

Laser World



July 2015



ISAF Sailing World Cup Weymouth & Portland

**FITNESS THROUGH THE AGES
PART THREE**



**SAN PEDRO SAILING CLUB
TAKE DELIVERY OF TEN NEW LASERS!**



THE MID LIFE LASER



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Sailing Fit Through the Ages - Part 3

by Meka Taulbee

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Meka Taulbee
CHN, CSNC, CPT

This is the last in Meka's three part series on fitness & nutritional needs for the different age groups in sailing. This last article focuses on the Grand Masters and Great Grand Masters.

Hydrate

This is the topic that hasn't changed for any age group! Water is one of the best things you can give your body. You need to keep your body hydrated to keep it functioning properly. If you stretched a dried out rubber band, it snaps, right? Well, that's what will happen to your muscles if you let yourself get dehydrated. Try to drink fluids all day long, aiming towards eight glasses of water a day. A general rule of thumb is if you feel thirsty you are already dehydrated. Sugary drinks like soda and sports drinks may perk you up but they will also make you crash. Things like coffee and tea are diuretics so they will actually have more of a dehydrating effect. Add a small amount of raw juice or coconut water to your water if you are feeling low on energy. Drinking water will help increase and maintain your energy!

Eat Smart

As we age our taste buds and appetite change. We tend to eat smaller portions. This is ok but when you are racing you need to remember to eat frequent smaller portions so your body gets the fuel it needs to stay strong and provide the energy needed. The quantity of the food is not as important as the quality. Choose foods loaded with vitamins and minerals not foods with empty calories. Starting the day with a healthy breakfast will set your metabolism on the right track and keep you from craving sugary foods. Eating fresh fruits and vegetables with a clean source of protein on the side will provide your body with the nutrients and fuel it needs. Fried and heavy foods are hard to digest - your energy goes into breaking down your food instead of providing you with the energy needed on the race course. When you come off the water, eat some fruit or veggies and hummus. Your body is looking to be fueled so it can repair your muscles and keep your immune system strong.

Many of these guidelines are similar for all ages and are the foundation that we build on. With a good foundation you will be able to take on life's variables. Traveling, foreign food, age and life events are changes for our body. When we are strong they won't be able to break us down as much. Hopefully you can incorporate some or all of them into your daily routine. If you already have, congratulations, you are well on your way to improving your sailing ability.

Most importantly remember to have fun!

As we get older we get set in our habits. Change is good and if you give it a chance I think you'll be happy you did. In the beginning it may seem difficult adding to your daily schedule but start small and add on gradually so it isn't overwhelming. Soon exercise and nutrition will become more of a habit than a chore. Here are some guidelines to start you on the right track.

Sleep

Most adults ranging from 18-64 years old need between 7-9 hours of sleep a night. As we get older our sleep patterns change and sleep becomes less about hours and more about quality and how you feel when you wake up. A good night's sleep helps you repair any cell damage helping to boost your immune system and in turn helping to prevent disease. Sleep recharges your body. During our awake hours a chemical called adenosine builds up in our blood. It breaks down while we sleep. Adenosine plays a role in energy transfer to the cells in the form of ATP and ADP. It also helps promote sleep. So if we are not getting enough sleep it builds up in our body making us more and more tired and inhibiting the energy transfer process. Your muscles aren't as strong and fast and because they aren't getting the energy they need, your reaction times are much slower. Getting adequate sleep at night can help you think quicker and help your body respond and repair faster.

Exercise

I feel that regular exercise is important at this stage just as it is in every stage of life. Stretching is so beneficial that I would recommend a daily regime of it. Walking and swimming are a great way to get your heart rate up and working your cardiovascular system. Swimming is such a great non impact activity that doesn't leave as much of a toll on the joints. I would strongly recommend Yoga, Tai Chi or QiGong. These improve flexibility, cardiovascular strength and balance all through slow and controlled stretching movements. They all focus on balance and muscle control. This is also what you need to be able to sail your boat well. Try to incorporate some of these activities into your day a few times a week. Whatever you decide to do, pick something you enjoy. Remember these exercises will make you better in your boat and improve your sailing performance

Stretch

Stretching helps prevent injuries. It increases your flexibility / range of motion, improves circulation and coordination. Your muscles are like rubber bands. If you keep stretching little by little it becomes easier to stretch further. If you just tried to stretch it quickly and really far it will snap. Well, your muscles will do the same thing. As we age the muscles in the chest and hips tend to tighten and pull our posture forward causing our bodies to be out of balance. Our connective tissues also start to lose elasticity and we lose some range of motion. With consistent stretching habits, you can help prevent this trend and little by little your muscles will be able to stretch further. This will help you become more flexible and more agile in the boat.

As always, if you have any questions or comments feel free to email at meka@sailfit.com or visit www.sailfit.com. I'd love to hear from you!

Meka is a Certified Personal Trainer and Sports Nutrition Consultant with a specialty in Plant Based Nutrition. She has been training Laser sailors for over 14 years. To learn more visit Meka at: www.sailfit.com

www.laserinternational.org

Mid Life Laser

by Joe Berkeley

© Thom Touw

Joe Berkeley talks about how he avoided the inevitable sports car purchase and opted for his mid life Laser!

As my 50th birthday approached, I always thought that I would celebrate by treating myself to a ridiculous sports car like a Porsche 911. Sure, the bills would be high and maybe I would get a speeding ticket or two, but the song of the flat six engine would keep me company.

I read every book on the subject of used Porsche 911's and drooled over glossy magazines. I wasn't sure why the Porsche 911 couldn't get out of my brain, so I thought I'd reach out to an expert on the subject, Mark Bear, a Laser Master sailor who has landed on the podium at the Master Worlds.

Mark Bear is also, get this, a PhD, Picower Professor of Neuroscience, Investigator, Howard Hughes Medical Institute at The Picower Institute for Learning and Memory in the Department of Brain and Cognitive Sciences at the Massachusetts Institute of Technology. What that means is Mark Bear is wicked smart.

Despite the fact that he has co-authored a textbook on the brain, Mark Bear was once infected with Porsche 911 fever. He went shopping for a car one day, and there was a used 911 convertible on the lot. He couldn't stop thinking about it, he couldn't sleep, it was like he was in love. In the end, he bought something more practical.

And so did I. Instead of rolling a used Porsche 911 down my driveway in celebration of the midpoint of my mortality, I purchased a brand new, well, new from the Laser Performance "scratch and ding sale" Laser.

For about the same amount of money as the first time the used German car would need maintenance, I have a new Laser. Still, I did have a bit of a hankering for some German engineering in my life. A quick trip to Dynamic Dolly in Portsmouth, Rhode Island cured me of that. Founded by ten-time Laser World Champion Peter Seidenberg, Dynamic Dolly can customize your dolly to meet your special mid-life crisis needs.

I requested the Mark Bear edition, which is a Dynamic Dolly with Seitech flip-up brackets to keep your boat from toppling. Just to add my custom touch to the experience, I also requested a one-piece tongue tube to reduce flexing.

As the team assembled my dolly, I gazed longingly upon their beautiful roll-aboard trailer package. Smelling weakness, a Dynamic representative offered to work up a quote to transform my trailer. After

making that purchase, fellow Fleet 413 member Scott Pakenham-Beaker noted, "Oh, you went with the full Seidenberg".

I did. Normally, when fat, out of shape, bald, middle-aged men buy the Porsche of their dreams they fret over each accessory that goes on the car. I took the same approach with outfitting my new Laser.

You just can't beat a cover from Colie Sails, so I treated myself to a brand new top cover and they put my name on it for free. I also got to talk to former Laser Olympic Campaigner Clay Johnson the owner, which is always fun. Sourcing a US Master's National Champion Peter-Shope-approved Acme Tiller took some doing, but eventually I tracked one down. My wife named my yacht "replay" and I splurged for a vinyl decal of her name from DoltYourselfLettering.com which set me back \$12. There is nothing in the world of sports cars at such a price.

Since the dolly and the trailer got the full Seidenberg treatment, I figured the boat deserved it as well. This involves removing every piece of hardware on the new Laser. Then you get a counter sink and gently enlarge each hole in the boat. Do not go any deeper than the gelcoat. If possible, give the fitting that mates up with the hole the same treatment.

For example, you would do this to the back of the plastic fitting that has the outhaul and cunningham cleats on it. This gives the caulking a larger area to prevent water from entering the hull.

Treat yourself to a tube of caulking that matches the hull color. I found that GE 100% silicone Light Gray matches the color exactly. Applying it with an epoxy syringe offers a higher level of control.

When reinstalling the fittings, it's very important that you turn the screw backwards to make it seat and click before you drive it righty-tighty. You don't want to create another set of threads in the hole, which would defeat the entire purpose.

On the race course, none of these choices will make a bit of difference. But the experience of marking a milestone in life with the purchase of a Laser is superior to the purchase of sports car where there is very little sport to be had.

The beauty of the Laser is that it is a possession that is the gateway to experiences. There are opportunities to



Joe Berkeley



Berkeley at Sail Maine



Berkeley at Hull Bay



The Full Seidenberg!

practice with others, compete with others, and socialize with others.

When I'm driving to a regatta with my Laser on my trailer, and some guy goes flying by in a Porsche 911, I still smile. Maybe one day I'll buy one when I'm too damn old to sail anymore.

Joe Berkeley is a freelance writer who owns two Lasers, 170780 and 208842. His work is at joeberkeley.com



COACH YOURSELF TO WIN

by Jon Emmett

In the March edition of LaserWorld we featured a boat handling article from Jon's latest book with thanks to the publisher, Fernhurst Books. In this second and final article we feature an article from Chapter 6 "Running Boatspeed".

Jon's book is 80 pages dealing with targets and goal setting, boat handling, starting, boatspeed upwind/reaching/running, strategy, tactics, rules, psychology and fitness. It is being used by ISAF to help sailors and coaches from emerging nations to develop their sailing and technique.

Fernhurst Books publish a variety of marine and sailing titles: www.fernhurstbooks.com

More information about Jon can be found on his website: www.jonemmettsailing.co.uk

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CHAPTER 6

Running Boatspeed

Gone are the days when the downwind leg was a chance for a quick rest! Indeed, in some classes of boat, the downwind legs can be far more physically demanding than the upwind legs, and there is always an opportunity to overtake boats or extend your lead. Races are often finished at, or relatively close to, the leeward mark, so downwind speed is now far more important than in the days of long beats to the finish line.

Rig Set Up

Just like any other leg of the course, the correct rig set up is vital to achieve maximum boatspeed on the run. You need to achieve a balance so that the boat wants to go fast in a straight line (requiring minimal corrective steering) rather than wanting to head up or bear away all the time, but you also want to be able to use the crew weight to change course easily to take advantage of pressure and waves.

When going in a straight line the boat balance needs to be stable. You don't want to waste the wind's energy heeling the boat to leeward (in a gust) or to windward (in a lull); you want all the force driving you forwards, which means a well tuned rig and a responsive crew (moving their weight a lot so that the boat balance and trim stay optimal).

The foil trim can also make a huge difference. Ensure that you have the correct amount of foil to stop the boat sliding sideways, but not too much so that the boat trips over it when it turns. The rake of the foil should result in a 'light' tiller making it easy for the helm to point the boat where they want to go.

It is a question of feel: you know, if you really focus, when it feels correct and when it doesn't. Keep a careful note of your fastest settings and the conditions they worked in, so that you can repeat them.

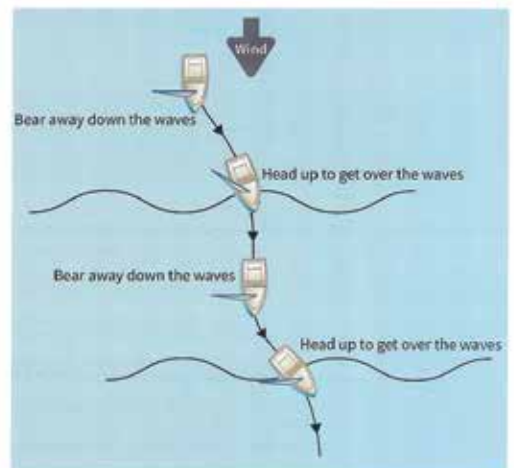
To achieve the same sail shape (for example leech twist) you may require far more kicker tension in 15 knots than 5 knots. 15 knots is 3 times 5 knots, but the pressure in the sail is more than 9 times greater because pressure is proportional to wind speed squared. ($15 \times 15 = 225$, $5 \times 5 = 25$.) This is why it is key to 'get your head out of the boat' to look for differences in wind speed. This can make a massive difference to your boatspeed, especially if you have optimised your rig set up.

Another fact to consider is that the waves will rarely be lined up with the wind, so one tack may be better than the other for surfing the waves. You need to get a rig set up which allows the boat to head up and bear away through the appropriate angle. For example, on one tack you may be wanting to head up more than the other. The more kicker that you have the easier it is to head up, but the harder it is to bear away and vice versa.

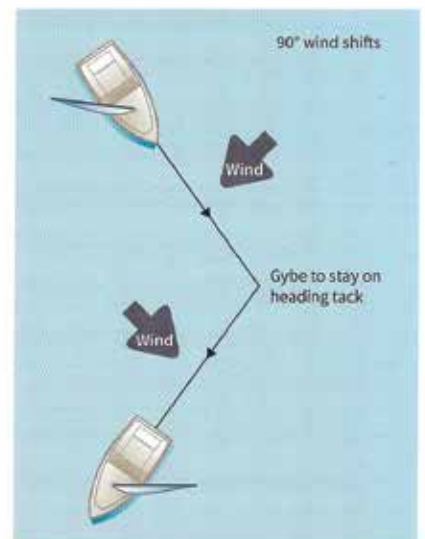
The key is to maximise your time going down the waves and avoid running into any hills; after all jogging downhill takes much less effort than jogging uphill. Don't look only at the wave in front of you, but the wave in front of that and the wave in front of that - this way you can choose the best route and plan where you want to go next (or when you want to gybe).

As you steer for the waves, you need to ensure that the sails are still correctly trimmed at all times: telltales can give you the information that you need, telling you whether a sail is correctly

COACH YOURSELF TO WIN



Heading up and bearing away from the waves



Choosing the fastest track downwind



Jon coached Lijia Xu (CHN) to gold medal success at The London Olympics 2012



Jon leading the fleet home!

© Jon Emmett

trimmed. They should be streaming from the luff to the leech and horizontal. If they are pointing down then you need to release the sheet or kicker tension (the sail is too far in or the leech is too closed). If they are pointing up, the opposite is true. Where you position the telltales can come down to a matter of personal taste, but around six mast diameters from the luff of the sail is usually a good starting point.

Downwind you are always looking for the heading tack - the tack which takes you closest to the leeward mark or gate (just as upwind you are looking for the lifting tack to take you to the windward mark by the shortest possible route). Therefore you need to gybe on the shifts and stay in phase with the wind. So, for example, if you approach the windward mark on a starboard lift, you know there is a port header, so you want to get onto port downwind as soon as possible.

Sailing by the Lee

In unstayed boats like the Laser and Radial, sailing by the lee can be extremely fast. Here the flow of the wind goes from the leech of the sail to the luff (exiting by the mast) and you can see this from the telltales. Now the mast acts as the leech, which is very stiff and therefore very stable. Remember everything is now in reverse, so when you get a gust you want to stay in it as long as possible so you head up (rather than bear away).

One of the advantages of sailing by the lee is that you may not need to gybe, so you can stay on starboard tack for the whole run, but the main reason is for boatspeed (and it is not uncommon to see Lasers gybe several times during the run to stay mainly sailing by the lee - just like spinnaker

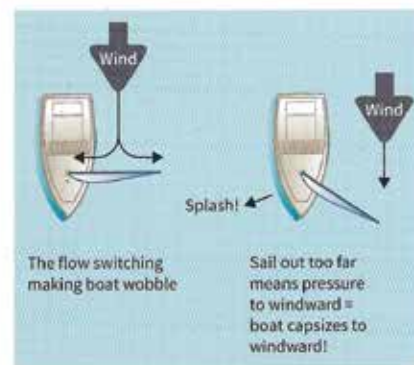
boats gybe to stay on the headed tack).

By sailing by the lee then broad reaching you change the angle the boat is sailing by a huge amount. This can be very useful for catching waves or getting into pressure coming down one side of the run quickly. It also means that you need to move large amounts of sheet (use as thin a sheet as possible so that you can feel any changes of pressure in light wind) and body movement (to leeward to start the head up / to windward to start the bear away) to turn the boat using minimum rudder. The boats look very dynamic rolling and turning downwind to make the best use of the waves. Rather like an escalator to the downwind mark, you want to catch each and every wave - if you miss one you take a step back on the escalator.

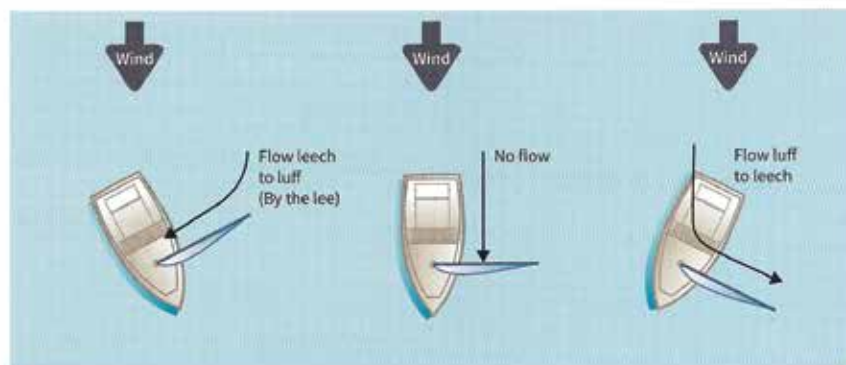
The fastest way to go downwind is very rarely a dead run, even in a single-hander with an unstayed rig where the boom can be let out all the way to 90 degrees (without being stopped by a shroud). This is for two reasons: because you need flow over the sail either from luff to leech or (sailing by the lee) leech to luff, plus you need to find the route of least resistance through the waves, and this is very rarely going straight into them (going dead downwind is only likely to be the best course in very flat water when trying to stay in a gust for as long as possible). You only need to change the angle of the boat slightly to achieve good flow or create a better angle of attack for the waves.

In fact the death roll is caused by trying to sail the boat straight downwind with the wind constantly changing the direction of flow (from luff to leech then leech to luff). Sailors usually try to correct this with their body weight but sometimes this is not enough. The simple answer is to sheet in slightly and bear away, so that you are safely by the lee.

This is very different from the windward capsizes, which is simply when the sail is too far out and pushing the boat to windward, making it capsize to windward (much as if you oversheet, the boat will be pushed to leeward and will try to capsize to leeward).



The difference between a death roll (left) and a windward capsize (right)



Flow of wind over the sail

Enter the Lasers

by Andrew Milner

Strapped Sailing Club finds solution that had been staring them in the face!

History

"We can't afford it! We can't afford to take all our kids to all these regattas!" So spoke Andrew Milner, the Commodore of the San Pedro Sailing Club, on Ambergris Caye, Belize Central America, when he spoke to the board of his nation's fledgling Belize Sailing Association (BzSA) in 2014.

A small group of sailors and parents had run the San Pedro Sailing Club for 4 years, teaching island children to sail and race Optimists. Sailing lessons and trainings are free, because the majority of Belizeans could not afford to do it otherwise. During the 4 years, the number of qualifying regattas for Belize's ranking system grew with the number of new emerging sailing clubs. Sadly the costs had grown beyond the club's meager means. Not only that, but most of the inaugural group of sailors had aged out of Optimists and needed new boats.

Bart's Bash

One solution percolating among Milner and club members was to start some sort of commercial venture related to sailing; however, they lacked confidence that it could succeed financially. Belize is well known for Mayan ruins, great diving and fishing but had never been seen as an attractive destination location for small boat sailing, racing, and training. The performance of the club's sailors in 2014 Bart's Bash changed all that! The young Belizean skippers surprised themselves, their own trainers, and many sailors all around the world, when they all finished in Bart's Bash's top 15%. To the now curious enquirers, Milner and other experienced club members reply with their conviction that Ambergris Caye's sunny, tropical climate, reliable trade winds, and the clear, warm, balmy waters protected behind Belize's barrier reef which runs less than a mile off shore, all coalesce to provide one of the most idyllic small boat sailing venues in the world - particularly for training. That and the international attention received after the 2014 Bart's Bash, provided confidence that people would come to Belize for sailing lessons.

Enter the Lasers

Enter the Lasers! In November, 2014, the members of the San Pedro Sailing club formed a business, found a few others to

sponsor Laser purchasing, and opened the Belize Sailing School, <http://www.belizesailingschool.com> as a commercial venture to provide Laser Sailing lessons for tourists who were current club racers or wishing to be national champions. On 5 January, 2015, the school's fleet of 10 new Laser Radials procured from LaserPerformance arrived on the beach that the Belize Sailing School shares with Caribbean Villas Hotel, a sponsor of one of the new Lasers.

ISAF Provides Opportunity

The Belize Sailing School wasted no time in putting the new fleet to good use. Free Laser sailing lessons for the San Pedro Sailing Club's eager teenage skippers began immediately and tourists, taking sailing lessons for a fee, are beginning to subsidize the club's charitable programme. ISAF took note of what will no doubt be recognized as the world's 141st nation with a Laser fleet and invited Belize to the Emerging Nation Youth Program in Antigua this coming July. With a great deal of excitement, preparations to attend have already included the sailing school's hiring of internationally respected professional coaches for both Lasers and Optimists. The coaches are qualified to provide Optimist and Laser sailing lessons from beginner to world champion level. With them on board, the Belize Sailing School, in partnership with BzSA, has invited the country's sailing clubs to send sailors they select to a free 2-week intensive Laser sailing clinic. The last 5 days will be a regatta designed to help BzSA select which young sailors to send to Antigua. Without ISAF financial aid, it is highly unlikely that Belize could find the funds to cover the cost of attending.

Sailing Lessons In Belize

In addition to rentals, one-hour lessons, half-day lessons, and so forth, the Belize Sailing School hopes that its new 5-day intensive courses in Laser sailing will lure current Laser Sailors who are racing at club level to come and train with world renowned coaches who can train all the way up to World Championship level. The current Director of Optimist and Laser Sailing is Juan Ignacio Mazzini, a 25 year old charismatic Argentinian who rose to sailing fame with successes in the Argentinian Optimist and Laser fleets. Juan later gave up his own personal



The Laser Sailing School



Enter the Lasers!



Laser Sailing Lessons

sailing aspirations and took employment in training Laser sailors to compete in Laser World Championships and the Pan American Games. Many of his trainees have succeeded in taking podium positions.

So through this venture Belize now has a highly qualified coach who can be called upon, for free, to help with local and International racing aspirations.

Additional Information and Reservations

The Belize Sailing School also offers windsurfing and kiteboarding lessons. Lasers, Hobies and Optimists can be rented by the hour.

<http://www.belizesailingcenter.com>

Accommodation: For both convenience and affordability: Caribbean Villas Hotel, which is right on the beach where the Belize Sailing School are:

www.caribbeanvillashotel.com