

Laser World



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London 2012 Olympics

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From the Bridge ...

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Committee and Mark Boats!



The most important toilet door in the Olympics - our course length calculators and logs



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2012 Laser Women Radial

Jeff Martin's inside view of an Olympic Sailing race Management Team

I was privileged to be one of 70,000 volunteers at the 2012 Olympic Games.

For me it started in 2009 when I was invited to put together and train one of 7 race teams for the 2009 Skandia 'Sail For Gold' Olympic classes regatta held at Weymouth UK. These 7 teams would be the foundation of 5 Olympic race teams and 2 ParaOlympic race teams. Each team would be responsible for particular classes so it was not a surprise that I was ear marked for the Laser and Laser Radial.

The preparation and training was intensive and the standards required were rightly high. We were going to be in the spotlight, our sport was going to be in the spotlight and TV cameras and reporters would be everywhere looking for a story. We had to be sure it would not be a disaster story!

So there was some pressure but the good thing was at the Olympic games level we had plenty of resources! Using a trapezoid course we sailed 2 races daily for each of the men's single handed (Laser) and women's single handed (Laser Radial) making 4 races in total a day. For this we had a committee boat at the starboard end of the start line (10 persons), a port end start boat (4 persons), 4 purpose built mark laying boats (8 persons in total), a finish line boat (5 persons) and a contra finish line boat (2 persons). A safety team of 4 boats (2 persons in each).

Our goal was to have an instant backup for each person and all equipment. We had spare mark anchors on each mark boat, spare marks, spare anchors for the committee boats, extra anchors

for all boats to set a second anchor if the current was stronger than the wind. Each mark had a responsibility for one of 4 mark positions but also worked with each other when changing course. Our training manual was the ISAF Race Management Guide, a 365 page document covering all aspects of race management.

<http://www.sailing.org/tools/documents/RMMManual2012-%5B12283%5D.pdf>

We were obliged to follow the ISAF Race Management Policy (Olympic 2012 version) a more readable 11 page document:

http://www.sailing.org/olympic_documents_london_2012_about.php

On the same web page there are a number of other documents we had to be familiar with.

The Basics Are Important!

All the documentation is worth nothing if we did not get the basics right. Our race team trained at 6 major events, 5 of which were at Weymouth. This involved over 180 separate races. We also had 3 days of virtual races - race team on the water with no Lasers!

The first requirement is to establish an accurate average wind direction and speed for the start and course setting. The course can be changed for subsequent wind shifts. This is done initially by looking at the weather forecasts and adding our local knowledge then going out on the water two hours before each race to plot the wind and compare it to our forecasts. Wind readings are taken manually by all the mark boats every 5 minutes. At the Olympics this was

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London 2012 Olympics

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backed up by an electronic recording and logging system on the Committee Boat and Mark one. Tides are also taken into account before deciding on a compass bearing for the course axis and wind speed that dictates the leg length. We had one person responsible for a dedicated manual plot of all mark boat reports against forecast. Another member of our team prepared graphs that would give us leg lengths for a given wind speed.

The second requirement is quick and accurate course setting and changing. This comes with practice and using gps and golf range finders for distance. These are covered in the ISAF Race Management Guide.

In 25 metres of water, starting with an anchored committee boat we could set a 300 metre start line accurate to one degree and plus/minus 15 metres in a cross current, two windward marks and two gates in less than 4 minutes. Our target times for the leader of each race was 60 minutes. We would be disappointed if we were more than 2.5 minutes (5%) out on target time. That never happened at the Games!

Olympic Add Ons

Anyone who has been a race officer at any event will be familiar with at least something I have already written. It gets more interesting when you are also in charge of positioning marks for coach boat zones for 80 coach boats, 4 marshall boats to lay the coach boat zones and making sure media, spectator and VIP boats do not interfere with

racing. We also had to set the 'stadium course' so that 4500 ticket holders each day could get a good view of the races, make sure that race start times linked with TV schedules, work the Omega Timing system that took all the results and tracking for mark roundings and finishes and keep the courses' areas within our dedicated, security cleared race areas. And the most difficult? ... for the on board TV, to look presentable at all times and take care of what we said especially in the odd high stress situation!

Race Management Tips

Prepare well. Make sure the mark and boat anchors are more than adequate for the conditions. Know the difference between a wind oscillation and a shift. Do not chase oscillations with the start line. Aim for a square start line to the average wind. Before changing the course have a good degree of confidence that you are doing it for a shift and not an oscillation. Every time you attempt to move or change something there is a risk of an anchor problem. Carry spare anchors and line with a ball buoy so if anchor gets stuck or you need to move quickly buoy off the existing anchor and collect it later. In nearly 200 races and estimated 600 anchorings/mark sets we had 3 anchor ropes round propellers, two mark drifts and no races lost through course setting errors. Finally do not wait for a problem to resolve itself!

My position as course Race Officer was made easy because of a great team (and all the right equipment).



Committee Boat!



Navigation Station



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2012 Laser Men

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Be Your Own TACTICS COACH

© Thom Touw

© Jon Emmett



Emmett with Olympic Gold Medallist Lijia Xu

Jon Emmett, author of Be Your Own Tactics Coach and coach to the 2012 Olympic Gold medallist Lijia Xu, knows just how important the tactics of the first beat can be...

The whole purpose of 'Be Your Own Sailing Coach' and 'Be Your Own Tactics Coach' is to help people who want to be successful to optimise every hour of every training session even without a coach. Even those who have a coach can never be too fit, too strong, too fast or too well prepared. These books will help you make the most of your time.

This was certainly true when Jon coached Lijia Xu from China. Lijia asked for Jon to be her coach after she had read his 1st book. He started working with her just after 2011 Sail for Gold when she finished 15th, to where she just managed to clinch the 2012 Olympic Gold medal by winning the medal race.

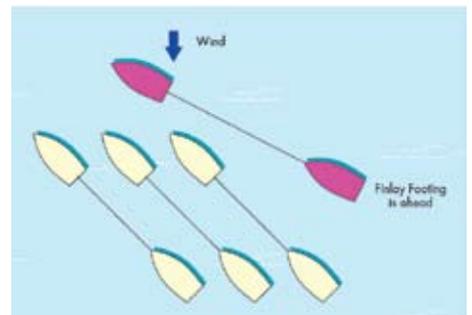
The First Beat

4.1 First Beat Basics

Your position at the first mark is crucial. After this point it can be hard to make significant place changes. So in a major championship simply being in the top ten round the windward mark can make a real difference to your overall regatta performance. For one thing the front of the fleet tend to fight less amongst themselves and just sail fast, pulling away from everyone else.

With most regattas having many races and few discards, being consistent is very important in order not to get too many high scores. See Chapter 18 Being Consistent.

boats and you are expecting the wind to go right you want to foot like Finlay to consolidate your gain.



4.1b Finlay Footing consolidates his gain

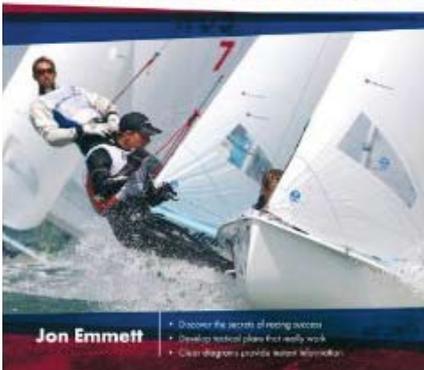
The class of boat makes a big difference to the way you sail. In a slow boat which turns without losing ground to windward you would tack on the slightest change of a wind shift (perhaps when sailing on a small inland lake surrounded by trees) as there is potential gain to be had for very little loss. However with a faster boat which loses more speed when tacking (a twin trapeze catamaran for example) you would only tack when you are sure it is time to.

4.2 Meeting Other Boats

One of the things about the first beat is that the boats are much closer together and so there tends to be much more boat to boat interaction, meaning the opportunity for place changing is much higher. So you need to make your decision rather than having it forced upon you. Try and think ahead, not only how you are going to get clean wind but how you are going to keep it!

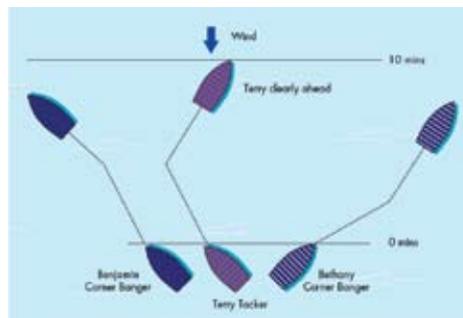
WILEY NAUTICAL

Be Your Own TACTICS COACH



Jon Emmett

- Discover the secrets of racing success
- Develop tactical plans that really work
- Clear diagrams provide instant information



4.1a Terry Tacker tacks on every shift. Everything else being equal this is a safe bet

If you go right to one side of the course then you risk not being able to take advantage of a shift later on (as you are over the laylines) plus you will be sailing extra distance.

To help you stay towards the centre of the course or towards the centre of the favoured side of the course relative to other boats you can alter your mode of sailing. If you are on the left of other



© Jon Emmett

Jon & Lijia: 2012 Olympics

A minute with ...

Laser Radial Youths!

© Alaine Neilson RQYS

We spoke to some of the top Laser Radial Sailors from Brisbane and asked them why they prefer Lasers and their experience at Brisbane!

Name: Juan Carlos Perdomo (age 17)

Started Sailing? Age 9 (Optimist)

Why Lasers? I sail Laser because I enjoy how physical it is, downwind sailing, and not having to depend on a crew. Also options for other boats are very limited in Puerto Rico.

Favourite Sailing Venue? San Juan, Puerto Rico - it's sunny, the wind is very consistent and the waves are fun.

How Did You Train For The Radial Youth Championship In Brisbane?

I did training camps in Cabarete in the Dominican Republic and in Lanzarote.

How Was Brisbane?

I thought the facilities were great but I would have liked more wind.

Other Championships Sailed?

2010 4.7 Worlds in Pattaya and 2011 Radial Worlds in La Rochelle, France.



© Mike Kenyon

World Radial Youths 2012

Name: Daphne van der Vaart (age 17)

Started Sailing? Age 7 (Optimist, 4.7, Byte CII)

Other Sports? Gymnastics & Squash.

Why Lasers? Because the sails and boats are universal. It is just about sailing and not who has got the best sail!

Favourite Sailing Venue? Palma de Mallorca, because the temperature is warm, the water is blue, good view over the beach and the cliffs.

How Was Brisbane?

The venue was great! Nice club.

Other Championships Sailed? Brisbane and La Rochelle.



© Alaine Neilson RQYS

Royal Queensland Yacht Squadron

Name: Ben Walkemeyer (age 17)

Started Sailing? Age 8 (Mudlark)

Why Lasers? Because they are one of the most competitive classes in the world and heaps of people sail them.

Favourite Sailing Venue? My home club, Fremantle Sailing Club, is probably one of my favourites, we get good wind and waves all year round.

Visits To The Gym? Yes, at least 3 times a week.

How Did You Train For The Radial Youth Championship In Brisbane?

I trained with my training partners Mark Spearman and Tristan Brown as well as other WA sailors.

How Was Brisbane?

The club is well set up and the sailing is good but the conditions were really tricky during the regatta.

Other Championships Sailed?

This was my first Radials.



© Mike Kenyon

Tomasgaard (NOR)

Name: Milly Bennett (age 18)

Started Sailing? Age 8 (Manly Junior)

Why Lasers? It's so simple you can get right down to the basics of sailing without worrying about setting up the rig or having to spend \$\$\$ to buy the best equipment.

Favourite Sailing Venue? Pittwater, Sydney. My home club. It's so beautiful and you always get tricky conditions, perfect to train in!

Visits To The Gym? Yes, 3 times a week.

How Did You Train For The Radial Youth Championship In Brisbane?

Gym sessions and on water training sessions with my coach.

How Was Brisbane?

I've sailed at RQ many times before, great venue... however a bit more wind would have been nice!

Other Championships Sailed?

This was my third. I have also done 4.7 Worlds in Thailand and San Francisco.



© Alaine Neilson RQYS

Radial Youth Girls

Name: Charalampos Mavrogeorgis (age 17)

Started Sailing? Age 8 (Optimist)

Why Lasers? My father was a national champion in Laser for many years, inspiring me to start sailing a Laser.

Visits To The Gym? 3/4 times a week

How Did You Train For The Radial Youth Championship In Brisbane?

A lot of training in winter and gym sessions.

Other Sports? Cycling.

How Was Brisbane?

A nice and a pleasant venue!

Other Championships Sailed?

2010 Thailand 4.7, 2011 France Radial Youths, 2012 Brisbane Radial Youths

Future Expectations? My dream is to participate at the Olympic Games!



Sailing Fitness Top 10

by Michael Blackburn

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Michael Blackburn, Laser Olympic medallist (2000) and author of 'Sailing Fitness and Training' tells us his top ten tips for sailing fitness.

1. Be Adaptable. Set a general training plan, then adapt it constantly. Books on training for sport say to set a periodised training plan a few months or even a whole year in advance, then follow it. However, more and more now in Sailing and other sports, that's just not good enough to get the best out of yourself at each and every session. And it's particularly true of Sailing where wind strength has such a big impact on the physical intensity of training.

Sometimes, you might want to do a hard session, but the wind isn't there - to compensate, you can add on a little fitness work post-sailing or do another gym session the next morning. Sometimes, you turn up to training in not-so-good condition (eg, lingering fatigue), so then you might reduce the volume and/or intensity of the session.

Have a good idea of what you want to achieve today and this week, check the weather forecast and be prepared to modify your Sailing training plans as needed.

2. Recover Well. Use ice and cold water recovery practices. Remember that you don't get fitter from training until you get a chance to rest and let the body rebound. You can recover faster for your next training session using recovery strategies like via cold water immersion.

Some people recommend making the bath really cold - 12-15 deg C (54-59 F), but I like it straight out of the tap (about 18 deg C/64 F). I'd sit in the half-full bath, cooling my back and legs, for 5-8 mins. That usually has me shivering so it feels like it's enough. While getting in is hard, afterwards you really feel less soreness and faster recovery.

3. Develop Your Back. Take particular care of your back. Sailors suffer injuries to their backs more than any other part of the body. Try to include exercises for your lower back and deep abdominal muscles everyday. There are specific exercises in my book.

4. Have Stable Shoulders. Take particular care of your shoulders. After backs, shoulders are sailors' next most injured body part. Sailing often requires sudden, strong movements of the arms over a large range of motion and these can trouble the shoulder

joints. Serious sailors should include shoulder stabilization exercises as part of their strength training routine. (Search 'shoulder stabilization' on Youtube)

5. Hip Flexors. Alongside working on your abdominal muscles, work on your hip flexors. Most of the time when you're Sailing, the hip flexors are in a shortened position so you need to correct that at the end of the day with some stretches. Hip flexor stretches can help improve your posture, help the muscles recover and participate in reducing lower back issues.

6. Equipment. Think of ways your equipment can help enhance your Sailing endurance. The obvious item is battened hiking pants which spread the load and improve blood flow. Also consider whether your grip on the boat is good enough (gloves, boots, wetsuit).

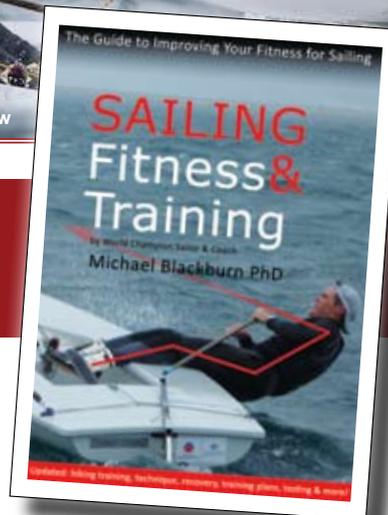
Make sure your ankles and body are well supported (boots and trapeze harness) and lastly, try to keep your muscles cool rather than hot when racing as overly hot muscles are less efficient.

7. Whey Protein. If you need to gain weight, supplement your diet with whey protein combined with a quality muscle-building resistance training program (protein won't work by itself). Skim milk powder is high in protein and when mixed with milk and flavouring makes a cheaper body building drink than the 'mega' powders in nutrition shops.

8. Be Scientific. Keep quality records of your fitness. The aim here is to find out what works through trial and error (hopefully not so much error). Body weight is the first thing you should keep track of over the long term. After that, think of tests you can apply to yourself to measure your fitness for Sailing. (You might start with the home fitness tests in my book).

I have a spreadsheet with 10 years of my results from time trials in cycling, rowing machine, pool running, and even surf ski paddling. It's great to be able to look back and see the improvements.

9. Hike. Use a Swiss ball as a hiking bench to train the legs when the wind is light. If you should have done some hiking but there wasn't enough wind, Swiss ball leg extensions can be a great substitute. Try 15-20 reps, rest for 5



Michael Blackburn: Sydney 2000



Blackburn: coach to gold medallist Tom Slingsby London 2012 Olympics

sec, then do 15-20 reps and continue through to 100 reps in total.

10. Better Technique. Hike at 90% effort rather than trying to sustain a more intense position that compromises your ability to steer, trim and decide tactics and strategy. You may not get as much righting moment, but you will gain more by trimming the boat accurately and being in a better mental state to decide which way to go. However, do go flat-out off the start!

The latest edition of Sailing Fitness and Training (2011) by Michael Blackburn is available via Amazon.com (\$9.99 US) and can be read on any device with Kindle installed. See www.sailfitter.com for release information.