent too: they have squared well together, blades are close, and the entry is pretty slick because at half covered (see picture #3) there's

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instance), but that any corrections to technique needed to take account of their age group, growth spurts, flexibility, water time, and be part of a year-on-year plan, gradually working towards their ideal model. This time the Oxford Brookes women's eight have allowed us to put them under the magnifying glass to see if it is different when you consider a crew of female 20-somethings in a big boat like an eight.

I think it is important to start with the positives again and particularly to see if we can spot things which have been taught in a planned way across the whole crew. As mentioned before, we all associate a certain look with the Australians, Danes, Italians, Romanians etc, so is the same true with domestic clubs?

So looking at the picture above, you can see that they are well compressed and are striving for forward length on the handle. They row long!

little splash. This is partly a consequence of rowing long because the angle of the spoon to the boat is quite acute and so they are going in 'tip-first' in a way, or 'spearing the entry' as my GB Rowing Team colleague Steve Gunn sometimes describes it.



There are some potential problems with this much compression but, before that, let's examine what the ideal length is. Well a total stroke arc of 90° for sweep is desirable for adults who are tall, fit and flexible. That breaks down as 54-57° at the front and to 33-36° at the finish for general guidance. These numbers will vary unfortunately because of body proportions, length of arms, physical conditioning and thickness / slenderness of trunk and limbs as well as equipment and other things. So don't worry if the numbers are less – the important thing is how the stroke looks and feels. Broadly, the first half of the stroke is for loading and force production, the second half is for power and acceleration and there





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should be a sensible relationship between the two. If you are overloaded or loaded for too long the stroke will feel heavy and difficult to accelerate. Conversely, if the arc is short at the front then it will be gone before you've hardly found the water at the catch!

Back to the girls, and the question in my mind is: can they use this long front end effectively or are they over-reaching? In the GB model shown overleaf of the perfect stroke, the example of the catch shows a more upright position because it is recognised that while the sculler can row longer the reality of rowing at speed means you need to control your momentum over the catch to change

direction well – and if the legs drive firmly then you also need a strong back angle to hold that load. If the back is too shallow you'll get a bum-shove.

Oxford Brookes coach Allan French has to choose a best-fit approach because he knows his athletes. It may be a stage goal, for instance, to establish really good length in training and then bring the range in a little if it causes problems at higher racing tempos. Probably better than choosing to row short too! Brookes tend to do quite a lot of side-by-side training and, being competitive people, athletes will increase length if the rate is capped because you can often go faster that way, especially at lower winter rates over long distances.

Nevertheless, we are using the Brookes photos as an example to provoke debate and when you look at picture #1 at full stretch then picture #2 as they enter the water my suspicion is that they will struggle to utilise that length.

Typically three things can happen:

1. You get the aforementioned bum-shove.
2. The body lifts early to recover its mechanical disadvantage.
3. Neither of these happens but in the mid-stroke the trunk is prevented from opening so the arms pull early giving a legs / arms stroke instead of legs / trunk / arms. ➤



#3

## ROBIN WILLIAMS

Robin coached the GB women's pair who won gold at the 2013 Worlds. He also coached the pair who delivered Team GB's first gold at London 2012. He coached the lightweight men's four to gold at the 2007 Worlds and to fifth at the 2008 Olympic Games. From 1995 to 2005, Robin was Chief Coach at CUBC, achieving seven wins out of 10 in the Boat Race against Oxford. After learning to row at Monmouth School and then representing the University of London Boat Club, he gained his first GB vest in 1981.

In picture #4 showing stern six, we can see that four, for instance, who started with a quite strong back angle is able to accelerate her back off the legs in the mid-stroke; six is more curved and is holding some of the leg pressure on her arms and shoulders rather than the low trunk. Compare too some hip angles, and stroke is still to move through her hips while three has posterior extension already.

Basically if your back is in front of your hips you are still loading (pushing and bracing), if your back is above or behind your hips then you are accelerating (pushing and opening).

For the eight the challenge is to have everyone row the same overall arc with a 60:40 ratio in front of / behind the pin, feel the oar load together and then spring from pin to finish the same. If someone is stranded with too much load then a taller back position may solve it and vice versa if they are under-loaded.

In the end much of this comes down to the coach's eye and he / she has to see if the crew can hold this technical pattern through all rates and pressures. The eight may well have found they get better speed based on a really long stroke than on a shorter powerful one, but the important thing is to reference off the GB model so you know which way to adjust your own model to achieve the outcome you want.



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## THE PERFECT STROKE

You can download a pdf of the British Rowing model stroke via [www.britishrowing.org/publication/perfect-stroke-rowing](http://www.britishrowing.org/publication/perfect-stroke-rowing)



The British Rowing model of the perfect stroke at the catch