

## **Short Distance Rep Training – by Robin Avery, May 2005**

The following are some suggestions for short distance, repeated exercise training and some longer work. The objective is to get the muscle to work anaerobically to develop muscular endurance. It will also build muscle. The other principal is to break up the exercise so that the end of each set is 'in sight' so the session does not become a slog and there is sufficient rest between sets for full recovery so that the first rep of each set will feel good and the last will be an effort. Although this is short distance training, it has benefit for both sprint and marathon training. Not only will you go faster because this builds more muscle than long paddles, it trains the body for the fast start, breakaway and finish that will be useful in marathon racing. Each paddler can set their own level by deciding on the number of reps that they do and the amount of rest that they take. If you feel that you want to set targets, keep a record of the session so that you can look back and see how you have improved. If you stick with it, it will either get easier and you can make a small improvement or you can choose to make it harder and try to reach your full potential. It is your decision. Four sessions are shown below. You can stick to one or use all of them to avoid boredom. Some use counting paddle strokes and others use times. If you can't set up a watch on the boat, there are 90 to 100 strokes to the minute under pressure and 75 to 85 per minute in the recovery period.. During the 'off' section, keep paddling and think about technique. The use of a heart monitor as Adrian suggests would be beneficial to check that the effort applied is what it should be.

I use the convention that a stroke is either side so a complete cycle is 2 strokes. In the section below, if a number is given, it means strokes but a number followed by 's' or 'm' denotes seconds or minutes respectively. All these sessions use running starts. Standing start practice is another exercise.

The sessions can be used for solo training, or for group work if the river is wide enough.

Always make sure that you have fully warmed up. I would at the least recommend shoulder rotations on the bank before starting and at least one session of 20stroke build up to flat out followed by 20 flat out then ease down.

### **Session 1: (40 on x off).**

Effort on the 'on' section is 100%. Start with 40 on 40 off times four then a two minute rest, repeated four times. (40 on, 40 off times 4, 2m rest, times 4). As you improve, reduce the 'off' count to 20 and then 15, (40 on, 15 off times 4, 2m rest, times 4). Next increase the number of sets to 5 and then six, (40 on, 15 off times 4, 2m rest, times 6), and then increase the number of repetitions in a set. Remember that only the last rep of each set should be really hard to finish and if you find yourself not putting 100% into every rep, reduce the number of reps in the set.

### **Session 2: 2m on 2m off.**

This exercise is designed to teach the body about 500m racing but will still improve marathon performance. In this exercise, there is a 90 to 100% effort in the first 40 strokes, (100metres or about 25 seconds), settle down to a sustainable but testing rate for 120 strokes and then 100% commitment for the final 40 strokes. Start with 4 reps and increase as you improve till you start to find it boring. A variation is to target your 500m time and aim to start the last 40

strokes about 25 second before this. e.g. 2m12s on 1m 48s off. If your 500m time is much more than 2m20s, it would be better to extend the cycle time to 4m30s.

### **Session 3: 1m on 1m off**

I have put this here as it is harder than session 2 and should only be started by paddlers who are doing at least 8 reps in session 2. Start with 1m on 1m off times 4, 3m rest, times 2. Increase sets up to 4 and then increase reps in each set to 5 and then 6.

### **Session 4: Pyramid**

These are composite sessions designed to give some speed work and some race distance work and consist of reducing repetitions but increasing distance till the max distance is reached and then reversing the cycle. The following is an example but others can be devised. The rest periods are always the larger of that applied to the interval that you are moving up to or coming down from. e.g. in changing from 1m on reps to 2m on reps on the way up and from 2m on to 1m on reps on the way down, the interval is 2m. 1m on 1m off times 4, 2m off, 2 times 2m on 2m off, 4m off, 2 times 4m on 4m off, 2 times 2m on 2 m off, 4 times 1m on 1m off. On the way down, because the distance decreases, you should feel able to commit more effort in the successively shorter sections.

#### **Additional:**

When you turn to come back half way through any of the above sessions, treat it as a practice for turning.

Before the end of the session do three starts from stopped. If you can, get someone on the bank to start you as this is the best practice. Most people are happy to help and no one has refused me yet. Just explain exactly the commands that you want them to give, ('Are you ready' a brief pause and then 'Go'), explain what you will be doing at each stage and thank them before they start you as, if you are doing this properly, you won't be able to afterwards. If there is no one on the bank, come up to the ready position and wait for some signal, such as birdsong or a crossing the next bridge.

Finish by warming down for at least 500m.