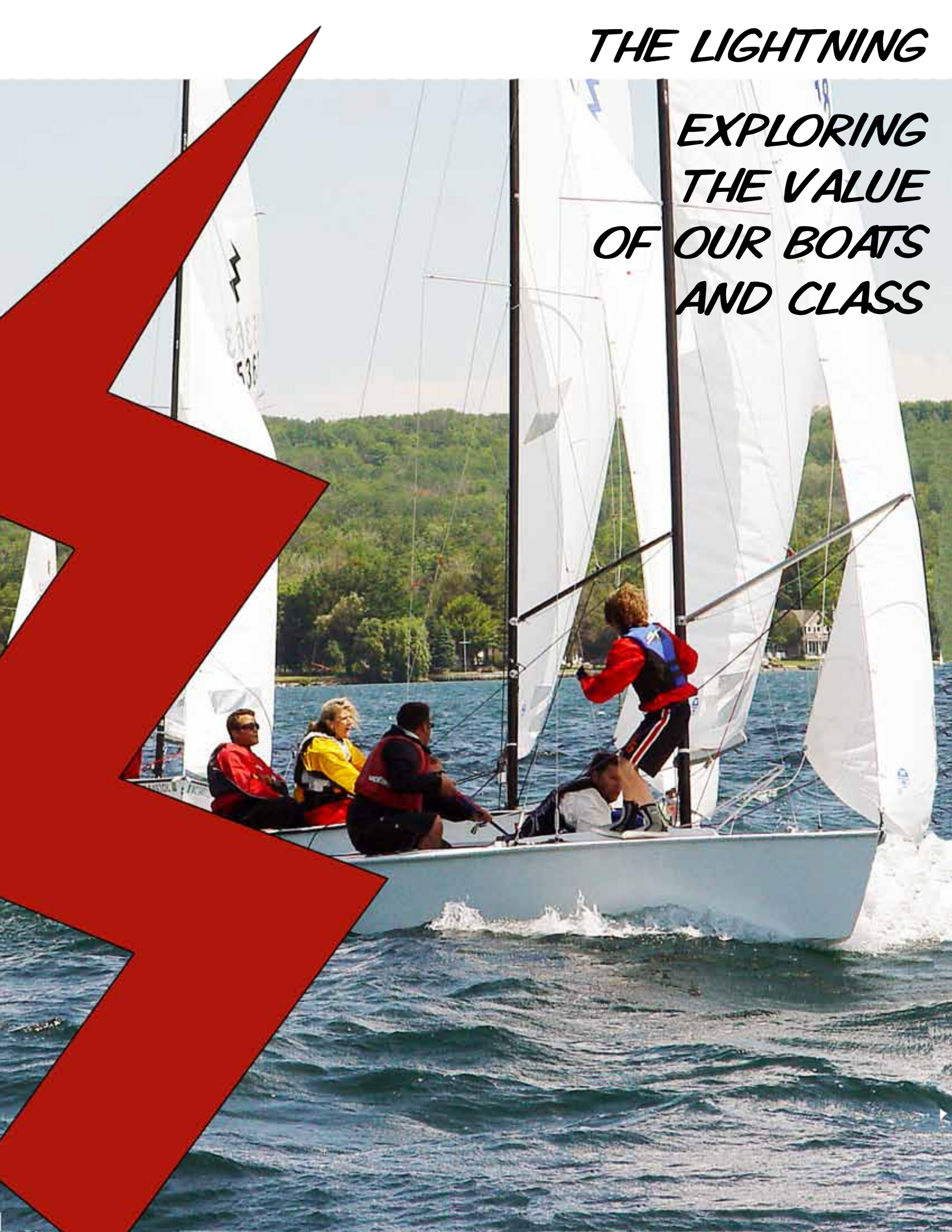


THE LIGHTNING

***EXPLORING
THE VALUE
OF OUR BOATS
AND CLASS***



CONTRIBUTORS

PACO SOLA: MR. WEST MARINE

Past President of the International Lightning Class Association and part of a three-generation Lightning racing family, Paco shares his love for sailing with his family and friends in Salinas, Ecuador.

IAN EDWARDS: RED BOAT OWNER

Introduced to the Lightning while working in Lagos, Nigeria, Ian discusses the syndication process used to introduce new sailors to the Lightning in a low-cost way.

TOM ALLEN JR: BOAT BUILDER

Builder Tom Allen discusses the strengths of the Lightning design, the history and evolution of the Class and the boat.

JIM SEARS: DOCTOR & SAILOR

Dr. Sears addresses the value of sailing for one's health, including muscular endurance, flexibility, agility, as well as the mental health benefits of our sport.

GREG FISHER: SAIL MAKER

DAVE STARCK: RACER

Both top racing skippers, Greg and David share their physical and mental preparation for elite-level competition in Lightning racing.

BOB ASTROVE: WOODEN BOAT LOVER

This article is about how Bob got involved in wooden Lightnings, what he has learned about owning a wood boat, the history of the Lightning, and the special joy of maintaining and sailing a wood Lightning.

BILL CABRALL: ENGINEER SAILOR

Hailing from Denver, Colorado, Bill addresses some of the history of the Lightning, the camaraderie of the Class, and the great investment that one makes in purchasing a Lightning.

REBECCA ESPINOSA: FROM THE BOW

A couple of years ago, I accepted Nick Farina's crew invitation. I had never sailed Lightnings or raced before. Turns out, Nick is a superb skipper and nice guy. He put me on the bow. Really fun.

Along came 2009. I was hoping to crew here and there. One day, Bill Cabrall very politely asked if I were interested in crewing. Well, of course, why not! He put me on the bow. Turns out, Bill is a gentleman, a great sailor and a superb instructor. What more could I ask for? One day, Bill asked what I would be doing in August. Why? He, due to an auspicious birthday, qualified for the NA's Master Mariners. Well, this was just too good! A big leap from Cherry Creek Res to Lake Ontario. Like Whoa! Insta-sailing lessons. Way steep learning curve. It was a superb experience. I came home all black and blue. My son was like, "Wow Mom, what happened?" I learned more in one week than in years.

At Sodus Point, Jan asked for a Yearbook volunteer. I used to do this kind of work, so why not. Turns out, Jan is a wonderful person and knows everyone and everything about the Lightning Class. She put up with my many stupid questions and crazy design ideas. I really enjoyed editing the District reports filled with great stories and such character. It was a total pleasure to interview and work with our great contributors. The photos alone are superb. So 2009 turned out to be a huge surprise. A crash course in the Lightning Class and culture.

I am so impressed with the amount of time, energy and good spirit that the Lightning Class members contribute. I really encourage you, new or tried n' true, to volunteer. Yes, volunteering takes time, energy and effort. But the rewards are great. Not only do you interact with the Class on varying levels, you can meet great people as well as contribute your skills and knowledge. You can personally help keep our Class alive and vital. The Class really needs YOU!

Thanks to Nick, Bill, Jan and all the super Lightning Class members for a great year. It's been a blast!



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SAILING SPIRIT IN SALINAS



PACO SOLA

Sun spattered waves sparkle. White hulls glisten. Blue waters blend into blue skies. Sails snap full. Boats heel. Bodies reach out over the water. Hair wind tousled. Faces smile. This could be a snapshot of many a boat in many a location. But in this particular snapshot, we are looking at Paco Sola in Salinas, Ecuador.

Paco Sola, former ILCA President, and his sons passionately race Lightnings. Their active Fleet sails every other weekend nearly twelve months a year. They love both the competitive and social aspects of sailing and belonging to their Club. However, Ecuador is faced with a number of economic and location issues that require creativity to sustain the Fleet. Purchasing boats and traveling to other racing venues pose interesting obstacles that need workarounds. And it would seem that the involved Fleet members are doing so with great spirit and ingenuity.

The District has two Fleets: #405 at the Salinas Yacht Club and #447 at Club Nautico San Pablo near Quito. The latter is quite inactive and its boats generally sail in Salinas. The Salinas Fleet happily sails out of the Salinas Yacht Club on a gorgeous crescent shaped white sanded bay. Lightning sailing first started in the 1950s in Guayaquil whose rivers and lagoons reach down to the sea. Paco's grandfather was an early Lightning sailor on these waters. But Guayaquil's Fleet #272 has been inactive for a couple of decades.

The Lightnings race in steady moderate winds. The Club regattas average eight to ten boats. The major regattas average fifteen to seventeen boats. The Fleet currently has twenty-five boats, twenty of which are active. The Salinas Yacht Club is a well appointed and comfortable facility. Their website writes "The Salinas Yacht Club is one of the most traditional and exclusive clubs in Ecuador. We are pioneers in the sport of sailing and incorporate many social and cultural activities to promote the sport." A Lightning is provided for junior use. Boats usually stay at the Club, as it is neither easy nor convenient to transport them on the local roads.

Most of the Lightnings are from the 1990s or newer. The sole wooden boat belonged to Paco's grandfather. Paco's family gifted it to a friend who continues to sail it though

not on a highly competitive level. The boats are competitively rigged and adhere to rules and regulations of the ILCA. Some leeway is given to safety issues such as anchors as Salinas is a safe place to sail.

All Lightnings are imported. This is a rather complex and expensive undertaking. Lightnings are manufactured in the United States and Brazil. Craftec in Brazil makes their own Allen-type Lightning. Apparently only enough boats are made each year to supply the rather large Brazilian Fleet. Though this source would be most cost effective, Ecuador has not been able to import boats from Brazil. This leaves the United States companies of Nickels Boat Works and Allen Boat Company located far away in the northern states of New York and Michigan. As you can well imagine, distance is costly.

When the boats finally arrive (yay), an import tariff must be paid. Great for the government: not great for the boat owner. Boat ownership is considered a luxury in Ecuador and is taxed as such. The import tariff is nearly 50% the cost of the boat. Let's do this rather simple math. A new boat might cost about \$20,000. With the added import tariff it would cost about \$30,000.

Boat costs, transport, and tariffs add up to expensive boats. It is rather difficult for one person to easily manage the task and expense of buying a new boat. Obviously the Fleet members must carefully consider how to get the most value for their dollar. So the Fleet helps its members navigate these turbulent waters.

The Fleet officers join together to facilitate this process. They contend with the expense of a new boat by negotiating Fleet contracts and purchase costs with the boat builders and sail makers. Shipping costs, methods, and logistics are dealt with. Tariff payments are expedited. The Fleet officers also do marketing in a sense. They look for current active sailors such as an active crew member and 'promote' owning a new boat. Replaced boats are kept within the Fleet usually going to a junior sailor. This group effort keeps the Fleet alive.

Boats are purchased in groups of four. Four Lightnings fit into a shipping container thus keeping transportation costs somewhat lower. This system was used the last time the Fleet purchased boats only. It worked quite nicely.



SAILING SPIRIT IN SALINAS

However, there was still a need to deal with increasing costs of purchasing and shipping. So the Fleet members came up with a creative idea to work around the high expenditures. They worked closely with Nickels Boat Works to purchase four new boats as boat kits. Very simple. The purchase price was a lot less as there were no assembly labor costs on Nickels end. The boats cost about 20% less therefore the tariffs were reduced significantly. All the parts, bits and pieces were neatly packed into the shipping container; hulls without even a single screw, all the rigging, the masts, the instruments, everything.

When the boats arrived in Ecuador, the Fleet worked together to assemble the boats. They of course made a party out of this project! Everyone enthusiastically pitched in doing what they could from carrying beer to technical work. The Fleet members didn't quite realize just how involved this four-boat project would be. It ended up being A LOT of work. Not so simple. As Paco says, "We learned the hard way."

This project became an Event. It took a week to ten days both evenings and full weekends to assemble the boats. With great excitement, the boats were put into the water only to discover that a lot had been rigged upside down! So out came the boats and time for a careful check and re-rigging. Despite the boat kit issues, this most recent method of boat purchasing worked well from a practical perspective. In true Lightning spirit, this event was not just about boat assembly but also about great camaraderie and good fun.

One of the biggest sailing events is the South American Championship. Started in the 1960s, it rotates between countries that have Lightning Fleets. Usually about thirty to thirty-five boats race. The leadership of the South American Championship is always working to find new and improved ways to keep the Class active on the continent, not just within individual countries.

Boat transport is a huge challenge. Unlike many European countries and the United States, travel between countries is very difficult. There are multiple serious obstacles along the road. Distances are long and travel is slow. For example, there is no road from Salinas to Brazil. In order to attend a regatta in Brazil, the Ecuadorians would have to drive through Peru then cross the Atlantic (not really a feasible trip). This journey would take three to four days. Road conditions tend to vary, often mediocre to poor. There are many customs stations. Often under-the-table monies are paid to pass easily through customs or police road stops. There are few to no service stations available for gas, food, rest, or repairs. Driving a luxury item on the road systems in South America is very dangerous. There is really no security to speak of. Often the police are not trustworthy. Guerillas and road bandits are only too real. They attack cars, steal, and hurt people on a regular basis. Driving at night, which we in the United States or Europe take for granted, is just not done-period.



If driving is too intimidating, there is the shipping option. It takes about one to two months to ship one's boat to another South American country. It is expensive. Then there is customs to deal with. Customs in the different countries are problematic, slow and unreliable. Sometimes boats get out of customs on the regatta start day. A lot of precious time is consumed between shipping and passing through customs. Therefore, the skipper and crew are not able to sail their own boat for quite awhile and, as we know, this does not make for optimal racing preparation.

In 1999, after the World Championship in Salinas, the South American Championship organizing committee agreed upon a new system of boat sharing. This alleviates the boat transportation issue and makes it easier and cheaper for Lightning members to participate in the event. Similar to the Youth World Championships, the host Club and country lend Lightnings for all participants.

Each participating country conducts qualifying races. The top two sailors from each country are allotted two boats. The host country is allowed to have four boats sailed by their owners. The sailors from the visiting countries 'draw' their boats from the host country's Fleet. Other sailors are allowed to attend as well. Every sailor may bring his/her boat; however, most visiting participants use local fleet Lightnings.

Again in true Lightning spirit, sailors from all over Latin America have the opportunity to race in a large venue as well as renew friendships. Big parties are an integral and very serious part of the South American Championship! This generosity of spirit through boat sharing really has allowed the South American Championship to continue.

Salinas hosts the Youth World's Championship in July 2010 as it did just a few years ago in 1998. Championships such as the Youth's serve multiple purposes for the Ecuadorian Fleet. It is an honor to host a championship. They can show off their beautiful country and sailing venue, thrill in the camaraderie as well as improve the health of their fleet.

The local Fleet lends Lightnings to junior Ecuadorian sailors from any sailing class for the Lightning competition.

SAILING SPIRIT IN SALINAS



By doing so, they hope to hook the young people and build the Lightning Class.

Local Fleet boat owners are asked to lend their boats to the visiting junior sailors. Group insurance is obtained to protect their precious boats. The Boat Committee offers to set up the boats and bring them up to date. This serves two purposes. The Committee maintains some control over 'matching' the boats. And this is a superb way for boat owners to upgrade their boats.

One thing to keep in mind is that there are fewer new boats in Ecuador due to issues discussed above (import, cost, tariffs). Also, access to materials such as sails, hardware, and lines is not easy. There is no West Marine down the street. Paco often purchases many boat items on his trips to the United States to help keep local boats in good repair and using current equipment. He is affectionately called their Local West Marine.

As many of the boats vary in make, year, and maintenance, the ILCA required boat measurement process is a huge collaborative effort. Over time boats gain weight through water absorption, leaks, or water in the hull. The Angle of the Dangle changes. Sails loosen and change shape. So this rigorous process is an effective way to bring the Fleet up to date.

The Fleet made all their own measuring tools including the Angle of the Dangle and the centerboard thickness gauge according to ILCA specifications. The Club has invested in tools that are too expensive to individually own such as the swagging kit, pop riveter, etc. They also have very qualified craftsmen who work wonders on fiberglass for those inevitable crashes.

For Paco, the family aspect of sailing is one of the most cherished values of the Lightning Class. It is a healthy activity that builds the Fleet as well as hopefully bonds the family. The love of sailing Lightnings has passed from father to son starting with his grandfather Paco, his father Paco, Paco, his sons, Paco Jr. and Eduardo. His sons are now eleven and fifteen years old.

Paco eased his sons into sailing. They started on Optimists but only learned the basics as they did not like sailing on their own. Overtime Paco started inviting the kids to crew with him and a good friend, Arturo Iturralde. This long time

crew member patiently showed them the ropes. Paco Jr. might crew in the Junior's this coming year.

During one of the very first regattas Paco and his sons sailed together, they were fighting for 1st place. Paco was very focused and intent on winning. Eduardo, aged seven, started asking questions about the other boats anchored in the bay. Typical kid why why why questions. The conversation went as follows. What are those ships? They are oil ships. They transport gasoline. What is gasoline? It is made out of petrol. What is petrol? What makes cars run? Where does gasoline come from? And on and on. Needless to say, they did not win. They came in a mere 2nd. To this day, they all laugh and tease Eduardo about this race.

The Ecuadorians join many of the Lightning Class members in this wonderful family activity. Family sailing in Salinas is a very traditional aspect of their Club. Without reservation, Paco is having the time of his life sailing with his sons. A memorable Lightning family snapshot.

About Ecuador



Ecuador is one of the smaller South American countries. It is bordered by Colombia, Peru and the vast Pacific Ocean. Though a small country (the size of Colorado), Ecuador rightfully boasts unique natural, historic, and cultural riches.

Ecuador's terrain spans a varied range of ecosystems from Pacific coastal white sand beaches, open windswept grasslands, sticky hot Amazon rainforests, high Andes Mountains and the world renowned Galapagos Islands. All these ecosystems provide haven to a vast number of animal and plant species making Ecuador one of the few megadiverse countries in the world. The cities of Quito and Cuenca are designated UNESCO World Heritage Sites for their outstanding historical preservation. Ecuador contributes unique indigenous cultures, food and music to the Latin American mix. It also proudly claims the origin of the Panama hat.

As biased ILCA members, we can proudly say the Lightning mariners are definitely part of the riches of Ecuador.

REB

SAILING SPIRIT IN SALINAS



Salinas Club Annual Fleet Photo

This is our annual fleet photo. Sailors and their families. We gather up to celebrate Santiago Romero's birthday, which he celebrates every October 31. Yes, on Halloween! He also sponsors a regatta which bears his name. There is a permanent trophy and every year he designs a special t-shirt which he gives away to competitors. I would say this is our biggest gathering each year.

A SYNDICATE = A NEW LIGHTNING



White Star is the original syndicate boat sailing in Lagos Harbor just near LYC taken during the ExxonMobil regatta.

IAN EDWARDS

Low cost shared boat ownership is really a great way to get someone into a Lightning.

Look at all those potential Lightning sailors out there—old hands who sailed a Lightning years ago thinking about starting again, new comers just picking up sailing, those only able to be 'part time' sailors, those who just can't afford solo ownership, and more.

The cost of buying a Lightning can be a huge barrier to getting started in the Class. To many people it requires just too much commitment, particularly before you are established in the Class.

Let me tell you about the shared ownership scheme we pioneered in Lagos, Nigeria.

It started when Andrew Barton, Gary Schwantz and I landed up in Lagos in early 2004. We did not know each other. We all knew that sailing at the Lagos Yacht Club (LYC) was a possible interest to pursue as expats in Lagos from our incoming briefings from people who were there. However, there were no active sailors in our company at the time to help us get started.

I met Andrew and our common sailing interest came out. I immediately charged him with finding a boat to buy, and we would sail together. At this stage we barely knew what classes were on offer. Andrew visited LYC. Long-term Lagos expatriate and Lightning stalwart, Julian Calvin, told him that another 'Mobil guy' had been down that day looking to sail and passed on Gary's name. We quickly linked up and decided to buy a boat together. Two other Mobil expats expressed interest. The group of us formed our own boat 'Syndicate.' Together we bought a twenty-five year old Nickels.

Very quickly with this momentum, others wanted to be part of the shared ownership. We extended the syndicate to nine people by buying another twenty-eight year old Nickels.

We wrote up a simple set of rules for shared ownership which, importantly, treated ownership as shares with predetermined value to be recovered on departure, including rules on syndicate termination and maintenance. We were clear about what our goal was: to maintain the boats to be

competitive against other Lightnings of similar vintage. An area of debate was responsibility for damage. We landed that as we were all sharing in sailing and wanting to get the boats out on the water. Any damage cost, beyond insurance, was a shared cost with no attempt to establish 'who did it.. This certainly reduced a potential area for finger pointing and conflict.

We set up a roster for usage, including rotating the skipper position. It helps that Lagos has racing every Saturday of the year, with more racing or cruising every Sunday. In time we found that there were those who preferred to skipper and those that preferred to crew. In general, the roster was not the limitation we thought it might be.

Actually, having nine people sailing meant we generally had both boats on the water by eliminating the 'finding a crew' challenge. I am not sure we ever were oversubscribed on a race day. It may have happened, but there were plenty of other walk-on crew opportunities at LYC.

We organized work days on the boats and training sessions for the less experienced. We developed a real team spirit around the boats. The Mobil Syndicate was quickly a visible presence at LYC. This was somewhat of a misnomer, as the rules did not require you to be a Mobil employee. There were member owners from other areas, including competitors like Shell. But these boats were forever the Mobil Syndicate Boats. At LYC newcomers that were looking for cheap entry were referred to the Syndicate, even though it was not a club organized structure.

In time some of us decided we were fully committed to the Lightnings and wanted our own boats. So we left the Syndicate. Until very recently, the Syndicate boats have continued successfully, but the Syndicate's own success has started to sap its energy. There have been perhaps six 'sons of Syndicate' boats, with graduates of the Syndicate. There are so many that they have enlisted newcomers as crew faster than the Syndicate boats. I think this is the type of success I can only be pleased about.

I owned five boats during my time in Lagos: the two syndicate boats (T34/#15523 Spetters and T48/#13759 White Star), then three red ones (T50/#13753 Twister,



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T64/#15273 Scud, and T68/#15323 Whirlwind). The first wooden Lightning in Lagos in 1948 was named Tarpon. So Lightnings were numbered in club sequence T1,T2, T3 to the latest T73. In those days the international Lightning number was of little consequence, and still today most boats in Lagos just use the T numbers. It makes it easier for the Race Committee too!

Andrew, Gary and I were instrumental in making the first ExxonMobil Regatta happen in 2006. It was really a byproduct of our syndicate's success. The photos show one of my old boats sailing in the ExxonMobil Regatta 2010 held just a few weeks ago. This boat was actually a 2006 Nickels. It was part of the first six new boats we brought into Nigeria. We imported eight more in 2007. This is a great photo with the red boat on the plane, the spin up and Lagos Victoris in the background. It is good to see the Regatta is still going with about fifteen to twenty Lightnings racing.

I think the keys to making the Syndicate shared ownership work were:

1. Publicity. It was well known and newcomers were directed to it;
2. Low entry cost. One ownership share just above \$1000
3. Written rules. Simple but effective;
4. Clear definition on exit price;
5. Provision for boat sale if numbers fell or member majority voted to sell;
6. A few key people to organize maintenance and roster at any point of time.

Oh, how did sailing together work? Great except if you got Gary, Andrew and me in a boat together. Over the last six years we have become good friends, we have sailed against each other, and with each other extensively. But we sailed just once, with all three on one boat, early in our Syndicate time. It was the funniest day with three people trying to call tactics, trim etc. We did far worse than our norm. We have decided that any two of us on a boat works well but all three just represents too many strong inputs.



In general, however, the shared ownership and availability of the opportunity to sail worked very well on the water. Training and the opportunity to step up to the skipper position developed new skills. The boats were generally competitive with the right crew combinations.

This approach is suitable for friends or unassociated people getting into a Lightning. We made this work without any formal sponsorship, but it would work well if a fleet had a boat and the basic shared ownership structure available for a newcomer to sign on with. Fleet loaner boats for daily rent can be a great option too, and we had some in Lagos. The thing about the shared ownership is that it developed a consistent team and a level of commitment to sail at a low entry price.

Since my shared ownership of the two syndicated Lightnings, I have owned five more Nickels (four new boats), so it definitely worked in getting me into Lightnings!

Please contact me if you would like more information or the Syndicate rules. To see some great photos of Lagos and our sailing club, see Jachym Rudolf's website:

<http://picasaweb.google.com/Fasta.Oga>

Now get out there Lightning sailing!

ABOUT THE BOAT



TOM ALLEN, JR.

There are many different areas that we could talk about on this subject. This story will be more about the boat than the Class, but you can never completely separate the two. The Lightning Class does a lot of things very well.

So what value are we getting with the boat? Some other boats cost less; some cost more. You have to weigh the options when buying a boat. Other boats out there can do some of the things that the Lightning can; very few out there can do as many things well. There are many reasons why this is true. A great deal has to do with the original design.

So let's talk first about the original design and what they were trying to do. In the late 1930s the Barnes family of Skaneateles, New York, asked Sparkman & Stephens to design a boat for them. They didn't want an extreme racing skiff or a big plodding boat; rather, they wanted a boat that could do a lot of things well. In particular, they wanted a boat that was good sailing to weather. It was supposed to be raced, day sailed, and easy to trailer. So after the Barnes family came up with some of the design ideas, Sparkman & Stephens executed them—very well. That is partly why the boat continues today to do what it does.

The Lightning was designed to be built by amateurs so the average person could afford to construct it. It could be built at home with relatively common lumber such as spruce and mahogany. These materials were easy to get back then. The early basic boat was straight forward to build and, with a

number of friends helping, could be built in a garage or even in a basement, like my father did. The number of home-built boats, with the help of friends and family, helped the Class get started and explains some of the early popularity.

Now almost all boats are made of fiberglass. The wood and labor costs associated with the original building methods would price the boat out of what most are willing to pay or can afford.

There are still a number of wooden Lightnings out there and a number of wood enthusiasts restoring them. The restored wooden boats are labors of love. They are beautiful to watch sail and admire in the parking lot. I have listened to many individual stories and histories of the people who worked on these boats. For the people who spend time restoring a Lightning, it's their hobby and a labor of love. If you had to pay someone to keep up your wooden boat and maintain it, that wouldn't make much economic sense. Most of these guys do spend money but not all that much. It's mostly all labor. If you are going to refinish the bottom of a wooden boat, sand to wood, router out dry rot and plug it, you might have to spend \$400 to \$500 in materials, but you could put more than 300 to 400 hours into it. Think what the bill that would be if you were paying to have it done.

So the original boat was designed to accommodate a lot of things. This gives the boat a sense of value. People in the 30s were in the Great Depression, so good value was on everyone's minds. Big cruising boats that needed crews and lots of money to build and operate were just too much for most people. They wanted something simpler and easier, more affordable, and user friendly for a family and/or a group of people. Lightnings do all of this well, along with other things that people were looking for. Lightnings can: sail in a wide variety of wind conditions, be trailered, easily floated on and off at a ramp or be taken on and off the trailer at a hoist. The trailers aren't too big and most cars, even back then, can tow them. The Lightning can be used to race. Obviously, that is what a number of us do, but actually it is a very good day sailor. You can set the boat up to sail with three to five people or sail it with just one person. This is because of the combinations of the main, jib and centerboard. You can use either one or both of the sails, even shorten the main (reef it). Being a centerboard boat, you can pull up the centerboard to change the lateral resistance of the boat. This allows you to sail with the main only if you want to. Realistically, you can do a lot of different configurations with the boat because of the way it is designed. The boat accommodates different water depths. You can launch and use it from shallow water. You can even race in five feet of water. With the board down, the draw is only 4' 10". You can sail in rivers, or even put on kick up rudders to get in and out of shallow water, like off the beach. It is truly an accommodating original design.

There are two different ways a sailboat Class can be organized. There are Class-owned boats and builder-owned boat Classes. The Laser design is owned by the builder who

has all the rights. The Laser Class Association has a set of rules but has no control over the boat. They make rules for events, qualifications, how to race the events and provide rules of the Class. But the builder can change anything on the boat since they own the rights to the boat. In the case of the Lightning, somebody was smart enough to ask Sparkman & Stephens, "Do you want to sell the rights of the boat to the Class organization?" They worked out the details, and the Class got the rights to the boat. That was a very interesting turning point in the Class. From then on, the Class controlled its own direction. One of the few things I have heard from Sparkman & Stephens is that they would probably not do that again. Obviously, their boat design ended up being fairly successful, and they lost a lot of royalties. Even today you can charge whatever you want for a royalty if you own it. Let's say the Class charges \$100 a boat. So for every number that is sold, the Class gets \$100. And that would have been going to Sparkman & Stephens forever. In fact, a Blue Jay, which is a two-thirds scale Lightning designed after the original Lightning, was designed by Sparkman & Stephens also. They still own the rights to that design, so they still get the royalties.

The ability of the Class to control the boat is a big plus. If you want to make changes, you can; or if you want to stop changes, you can. For instance, Laser could decide they want to make boats even lighter. They could figure they'll just sell more boats if they were faster but fall apart in four years. A builder-owned Class could do this even if it was not good for the Class. In the Lightning Class, there is a long list about how to build and measure a boat. The Class can watch over and shepherd the process so you can't make a throw away boat. This also helps keep the boat consistent so you don't end up with lots of different versions of the "same" boat.

Over the years, with the Class in control, we have been very careful with changes to the original design. Trying to decide which changes to allow and which ones to implement is difficult without changing the Class in a negative way. The wisdom and dedication to do this well has been a strength of the Class through out the years. This has to do with the Measurers and the other strong Class officers we have had. The Class hierarchy allows discussion, experimentation, then rulings and well written laws for enforcement. Say you want to make a change to your boat, your first step would be to approach the Chief Measurer. The Chief Measurer has the ability to look at any kind of possible change and determine if it is accordance with the rules of the Class or not. If you get the OK from the Chief Measurer, you can implement your change. If, however, the Chief Measurer decides your ideas do not fit within Class specs, you have two options. The first is to retire your idea or change your plans. The second option is to approach the Class with a new rule or change to the specs and rules which would then allow the change on your boat to be possible. Any rule or spec changes must be voted on at the an-



nual meeting or a general meeting, but these amendments or specification changes can be raised by anyone.

Once we figure out how the process of change works, the next questions are what do you change and why. Everyone wants to go faster. Finding ideas to change your boat have never really been too difficult. Change happens because everyone wants to find a way to beat the other guy, or there is a problem common throughout the Class which requires a change to be made. For instance, in the early years, a number of people were breaking masts. You would generally break a mast once a year or every other year. It was just something that was a given: you were going to have to replace your mast. Eventually the Class realized this was not going to be good for the Class in the long run. There are some other options, so let's take a look at them. It was not just, "Oh, let's do this;" it was well thought out. A committee was put together, and they first they tried an exact duplicate mast in metal (aluminum). It was hard to build because it had to be tapered and welded. There was engineering and testing done and lots of discussions back and forth. The group developed and implemented the tear-dropped shaped aluminum mast which we have today.

There are a lot Classes that will not change anything. You can not even use a different cleat or pulley from what was supplied with the boat. The owners of the Laser design control the builders, molds and everything about the boat. There are other classes, what we call "experimental classes," which allow you do anything within a broad framework, like the international Moth. The International Moth has to fit within a specific size box. Anything you want to do within the size of the box is fine. After lots of development, a builder designed a Hydrofoil Moth that is considerably faster than the normal boat. Now they have two different classes because you can't sail a foiler Moth against a normal Moth in anything but extremely light conditions. They are not even remotely the same boat. These are the two extremes and there are pluses and minuses to both ways of doing things. The Lightning is an excellent balance someplace in between. It is one-design more than the experimental class, but it is not as strict a one-design as others. This bal-

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ance has allowed the Lightning to be home built and also be built by a number of different builders. Here are just a few of the names of Lightning builders: Skaneateles Boat Works, Lippincott Boat Works, Eichenlob Boat Works, Muller Boat Works, Nickels and Holman, Nickels Boat Works, Allen Boat Company, along with a number of other builders over the years. There are a lot of tolerances on the boat which allow some change. So the builder can change things a little bit here and there. We still try and keep it one-design, and in a big part it is. But a lot of this due to the basic design and keeping the clamps on and not letting people go hog wild and do anything they want. The Class allows changes and adaptations that will benefit it in the long run, avoiding any changes or adaptations which could cause the Class harm.

When we do contemplate making changes to the boat, we should be asking questions like: Is this change making the boat safer? Is it making the boat easier to use in some way, shape or form? Is this change keeping the cost in line or reducing the cost of the boat? A lot of ideas come because of wanting a faster boat. That's not really a good reason to change something in a one-design class. Going faster might be a product of a change but should not be the driving reason for a change. For instance, when we went to the aluminum mast, we decided that we could now have an adjustable backstay. Having an adjustable backstay does not make the boat necessarily faster, but it makes the boat able to sail in a much wider variety of wind conditions comfortably. You can depower the main and boat with the backstay—which you could not do before. Now you know a lot of changes come from wanting to go faster, but they aren't necessarily approved with that in mind.

There is another factor we should consider: whether or not we are going to make the old boats obsolete. I think

this is very very important. There are some classes, as we talked about above, that have hurt the chances of growing their fleets by not keeping change in check. For instance, the Flying Dutchman boat went to a full carbon composite boat. There is a huge difference between a glass boat and a carbon boat; you really can't race the two competitively with each other. You can see this over and over again. The DN Ice-boat Class had an aluminum mast, and now they have fiberglass masts. So they have two fleets: an aluminum mast fleet and a fiberglass mast fleet. They are not the same boat. We are always trying to be very conscious about how much change is made to the Lightning.

We also need to consider what changes are going to cost. If you make a change that costs \$50 to upgrade, there are not too many people who are going to complain. If you make a change that will cost \$1,500 in order to stay competitive, there are going to be a lot of unhappy people. A happy class is a class that's going to grow. A happy class is a class that is going to keep people coming into it. Those are the things that you have to think about when you are considering changes. For the most part, we have done that very well in the Lightning. Some of the big changes the Class has gone through are: wood to aluminum masts, wood to fiberglass in the hull. Sails have also changed a lot over years. They are now much more user friendly. They last longer and don't rot. We've changed ropes and other things as materials progressed, but we didn't lose sight of trying to keep everyone competitive to some degree. Obviously, we can't keep everyone competitive forever. You can't build a boat that will never get tired, but we do a pretty good job getting close to that.

A lot of factors affect the used boat market. For instance, when fiberglass boats came around, everybody was using fiberglass and foam. The foam at the time was urethane foam. It was a very common building block in a lot of boats—not just the Lightning but in many sailboats and power boats. Then eventually we realized that the urethane was susceptible to water absorption. Once they started sucking up water, these boats were no longer racing boats. If your boat weighs eight to nine hundred pounds, unless you are sailing in light air and in lots of shifts, you are just not going to be competitive. You can't carry two hundred extra pounds and think you are going to win races. You might win occasionally but not very often. So there was a whole era of boats that became day sailers and could not be raced. This put a serious dent in the number of used boats in the Lightning Class for a long time. I think we are past that now. It's more than twenty-five years since the last one of those boats was built. For awhile though, there was a shortage of used boats within a certain price range.

Now we are all building with construction materials that are a little better. We use a cross-linked foam/pvc core that should not absorb water, but we also have changed building techniques. When it comes to the Lightning, Sparkman & Stephens did a good job balancing the different aspects

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of design like the weight. The Lightning goes pretty fast because it is not too heavy, but it is also not too light. There are problems with real light boats built at the edge of the material limits; the crew weight becomes very sensitive. Sometimes the boats break or do not stay competitive for long. As an example, some of the Olympic class boats have a very short competitive life due to their very light weight and tight tolerances. Another example would be the 12-meters which have had some pretty spectacular catastrophes. These were mostly caused by errors in rigging or by the crew doing something the boat was not designed to do. The 12s had been designed to nth degree and had little or no safety margin.

Let's talk a little bit about building what we call "flat bottom" boats. The Lightning is not really a flat bottom, but compared to a round bottom boat, it is pretty flat. If you envision a big flat panel, it's hard to keep it stiff. So you have to put some framing in it to make it strong enough so that it does not flex much. Therefore, the boat has to be built relatively strong in order to be a flat bottom. This strength really helps the boat be stiffer so that it can be competitive speed wise and also have a better chance of lasting longer. The Lightnings are a pretty strong boat for its size and will stay competitive for a long time. A much lighter boat could be competitive for a while, but then you may have to get a new boat to keep up. Just imagine if you had to get a new boat every four or five years, and your old boat had very little resale value.

One of the philosophies I have when building a Lightning is that I am not necessarily just building the boat for the guy who is buying it. I am trying to build the boat for that guy, the next guy and the guy after that. The reason is counter intuitive. It certainly costs more money to build a boat that way, but the boat will last. That longevity is a major plus to the Class. There is always somebody who wants to get into a boat at a certain price point. If you don't have a boat around at that price point, they might decide to get into a different boat. So you need to have a boat around that is going to be competitive for a long time to have the range of pricing needed. This range of prices strengthens the Class. Having a strong class that is thriving is another goal of ours as a builder. If you don't have a strong class, eventually you're not going to be building that boat any more. Yes, our building viewpoint is to make a strong and fast boat that people are going to want so they can win races; but it's also about getting a boat that will last for a long time so that you get the value out of your boat. This way you can keep the used boat market and the Class going strong.

The used market is probably as important or maybe more important than the new market now. The Class might be selling twenty to thirty new boats a year, but there are hundreds of used boats that change hands. A class needs a continuity of used boats that go all the way from new to very used. If not, you can get too big a price separation between a new boat and a used boat. It's not good to have



a used boat and nothing that's just another step up. Let's just say for instance, the best used boat you could find was \$12,000, but a new boat was \$25,000. All of a sudden you now have a \$10,000 to 12,000 differential to buy a new boat. When that differential gets too big, the Class really is going to hurt in the long run. There are basically two possible ways for this continuity to be broken: if something happens to make a large number of boats obsolete, such as the past issue of the urethane boats in the Lightning Class; secondly, if people stop buying new boats. This doesn't mean that individuals are wrong to work on their older boats. Only a small percentage of boats must be new in order to keep the supply flowing. Think of it this way. If everyone starts working on their boats to make them last longer, no new boats will be put into the system. So the boats being fixed are getting older and older, while no new ones are filling the gap. This leaves a shortage of boats available. Working on older boats is great for our Class. So is the balance which comes from the fact that not everybody wants to work on their boat. A lot of woody guys do their own work but not a large number of others. I know a lot of other people who say there is not enough time in the day for what they want to do—never mind going out to work on a boat. Those are the guys who want to buy a new boat every three or four years. They want to sell their old boat, add about \$4,000 to 5,000 to get a new boat, and do no maintenance. They just want to drop the boat in the water and go sail, that's it. So for that they are spending that \$1,000 to 2,000 per year. They had to do the initial outlay at some point to buy the boat, but after that, they are not spending too much money to keep themselves in a relatively new boat. This turn-over lets the next guy buy a boat for about \$18,000. That guy then sells his boat to another guy who buys it for about \$15,000. So this continuity of used boats that goes on and on is a big plus for

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our Class. These used boats need to and can stay competitive. I've seen people win the North Americans in boats that were ten years or older. They had to do some work on them and fix them up, but it was an older Lightning, not a brand new boat.

When there is an active used market. You get value for your boat when you want to sell it. There are some classes where that is not the case. Let's say you want to get into the Star Class. It might cost you \$120,000 to \$150,000 for a state of the art Star-brand new and straight over from Germany. You can buy a used one that's not really a strong competitive boat from anywhere from \$5,000 to 7,000. What does this mean? There is no one buying new boats at that point unless you are a really top-end racing guy. In this stage when racing the Lightning, you can find any price range you want to get into. Now they are not all as competitive as the next. You are not going to buy a forty-year-old boat, step right into and be super competitive in the North Americans. But if you want to buy a forty-year-old boat and spend some time fixing it up, changing rigging, reinforcing it in some places, you could go and be competitive in a flat water North Americans.

The market strength is based on the racing life of the boat. Any market price is set on what someone is willing to pay for the boat, and that price is based on how competitive the boat will be in racing. I know a lot of Lightnings don't race, or race very little, but racing is what influences the price. So how long the boat can stay competitive has a lot to do with how much you can sell the boat for. Now that we are passed the issue of the urethane foam boats, you can have a boat for a long time, sell it and not get hurt too much financially. I know it's not your car and you aren't using it every day, but in relative terms, with the Lightning you don't lose value to depreciation as fast as other things in life. When the prices were going up pretty steadily, a number of people sold their boats for almost the same amount of money as they paid for the boat. All I am saying

is having a good used market, having a boat that's good enough to race later in the life of the boat is very important and part of the reason we have a healthy Class.

We keep slowly changing building practices over the years. I wouldn't say it is state of the art right now, but we have evolved over the years from wood to fiberglass, to changing the core, to what we have now which is a hollow bottom boat with an air pocket with skins of glass and foam on the bottom and on the top. It's one of those things. You just keep trying to evolve and stay up with it. So if there is a faster or easier way to build the boat, you do it that way.

We still need to be competitive and have the boat be what everyone wants. We also need to keep adapting to building for the way the boat is sailed now. For example, as the rigging improved, the necessary crew weight and size has changed. This means now lots of different body sizes are accommodated by the Lightning. The crew weight for the boat has been coming down pretty steadily through the years. Because of this we have been increasing the purchases on controls over the years. The biggest crew weight change recently was when we went to all windward/leeward courses. There are no more tight reaches, so there is no need for a heavy crew to help hold the boat down on a strong reach. The ideal crew weight range has changed from 475-525 pounds to probably 450-480 pounds. We can jockey the crew weight around quite a bit if needed, especially as some of the Class sailors have put on a few extra pounds!

The Lightning is not a highly acrobatic Class. You don't need to be super strong. You don't need to be a special size, like a 280 pound Star crew, or tall and thin 470 pound crew. This average size crew makes getting crew so flexible. This crew flexibility is another draw for the Class. It means you can sail with a lot of different people. I have sailed with older people, my two kids, and people of age nine to seventy-five.

The rules for how you build a Lightning add value to the boat, help control the value, and even stop it from eroding. These rules are governed by the Class. So what the Class does now is have a Chief Measurer or certified Measurers that certify the boat builders every couple of years. They come and measure one of the boats that came out of the mold to see if it still fits the specs. Then they say 'OK you can keep building'. If an individual wants to build a boat, they say that's fine 'You build the boat, and we'll measure it.' If it's legal, then you get a Lightning measurement certificate and you can race the boat.

Even though building your own boat is a bit of a lost art, there was a resurgence of the practice five or six years ago when Wooden Boat magazine did an article about building a Lightning. They had a group of guys build a wooden Lightning out of all the modern wood building practices, then rig it and sell it. The Lightning Class got a lot of PR, and a lot of numbers and plans were sold to amateur builders. The

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amount of boats built and actually measured wasn't too many, but you have to start some place. The Wooden Boat magazine guys wanted to sell the boat for around \$25,000 after they were done. They said that just covered their costs. So building your own Lightning is not a highly cost effective thing. Boat building is its own art form that takes a lot of skill and knowledge. Building a boat yourself can be very rewarding, but unless you have time and experience and patience, I would not recommend it any more.

So let's look at measuring at the regattas. We do less measuring than we used to do. It used to be that every District had a full measuring. So every year you would get a list of what they were going to measure at the NAs. The District level was supposed to do the same set of measuring. This made sense because then you could fix any problems before you went to the North Americans. Most Districts do not do that amount of measuring any more. So now people can show up and end up not measuring in at the NAs.

There are tolerances and things that change a bit from time to time. For example, I've seen scales change from five to ten pounds depending on wind direction. Lots of things can affect them, so I don't get to upset about the weight. Even stuff like the Angle of the Dangle; if you drop that centerboard, you can bend that plate a little bit. An eighth of an inch at the crash plate is like a quarter of an inch at the bottom, which is a pretty big difference. If there is a big change and it's obvious, the Measurers should catch it. The point is not that the boat is exactly 700 pounds or the angle is perfect but that your boat is the same as all the other boats that you will be racing against.

The Class and measuring is a chicken and egg kind of thing. Is the Class good because we measure or do we measure because the Class is good? I don't really know, but certainly I'd like to have some measurement instead of no measurement. If people know they aren't going to be measured, they become more likely to adjust things on their boats and eventually enough of this could lead to boats out of spec. It could cause the Class to unintentionally become less uniform and not in a good way. Measurement is keeping things in line so you can't get huge differentials between boats. You won't get someone who is out-of-sight faster. This is part of what helps keep up the value of the boat. Being able measure and control to some degree what some people do and don't do helps a lot. Nobody particularly likes measurement. There is the time it takes to do it, then either it goes smoothly or you have a problem. But if you look at it from the Class point of view, it is keeping the boats more one-design. It is keeping the boats more competitive with each other. I understand people don't like it, but there is a place for it. There was talk about not measuring sails built within the last two years because they are all the same. But I think to myself, how are you going to prove that the sails are the same. You can prove when they bought the sails, but what if one of the guys used it fifty times and the other guy used it five times. Then the



sails won't be the same. It's the same thing with the boat. Well my boat measured last year so I should not have to measure now. But have you changed your mast? There are a lot of little invisible issues behind the scenes things that can change the boat. These get taken care of when we get measured at the major events. Measuring helps keep the boats one-design and competitive with each other

Now there is racing to talk about. Here is what I want to say about racing. Because we have continuity of boats and wide range of sailors, you can pick what level you want to race at. You can sail once a week for three months. Or you can sail every day. There are some people who just race at their club or travel regattas. There are people who do Districts and North Americans. You can decide what level you want to take your racing to. We have that option because we have a Class that is strong. Because we have such a wide range of racing levels, you have the ability to buy a boat that fits into your level, and can race in that level competitively. You can target what level you want to race at and how much money you want to spend to do that. Most other boats do not have the breadth of sailing anywhere from day sailing up to a very competitive world championship that you can pick and choose from.

The Lightning was designed to accommodate a wide range of people and a wide range of tasks. It still does that! Thanks to its history, design, and Class involvement, the Lightning is a great boat to sail. I see a bright future for the Lightning Class because you don't get just what you paid for, you get a lot more. When someone buys a Lightning, they get the boat but they also get the history, the Class, and the people. Now that's good value. SA/REB

SAILING IS HEALTHY FOR YOU



DR. JIM SEARS

Yup, sailing is healthy for you. As we stand around after a race enjoying our beers, laughing and sharing stories, we can all be satisfied knowing we have done something 'healthy' today.

Most of us know that being outside as well as doing physical activity is good for us. But we don't necessarily think sailing is doing something 'healthy' because it is fun (well most of the time). We usually don't email our friends saying 'I'm going sailing because it is healthy for me.' We might say we sail to de-stress or just plain have a good time on the water and with friends.

"I was thinking about the health aspects of sailing and was really quite surprised how many ways sailing actually impacts us physically and mentally," says Dr. Jim Sears. Here are some health benefits for you to consider the next time you go sailing.

Sailing as Exercise

When we sail, we are constantly using our muscles. We move our eyes and flex our necks looking up at the sails, turn our necks from side to side and rotate our torsos to look at other boats or locate the mark, bend our torsos and rotate our bodies to tack, use our biceps and other arm muscles to pull on lines to raise and lower sails, as well as use our abdomen and legs for hiking. Of course there are a lot more large and small muscle movements used in the sport.

If you think about it, many of the movements that we do when sailing actually mimic the movements we do in an exercise class or in the gym. There are stretches and exercises involving side to side neck movement, torso rotation or extension, forward bends, squats, leg lifts, etc. When we lift weights, let's say a bicep curl, we are moving a clenched

fist towards the body. Pulling sail lines with a clenched fist is a similar movement.

In sailing we use our muscles with 'purpose' rather than just exercise. We are actually 'doing' the exercise. At the gym, we usually work single muscle groups such as the thighs. In a class we might work out two or three muscle groups. On the boat we incorporate many muscle groups in a much wider range of motion. This is a great way to look at our sailing 'workout'.

3-D Movement

Three-dimensional movement is superb for our bodies. Ordinary everyday motion works all parts of the human body system. It literally keeps the juices flowing and also works the different muscle groups in a non-intensive way (as opposed to weight lifting for example).¹ When we sail we use our bodies in a non-repetitive fluid motion. This provides for overall body toning and general health.

Aerobic and Anaerobic Exercise

Sailing provides aerobic fitness. Aerobic exercise usually includes lower intensity activity for longer periods of time. So if you get your heart pumping even for a few minutes repeatedly throughout a race, you are performing aerobic exercise. The benefits of aerobic exercise include strengthening the lungs, heart, body muscles, oxygen flow, and improving blood circulation.

Anaerobic exercise works specific muscles in isolated, limited movements. The benefits include speeding up metabolism and strengthening bones, ligaments and muscles. Generally sailing is not highly anaerobic; however sailing at the more competitive levels can incorporate this intense form of exercise.

Muscular Endurance

Muscular endurance is a great side effect of sailing. Muscle endurance refers to how much exercise and movement your muscles can take. As we use our muscles constantly and often for hours pre-race, during long races on the water tacking, hiking, jibing, sails up, sails down, spin up, spin down and post-race, we are building their endurance and strength to perform our sailing tasks.

Muscular Flexibility

Now consider flexibility and agility. Where would we be without these vital components to healthy bodies? Again by simply using your body during sailing you are helping maintain a good range of motion. "Anti-couch potato stuff here," as Dr. Jim says.

Muscular flexibility is the ability of the body to move through a full range of possible motion. Flexibility can be increased by stretching to some extent. Not using your muscles shortens them while using them maintains their length. People who enjoy a variety of activities tend to be more flexible. When you are flexible, your body does not get stiff as easily and you are less likely to injure your muscles or have lower back pain just to name a few benefits.

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Physical Agility

Physical agility is the ability to change your body's position efficiently. It requires the integration of isolated movement skills using a combination of balance, coordination, speed, reflexes, strength, endurance and stamina.² In sports, agility is defined as a rapid whole body movement with change of velocity or direction in response to a stimulus.³ And that is exactly what happens when we sail! The more you move in all different directions helps maintain agility. Being flexible and agile help us accomplish the many tasks required in sailing.

Gross Motor Skills

"When working on the boat or being on the water, we use our gross motor skills," adds Dr. Jim. Gross motor skills involve our large muscles groups and whole body movement. Gross motor skills are developed in early childhood and continually improve until adulthood. They peak before 30 years of age, usually between 18 and 25 years. After peaking, these muscle groups sadly start to decline. This is why older adults move, react, and perform slower than the 20-somethings. Again, maintaining an active lifestyle on the water helps to slow down this process. When supplemented by additional exercise, older adults are able to perform at higher levels. (See Dave Starck and Greg Fisher's Yearbook articles.)

Fine Motor Skills

"Sailing helps develop our fine motor skills. Fine motor skills are the coordination of small muscle movements in the hand, fingers, and thumb, usually in association with the eye (eye-hand coordination). We use our hands all the time when sailing or fixing our boats. All the tinkering and fidgeting with the small parts on the boat can actually help keep your finger joints flexible and strengthen finger muscles. Hand health is important in staving off arthritis. Studies show that people who work with tools and use their hands such as sailing or gardening tend to live longer," says Dr. Jim. So put away your squeeze balls and go work on the boat!

Balance

We constantly fine tune our bodies to accommodate the movement of the waves, the wind, the boat, and our onboard duties. We are constantly tweaking our vestibular systems. It is a sensory system linked to the auditory and nervous systems. Balance exercise works a multitude of small and large muscles. We move from side to side sitting in the boat. The bowman obviously uses a lot of balance. If we do not maintain our inner balance, we get seasick. (Seasickness is a lovely combination of auditory, visual, and sensory disorientation affecting our balance.) Working on our sense of balance on the water of course translates to having a healthy sense of balance on land. Older people or inactive people tend to lose their sense of balance. So sailing can help keep this complex body function healthy.

Body Awareness

Dr. Jim tells a funny story. "Another benefit of sailing (or doing anything active for that matter) is that you can be more aware of your body, its needs and changes. I first realized that I needed eye glasses when I couldn't read the sail numbers at the 1993 NAs in Milwaukee. We have a better chance of noticing changes to our bodies and physical facilities if we are aware of and using them."

Fresh Air

"Being in the fresh air is a 'no brainer' side effect of sailing. We all know that being outside is healthy for us," says Dr. Jim. Right? Why? Indoor air is not fresh. It is filled with a concentration of dust, radon, bacteria, and other particulates. All this stuff gets recirculated around our houses and offices. It gets into our respiratory systems.

Fresh air cleans out our respiratory system. The volume of outdoor air is essentially infinite so there are fewer particulates per volume as compared to indoor air. Also, the constant circulation of outdoor air dilutes these particulates. As the sun's ultraviolet rays rapidly destroy germs, fresh air is basically very clean.

We tend to breathe more deeply when outside. This brings more oxygen into our cells of our entire body. More oxygen brings increased physical and mental energy and clarity. Our brain needs twenty percent of our body's oxygen to function at top capacity. So next time you are on the water and a gust of wind blows your way, inhale deeply.

Awareness of Nature

Recently, people have begun studying the connection between the natural world and being healthy. It turns out that just looking at green vegetation, water, clouds, flowers, etc. can reduce stress, lower blood pressure, and put people into a better mood. Sailing helps us be aware of nature around us. We need to have an awareness of wind, clouds, water conditions, changes in weather, etc. All these things greatly help our overall general health and well being.

Green Sport

Being 'green' is a hot topic these days, with increased costs of energy and concern for the environment. Well, we non-motorized sailors have been on top of this for decades now. Sailing small boats such as Lightnings is clean for both our bodies and the environment. As we do not use motors, we are neither inhaling gas fumes nor spilling gas into the water and the air.

Mental Agility

Let's look at the mental aspect of our sport. We need mental agility to sail. Mental agility includes the capability of rapidly adapting to change. Well this certainly applies to a good race, doesn't it? Like muscles in the body, the brain needs exercise to keep it in shape. Dr. Jim says, "In our sport, we are constantly doing mental exercises figuring out the end of the start line, wind shifts, course changes, what our challengers are doing and more. The

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very act of learning a new skill such as installing a new radio or GPS on your boat is a mental exercise as well. I know it sounds simple but the best way to keep your brain sharp is to use it."

The more you use the brain, the more it grows and remains healthy. It actually shrinks with inactivity. Physical and mental exercise builds new neurons and strengthens synaptic connections. Moving our muscles produces proteins that help reconstruct the brain. Doing a complex sport such as sailing stimulates both the brain and the physical system. These activities build a more complex brain structure and synaptic connections.⁴ We see such results with the more mature sailors. They can be sharp as tacks!

Stress

"One of my favorite parts of sailing is its impact on stress. Stress is a part of our daily lives. We all have physical and psychological stress. There is actually good stress and bad stress," says Dr. Jim.

Negative stress is long-term chronic stress that builds up around us. It demands too much of our bodies and minds, wears us out and inhibits our ability to function well. The long list of negative effects includes a weakened immune system, high blood pressure, heart disease, cancer, and depression. It disrupts nearly every body system and speeds up the aging process. It erodes the connections between our nerve cells in the brain making us mentally less sharp. It is really amazing what bad stress can do to us.

So we need to learn how to manage our bad stress. "Sailing offers a vacation from chronic stress. We are hyper focused on one small situation (getting a good start, hitting the first shift...). All the other negative stress factors get to go away for a short period of time. This is really really good for us. Probably a lot of people sail to relieve their stress. If we are able to lower our bad stress level, we have healthier bodies and minds," adds Dr. Jim.

He says, "When sailing upwind off the starting line, you are thinking about nothing other than the boat, wind, and water. Your adrenaline is flowing. This is positive stress (called eustress)." Positive stress is short-term. It gives us a jump start, gets us alert with a burst of energy and active, then is gone. It prepares our minds and bodies for immediate challenges. It helps improve blood pressure, circulation, and boosts our immune system. It also helps us learn new things, adapt to change and sharpens our intelligence. All in all, positive stress can strengthen us mentally and physically helping us accomplish more.

Social Health

Dr. Jim loves this part of sailing. "The friendship and camaraderie part of sailing is huge for many of us. It's just great fun to see fellow sailors, talk boats (and other stuff), chase them around the water, chill out afterwards telling stories. One thing I love about the Lightning Class is that you can go to a big regatta and see friends you only get to see once a year or you can see your fellow sailors every weekend. It's such a blast." And yes this is healthy for you.

Studies show that people who socialize and have friends live longer, have less stress, and are generally healthier all round. "Connecting and building relationships, communicating and problem solving, laughing and being part of something contribute to a healthier mind thus a healthier body," adds Dr. Jim.

Hormones and Internal Systems

Sailing, socializing and being active have amazing effects on our glands and hormones. We release hormones naturally all the time. But stress (good or bad) releases more of them. A little can be a good thing: too much can be a bad thing. All in balance.

The thyroid gland releases hormones that elevate the level of alertness present in the brain and central nervous system. Concentration and reaction time are more focused as a result.

The adrenal gland releases adrenaline. Adrenaline is a stimulant produced when the body is exposed to excitement or self-defense. It immediately increases the strength and frequency of heart contractions and gives blood sugar energy to our muscles.

When we are active, higher levels of dopamine are released giving us feelings of excitement, anticipation and immediate pleasure. This is one reason we might feel 'great' after a good stressful day of sailing.

Endorphins give us a feeling of well being and physical wellness with some euphoria. Some drugs such as cocaine provide a similar feeling. So keep sailing and you can stay happy drug free.

Being outside in the fresh air and being active help with our serotonin levels. Serotonin affects many things including appetite, sleep, memory, learning, mood, behavior, and depression. A good night's sleep can be a wonderful by product of sailing.

Sunshine

When we are outside we are exposed to the sun. This can be beneficial and detrimental. While the sun's ultraviolet rays shine down vitamin D, they can be extremely damaging to our skin. "Eighty percent of skin damage happens before the age of eighteen. Kids really should wear sunscreen even if they hate it. It is vital that you protect your skin by wearing appropriate clothing and sunscreen," says Dr. Jim. Remember sunscreen takes about fifteen minutes to start working so lather up prior to heading outside.

Hydration

"Water water everywhere and not a drop to drink."⁵ Hydration is really important. The sun and elements dehydrate our bodies. Water helps nearly every part of the human body function from the little toes to the big brain. Our bodies are nearly two-thirds water, nearly 60%.

On average, our bodies lose 2.5 liters of water per day. Changes in body fluids affect blood volume, circulation, and hydration of our cells. Our bodies function much better if

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we can keep our body fluids consistent. Water even helps regulate body temperature. It flushes toxins and waste from our system. Proper hydration ensures our wits are sharp. Hydrated skin helps guard against damaging UV rays and environmental conditions.⁶

By the time you feel thirsty, you are in the first stages of dehydration. Even mild dehydration can drain your energy and make you feel tired. And this diminishes our sailing experience and performance. There is many a story of dehydrated sailors making poor decisions! So watch your water intake. Even though you are around plenty of water, you need to take it onboard with you.

Enduring Sport

Dr. Jim really emphasizes this aspect of sailing. He says, "Sailing is a sport or activity that spans the ages. Sailing can be done in many types of boats, with different crew configurations, and at levels of varying difficulty. The physical and mental requirements of sailing allow for this wide age span. It is an accommodating and enduring sport. Some sports we learn when young such as football, baseball, or gymnastics do not have such lasting value. Studies show that less than five percent of high school team sport athletes continue as they mature. Actually playing football when you are older can be detrimental to your physical being. We can pretty much sail our entire lives starting at a rather young age continuing until we are elderly. Even though I have been sailing since I was a kid, I am still getting clobbered by sailors old enough to be my dad or young enough to be my son. Sailing is very inclusive in this way."

Gift for Life

"Teaching kids to sail is really giving them a gift for life. As we have seen above, sailing engages them physically, mentally and socially. Sailing teaches them to use their bodies and feel comfortable with the water. One of the benefits that I got when I was younger was that it was great to be good at doing something. With sailing, a kid can feel a sense of accomplishment. A kid might not excel on the Little League diamond but he or she can sail. It builds self

confidence. Kids are part of a crew, learn to work together, communicate, rely on each other, learn the benefits of team work and that each part of the team is as important as the other, etc. Sailing is something they can do their entire lives at nearly any level. You can't say this about most sports," says Dr. Jim.

To finish up, the best type of exercise is doing something that you enjoy. If you like what you do, you will continue doing it. It is a positive feedback loop. For us in the Lightning Class, we are indeed having fun and being challenged while taking care of ourselves physically and mentally. What could be better? In our case, we can truly say 'Sailing is the best medicine'.

Please note: Remember to consult your physician before starting any new exercise routine or program. The information above is for informational purposes only. It is not medical advice about you and your specific health needs. REB

¹Dan Buettner. "The Blue Zones: Lessons for Living Longer from the People Who've Lived the Longest." TEDxTC. TED: Ideas Worth Spreading, Sept. 2009. Web. March 2010.

²Byron Mays. Strength, Speed, Agility, and Jump Training. Innovative Fitness. 2009. Web. March 2010.
<http://www.byronmays.com>

³Sheppard JM, Young WB. "Agility Literature Review: Classifications, Training, and Testing." Journal of Science and Medicine in Sport, 2006; 9:342-3449. Web. March 2010.
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⁴John J. Ratey, M.D. with Eric Hagerman. SPARK: The Revolutionary New Science for Exercise and the Brain. New York, New York: Little Brown and Company, Hachette Book Group, 2008. Print.

⁵Samuel Taylor Coleridge. "Rime of the Ancient Mariner." England. 1798. Verse 29: Lines 3-4. Memory.

⁶Wikipedia: The Free Encyclopedia. Wikimedia Foundation, n.d. Web. 15 March 2010.

FITNESS TO THE FINISH

Greg Fisher and Dave Starck, as many of us know, are top Lightning racers. Dave was 2nd at the World Championship in 2005 (Chile) and 2009 (Vermont), and the 2007 Pan Am Silver medalist. Greg won the North Americans in 1990 and was second in 1977. They enjoy the sport, the fun, the camaraderie, being on the water, the challenge of the wind and weather—all those good things that we love as well. What sets them apart? Well a number of things. They are naturally talented sailors. They have sailed for decades. They have tons of experience sailing on various water bodies as well as in different weather conditions. However, they are also calculated sailors who take the sport seriously. In other words, they do specific things so they will be better sailors and will place/win more often than less. They work at being 'winners'.

There are any number of things a racer does to remain at the top of the class. For both Greg and Dave, physical health and mental preparation are very important. They deliberately work at eating well and staying physically and mentally fit. Greg and Dave share their specific approaches with us.



GREG FISHER

Sailing is a way of life for my family. I was fortunate to start sailing really young, around five or six years old. I crewed for my Dad in his Lightning, enjoyed the best of junior sailing and then sailed in college. I enjoyed the sport so much I made it my avocation and became a sailmaker for North Sails One Design. Sailing is not only my avocation, but it's my hobby, my favorite sport and my passion. I feel very fortunate about this. I enjoy all the different things sailing offers: the racing competition, teamwork, strategy, tactics, boats and equipment tweaking and of course the socializing and camaraderie.

My wife, JoAnn and my kids; Martha, Kurt, Bessie and Addyson, love sailing as well. JoAnn and I sail together and in fact, it was through sailing that we met. JoAnn started sailing Lightnings with her Dad as well when she was young. She is an excellent well rounded sailor and not only is she a great crew on a number of boats she is also great skipper in her own right. She has become an accomplished Match Race skipper and regularly competes on the Women's Match Race Circuit. We recently had a great week sailing the J/22 Midwinters in New Orleans with Jo Ann and

my daughter Martha on the boat...and we even won. Those regattas are especially fun for me.

About ten years ago, I had a wake up call during an especially windy series. We sailed three back to back races in breeze over 20 and I was amazed and disappointed at how spent I was when it was over. I was not as competitive later in the day because I simply couldn't physically handle it. It became quite clear then that you can play the game better and concentrate longer if you're not worrying about being worn out. I had taken for granted my physical conditioning and paid the price. I started a fairly regular work out program shortly thereafter.

A couple years back we had another reality check when my father passed away from stomach cancer. This event gave my family and me great pause for thought about how we were living our lives, what we were eating and reaffirmed our concerns about how we were exercising. So we as a family refocused and regrouped. Now, we make conscious choices around our physical lifestyle both in what we eat and how we take care of ourselves.

After the wake-up calls, JoAnn and I cleaned up our diets and regimented our exercise routine. It is interesting how I have noticed a big difference not only in my physical "being" but also in my racing. When you're not as concerned as much about your health, you can focus better on so much more during the actual sailing.

We (primarily at JoAnn's urging) now are very conscious about our diet and watch what we eat. We focus on organic, less red meat, higher protein, little gluten, and no refined white flour (mostly). We are aware of food allergies. We found that Jo Ann has a couple that once dealt with helped her feel better as well. Our calorie and protein intake is watched on a daily basis. We avidly read labels prior to buying food. (As a consequence of our diet change, I lost a bit of weight.)

Having a strict diet is a challenge when travelling to regattas. We bring good food to eat such as power bars, protein bars, apples and non-processed foods. We try to make sure we hit all the food groups. No running out of gas and sugar crashing. We usually eat a big breakfast (with eggs)

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a couple of hours prior to racing so we are well stocked before leaving the dock.

We probably over do the water and make sure we are well stocked when we leave the dock. We force ourselves to drink during the race. JoAnn had an experience once where her skipper became badly dehydrated during a race and no one realized it. She lost focus mentally and made some really poor judgment calls that resulted in some poor finishes...and even collisions. Once she was rehydrated they were quickly back on their game. So this was our hydration reality check.

After racing, like everyone we like our parties! We do have a few drinks after racing but try to counter it with a lot of water to flush it from our systems. We also make sure we stop so we are not in trouble the next day. Eating well also helps with alcohol consumption issues. For every beer or glass of wine, we have a glass of water. It's not exactly a game but we try to keep a good balance with it all.

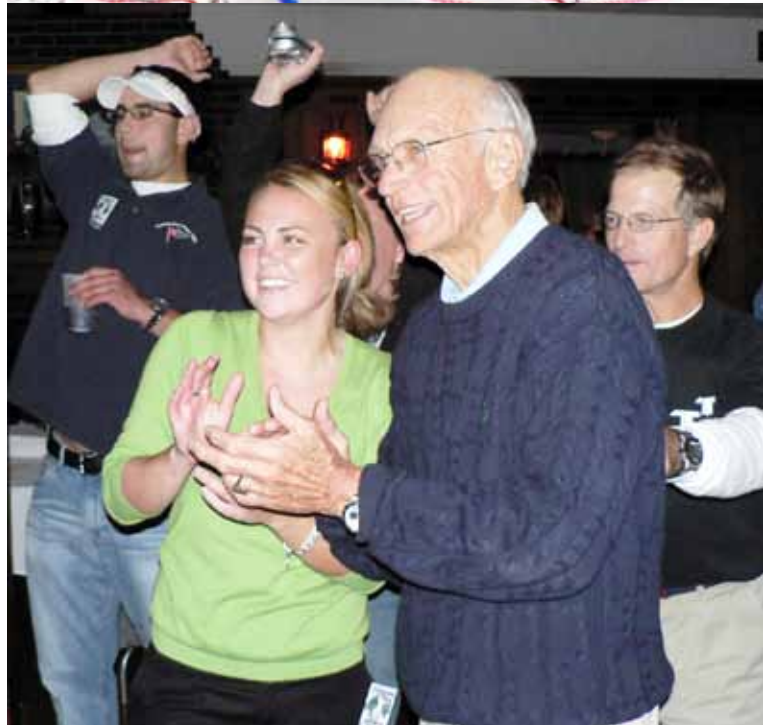
Again, I noticed a big change when I started working out regularly. I do aerobic exercise (I like spinning the best) three days a week. I lift weights two to three days a week as well. I break it up so I'll work on the upper body, legs, core and abs on different days. I usually pick exercises that focus on the muscles we use most in sailing and even do specific exercises for the different boat positions. I'm pretty religious about my workout routine. JoAnn does a similar exercise regime. She likes step classes.

Sailing is such a good physical outlet. When it's breezy, sailing is physically demanding forcing us to stay in shape. Sailing in light shifty breeze air is mentally challenging. Sailing requires organization and forces us to be up on what is important and on game.

The mental aspect of racing can be rather complex. There are so many things to stay on top of. You are forced to keep sharp and focused. To sail well, you need to coordinate all the details of weather conditions, water conditions, the team, and the boat. Before getting on the water, there is a lot to prepare. Then you need to pull it together into a game plan when racing. To stay at the top level, you have to master a number of these aspects.

It feels as though I have just started doing my best in racing during the last four to five years and I am over fifty years old now. I feel there is a direct correlation to my wake-up calls during the past ten years when I started to exercise routinely and eat better. As long as I take care of myself, I am not as physically limited and am able to concentrate better during racing.

The beauty of sailing is that you can do it from five to eighty-five. It is a sport that helps keep you healthy for a lifetime. I feel so appreciative and lucky that sailing has been, is and will be a part of my and my family's lives. REB



FITNESS TO THE FINISH



DAVID STARCK

I come from a long line of Lightning sailors. My parents sailed Lightnings. I grew up sailing in the Class as did my wife, Jody. I have gained superb practical experience by virtue of sailing a long time.

So what are some of my secrets to being at the head of the Fleet? Physical exercise and mental preparation are pretty close to the top of the list. A few years ago I represented the U.S. at the PanAm Games. Sailing at that level, I was struck with how taking care of oneself is such a factor to racing well. I definitely feel that you cannot be a top sailor without both physical and mental fitness and preparation. It simply makes a huge difference.

My wife and I are naturally athletic people. We like to exercise. Jody is quite diligent. She was on the U.S. Sailing team and had a more regimented workout routine for a long period of time. She goes to the gym daily as well as runs, etc. I try to work out routinely. I run, spin or lift weights regularly.

There are specific exercise routines you can develop for each position on the boat. It is important to look at what each position does then develop exercises to be effective in this role. The bowman is usually agile, needs good hand/eye coordination and generally is always moving. The helmsman needs a lot of patience, does more sitting and

thinking about strategy and conditions. All three positions require weight shifting, bending, and reaching/pulling. Doing exercises that support these roles helps in the execution of tasks while racing.

For all three positions on the boat, core strength is important. Top sailors really work on this area. Core strength supports our arms and legs in doing what they need to do during a race. Also it makes hiking a whole lot easier. We can hike at a lower angle for longer periods of time. A strong core extends our range of motion in strength.

Well conditioned sailors really notice the difference in their fitness especially on those long multiple race days on the water. When most people just want to have a beer or lose their concentration due to adverse conditions, well conditioned sailors are able to better focus and maintain themselves. They have developed physical and mental endurance. They neither tire nor get discouraged as easily. Their physical system supports rather than hinders their sailing.

Generally, my crew and I like to exercise during regattas. For example, at the World's in Vermont last year, we would race for hours, get off the boat and bike or run to the place where we were staying. People are always surprised by this. However, this is a routine that works for us.

About a month before a major regatta, Jody, Ian (Jones) and I started preparing for racing in earnest. We ramp up our exercise, watch our diets more closely and prepare mentally as well.

Mental preparation is just as important as physical. Both are vital to being a top racer. They go hand in hand together. Mental preparation for sailing is under appreciated. People don't tend to focus on it. This particular aspect of racing preparation really helps me stay in top racing form.

I start mental rehearsing. Studies show that mental rehearsing is equally as effective as actually doing the actions. It builds mental patterns in the brain allowing your brain to go on 'auto pilot' when need be. I 'see' the entire race in my mind. I spend a lot of time thinking about



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the upcoming venue(s). I visualize the race course over and over again and where our boat will be all the time. I develop and review strategy and tactics. While exercising, I think about the maneuvers of sailing the boat. I decide what to do if something changes such as boat placement or wind shifts. Different situations, tactics, angles of attack are all thought out ahead of time. This planning makes for better boat handling and racing in the long run.

Knowing your competition is part of race prep. Since I have been a Lightning Class sailor for years, I really know much of the competition. So I spend time accessing my competitors' strengths and weaknesses. I watch and learn from what they do well. Often I go and speak with them about how they sail. If someone comes up to me and asks what my rig tension is, how I prep the bottom of my boat, what kinds of sails do I use, I gladly answer questions. The more questions you ask, the more you get to know your competition as well as learn about sailing. The Lightning Class is great in this respect because skippers and crew willingly share with each other.

Having the right diet and eating correctly is actually pretty important. We eat quite cleanly and healthfully as a matter of course. We watch what and how we eat during racing. You really don't want to blood sugar crash halfway through a race. You lose both perspective and focus. Skippers can get short with the crew, yelling starts, mistakes happen, etc. Hydration is also a key to keeping a clear mind and functioning body. On board we drink two-thirds water/one-third electrolyte solution (Gatorade).

Our alcohol consumption depends on the type of regatta. During serious regattas such as the World's, we are very focused and do not hang out and drink after the day's

racing. We exercise, eat a large dinner and get good sleep in preparation for racing the following day. If we are at a more social regatta or weekly races, we do enjoy our drinks (rum and coke for me!) and relaxation after sailing. "All in moderation. Nothing excessive. Just being smart." Good racing happens when things are good in both the mind and the body.

There are two different ways to look at sailing: recreation and sport. Many people sail and enjoy the recreational side of sailing and often attend races for their vacations. However, if you go out to the starting line and treat the race as a sport, this perspective puts you on a different plane. This is how my crew and I approach racing.

Many recreational sailors who want to win more often might have to make the leap to the 'sport' level. Basically shift their approach to sailing. There are a lot of competitive and athletic sailors who finish between 11th and 25th place. They are not quite in the top ten but not all the way in the back either. If they want to improve their placement, these sailors should work on both their physical and mental racing prep. There is a fork in the road between having fun and really excelling.

Remember the simple rule of physics: something at rest stays at rest and something in motion stays in motion. Just go do something for at least twenty minutes a day. This 'little' thing can be just huge. Get your heart rate up. In the end, you will be so much further ahead in your conditioning because your body is 'tuned' up.

You can be a good sailor with knowledge of the wind and water or your boat but you can be a great sailor if you keep in both physical and mental shape as well.



FINDING VALUE IN WOODYIES

BOB ASTROVE

Why Did You Want a Wooden Lightning?

Just something I had to do to be a complete Lightning sailor. I bought my first Lightning in 1978 two weeks before I graduated from college. Except for a two year period, I've owned one continuously since then. My current boat is my fifth. I moved up to a wooden boat after I suffered a bad accident. In 2002, while laying in bed recovering, I got the bug to have another Lightning. But I wanted to do it differently this time. It had to be more than a boat I'd just jump into and go sailing. A wooden Lightning gave me more of what I was looking for.

I didn't grow up in a sailing family. My parents' best friend, Paul Grinberg, had a Lightning, Pandora, and he sailed out of SSA in Annapolis for twenty-five years. You know how it goes. He needed crew. I tried it and forty years later I'm still at it. Mr. G. may hold the class record for number of races sailed without ever winning even one. All the fluke wind shifts but he never so much as got lucky and won a race. But he loved it and he taught me to love it too. He passed away earlier that year and that certainly weighed on my interest in getting another Lightning. In fact, my Woody is named Pandora – 2 in tribute to Mr. G. and his first Lightning, the first one I ever sailed.

It is more of a year round hobby then is the modern boat. In fact it is more than a boat. It lives. It talks to you. It has stories to tell. I know that sounds silly, and you'll never understand until you have one. We sail our Woodys in the warm months and tinker with them in the cold months. It is that added effort that builds a bond between owner and boat that is completely unlike the modern glass boat.

How Did You Find Your Boat?

Pretty much the same way I would have found a glass boat. I watched Flashes for several months and let a few people know I had an interest. One day I was talking to Frank Gallagher (Fleet 50). He said he heard of a Woody down at Rehobeth, Delaware. I called Dave Racine, Mr. Lightning in Rehobeth, who suggested it was a good boat and that I should drive down and take a look. Early February of 2002, I threw my 13 year old son in the car and drove the four hours to the beach.

First off it was a pleasure to see Dave and his wife Kitty, whom I had not seen in over fifteen years. I had spent my teens and twenties sleeping on their floor at regattas. And, of course, my son was rolling on the floor laughing at the stories of all the bad things his dad had done.

On to the boat. Humm, a little rough, definitely needed work, re-rigging, no mast, lots of nicks, and the centerboard was rusted in place. And how did all that petrified goose poop get in there? But no rot. It looked like a real Lightning. I have a rule: never to buy something on the spot. So I waited until the next day, called Dave and said I'd be back the following weekend to take it.



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How much? Well, Dave didn't actually own the boat. It seems a Delaware Supreme Court Judge who had retired and moved actually owned it and kind of maybe abandoned it. They stored the boat in the club building all winter, so how about \$100? Not exactly a clear title, but what the hell, my word versus the Delaware Supreme Court Judge. . . I then begged Dave to take it to get the bearings repacked on the 1960 trailer, to save me time the following Saturday. Well anyone who knows Dave, of course he did it himself. So I paid another \$100 for his help. In the meantime, I bought two new wheels and tires for the haul back to the D.C. area. So technically yet another \$100.

I get home w' the boat. I'm beaming. My wife comes out of the house, takes one look and says "You overpaid." Wham, wind out of my sails...

Next, the kid across the street wanders over. Takes one look and just starts shaking his head. Damn, these people have no vision. At least my son Billy was excited. As for the kid across the street, Matt Klise, he manned the front position on the boat for the next six years.

What Did it Cost to Get the Boat Back in Shape?

Well first let me say I had no intention of racing this boat. Oh maybe occasionally for grins, but I knew better. No way it could be competitive. I figured sanding, varnish, paint, find a used or maybe spliced mast somewhere, used sails. Maybe \$1,500.

I did find a mast. An aluminum tapered spar w' jumpers from the early 70's. I think I paid \$250. Four trips to motor vehicles and they finally agreed that I must have built the trailer myself and gave me a title. Then the sanding, sanding, and more sanding. Mostly w' an oscillating sander and a good bit of hand sanding. I did the bottom without flipping the boat, laying down underneath.

New floorboards, and okay I did buy a new main and jib then found a used chute. Then there were fittings. I tried to reuse what I could and bought new to supplement. But in an old boat you don't run all the controls to both sides, so there really are not that many blocks and cleats.

I have a rule about NOT counting what I spend on the boat but I was probably in the \$2,000 neighborhood before I launched for the first time. August of 2002, just 6 months after I brought it home.

Now that I'm eight years into this endeavor and have helped many others, I can positively conclude that one can be on the water in a fun Woody for \$2,000 to \$3,000. You can spend the money for a partially restored boat or spend less on the boat and invest time and money yourself. Either way \$2,000 to \$3,000 is the low end of what you'll get on the water for. You can certainly spend more, and over the ensuing eight years, I'm quite guilty of that but you don't have to.

Was it Very Time Consuming to Get the Boat in Shape?

Surprisingly no. Remember, I started with zero woodworking skills and didn't have much experience maintaining boats beyond a drill and a pop-rivet gun. But what I had was a good vision of what a Lightning looks like and how it's rigged.



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I also had commitment to the project. I worked on it almost every day. And that was the key. Often as little as fifteen minutes but something every day. I did not develop a big long written plan. That is the kind of stuff one does at work. This was for fun and I just worked on whatever I wanted to work on it. The key was to keep momentum moving forward and doing something every single day.

I did have a helper, my son. And working with him on this project was very special and something I will always remember. One of his tasks was to varnish the interior. He had never painted or varnished anything before. And like all first timers, he left a few (okay, few dozen) brush hairs in the varnish. One of the things I did right as a parent and wrong as a boat restorer was I left every damn one of them in the varnish. To this day every time I see one, even in the middle of a tense mark rounding, I get an ear to ear smile on my face, remembering that I did that w' my son. You can't put a price on that and it is a huge part of the "value" of my wooden Lightning.

Did You Do All The Work Yourself or Did You Use Any Professional Help?

Not for the first seven years I had the boat. We did all the work ourselves. And I repaint often. I don't think twice about stripping down a side and repainting or maybe I'll do a section of the bottom. That is a Saturday afternoon project. So I guess the boat probably gets a repaint every two years but rarely all at once.

But I do get some help. There is my good friend Doug Dixon. Doug is also an old Lightning sailor from the 1980s. We had owned #14019 together for a few years. After I bought mine and he crewed for me once, he went out and bought #584 which had been in a barn in Colorado for forty+ years. A 1940 Skaneateles. Unlike myself, Doug is a craftsman. His boat is restored essentially as original. So what does Doug's boat have to do with mine? Free skilled labor! I wanted new rub rails. The old ones were okay but a little beat up. Doug made me a set out of African Mahogany. I paid for the wood but he made them. And then he didn't trust me to install them to his standards so he drove them three hours to my house and I helped him put them on.

And That is Just One Example of the Classic Lightning Friendships That Are Built. How is That for Value?

The only thing I have had done by a professional was this past winter. It was written up in Flashes in February. (The details of this story are online on the ILCA website.) I took my boat to Corky Gray's place in North Carolina and he re-did the deck. After seven years of racing the boat, the fifty year old deck was showing its age. Yes, Corky is a professional and I did pay him for his work – but. . .

And there always is a "but" in wooden Lightning experiences. I already knew Corky. He was a counselor at the summer camp I went to thirty years earlier, Camp Sea Gull in North Carolina. Corky had built his first Lightning as a teenager with his father. Once again demonstrating that it is the relationships and family participation over long periods of time that are so much of what the Lightning is really about.

You Said You Had No Plans To Race This Boat, But You Do?

Well, once a racer. . . I raced once that first year in 2002 and been a regular on the race course with my local fleet ever since. I guess my competitive side wasn't really done, but doing it a Woody totally changes the game and one's outlook on racing.

Yes, the boat is slower than my competitors' modern glass boats. Who cares? I'm not out to win until the five minute warning that is. We try our best and have just as good a time as we did when sailing a modern glass boat. Maybe even more fun as expectations are much lower.

What I have found is that I think the Woody is definitely a little slower than my competitors' boats. However, on our short Potomac River courses and predominately light winds, the boat is plenty competitive. We even win sometimes.

And What a Blast to Finish Ahead of a New Boat!

We go to a few away regattas every year. Sure, on the mile plus legs the other boats just grind us down and the speed issues become more noticeable. But it's still fun. As long as the winds stay light and we get a little lucky, we'll have our sporadic great races.

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In the 2007 Masters at Leesylvania, with Doug Dixon driving my boat, we finished the light air race in 7th. Some good individual finishes at the Borderline too. In our fleet's "Sunday Series", we generally place in 1st out of every three races in a typical ten Lightning Fleet. I think the key is that we do well enough often enough to still enjoy racing a fifty year old wooden Lightning.

One of the neat things about racing an old Woody is that there is always something else I can do to the boat to make it faster. The bottom can be smoother, parts of the hull made stiffer. It never ends and it is fun to do. I often think this must have been part of the thrill of the sport back in the 1950s, and maybe something we have lost as a Class and sport? The modern boats are so good, there is virtually nothing to do but put it in the water.

As I said earlier, sailing the "classic" boat takes the warm weather sport and makes it a year round hobby. Depending upon your view of the world, more fun and more value!

The classic Lightning Fleet is considered to be well organized and you have events. What can you tell me about that?

Pretty soon after I bought my Woody, I needed some hiking straps. So I called my old friend, Craig Thayer at Fabricraft. Craig and I had met maybe twenty-five years earlier at the first Borderline regatta. As you know he sails #736, Huntress. He asked why should we wait a decade between Woody races. So we found some other Woodyes and held the first event in 2003.

I think we had seven boats that first year. By dinner time that Saturday evening, we had already figured out we were on to a good idea and assigned some tasks for us each to go home and follow up on. The result has been our Wooden Lightning Yahoo Group, our annual event, the almost monthly 'classic' articles in Flashes, efforts to preserve the history of the Class, and providing real support to our fellow Woody owners.

We've had some contact with other one-design Classes as well who are trying to do the same thing. By dumb luck and Craig's hard work, we were the first to organize. But the Snipes are making progress. This summer's Woody Get Together will be a joint Snipe and Lightning event. Comets next?

Could a Modern Competitive Lightning be Build of Wood Today?

I believe the answer is YES. And someday I'll put up the \$20,000 to \$30,000 to prove myself right or wrong. A stringer frame boat was built in Finland a couple of years ago and promptly won their big events.

One of my internet Lightning friends in Argentina just finished building a beautiful modern Lightning in wood, rolled deck and everything. He just launched it this spring. He has not raced it yet so the speed report is pending.

One of my lifetime goals is to build a Lightning. I've had new ones, used ones, glass ones, and an old wooden one. But I now feel like what I really need to do to be a complete Lightning sailor is build my own. Someday...

Along those lines, I have had some long discussions with others about this. In fact, this past January, Corky and I began tinkering w' the idea of, what my wife called, "Man Camp" at his place in North Carolina. A group of maybe four or five of us and we'd assemble two hulls. Those who put up the bucks take them home to finish the work. It won't be a cheap week's vacation and details are still vague but it's under consideration.

To me, the point is not to come up with a boat faster than those built by Tom Allen or at Nickels. Come on, they are great boats sold at very reasonable prices. Both companies run by the nicest people on earth. They are perfect. But to have a boat 98% as fast and to have built it with my own two hands is a powerful draw for me.

Some of the issues I think are the Class rules that could perhaps better allow for modern wood construction techniques. For example, ever note how thin the transoms are on the new boats, push on one w' your index finger. And look at a bow after it's been in a T-bone. Compare that against the 1/2-inch Mahogany transom on a Woody or its 3-inch solid hardwood stem. The Woody has weight in the ends that the modern boat lacks.

Do a Lot of People Contact You Throughout the Year?

Oh my, YES. Multiple times per week. Sometimes it's people looking to see if we know where the boat they sailed as a kid is still around. Sometimes it's people looking to dispose of that thing in their back yard for the past forty years. And sometimes it's people who just bought a boat and looking for information on where to start.

FINDING VALUE IN WOODYIES

What we have done is create a Yahoo group for Wooden Lightnings and now have over two-hundred participants. On one level it is simply fun social networking w' fellow Woody owners from all over the world.

Also, via the internet, it provides a place to go for getting all those pesky questions answered. Not that you won't get differing opinions but the online discussion usually leads to consensus that boat restorers really find helpful.

I think the internet has been the key ingredient facilitating the resurging interest in wood and classic Lightnings. It provided the Class with the missing link enabling communication with others located far apart. Between the Class website and the Yahoo group, we are reaching new people all the time.

As an example, one of the hot recurring and sometimes heated topics is whether or not to cut your mast in half and install a tabernacle. While the racing community might view this as sacrilegious, you'd be amazed at how many Lightning day sailors have done it. Step and drop the mast yourself in seconds. Not such a terrible idea, just not fast on the race course.

Unfortunately, we get more contacts from people looking to dispose of boats than potential buyers. But every now and then we connect with big winners!

I'll never forget it only took forty-eight hours to find the boat Scott Graham (America's Cup designer) had owned as a teenager. He bought it back and is currently restoring it himself in San Diego. How about that? Restoring a Lightning is his stress relief from the insane world of "the America's Cup".

Finding Ted Turner's old boat was equally a thrill. That boat is also now restored, on the water, and a great story. Sam Albergotti's dad owned the boat. They raced it for a couple of years in the 1960s. Time came to repaint the boat and he assigned the task to his sons. Well, teenagers are teenagers and the boat sat in the shed for the next forty years. Last year, Sam finally pulled the sofa off the top and got to work!

What Do You Have Planned for 2010?

For six of the past seven years we have held the "Wooden Lighting Get Together" (we shy away from the word "regatta") in Syracuse, New York. The one off year was the Class 70th anniversary event in Skaneateles. But this year we are going to try something new.

One of our regulars couldn't make the event in Syracuse because their home Fleet was hosting an antique boat show. They requested we move forty-five minutes to the west and hold our event concurrently with The Finger Lakes Boating Museum's show and event.

So this year we will be in Geneva, New York over the July 24/25 weekend. We already have eighteen boats indicating they are going to try to make it! That would be a good turnout for any event and unbelievable considering the newest boat is at least forty years old.

We'd love to add a second event perhaps in the southeast. Wooden Boat Magazine had been trying to organize something but it didn't pan out. Maybe next year?

What Can You Tell Me About the Transition from Wood to Fiberglass?

Great question. Something I too would like to learn more about. I'm not old enough to speak w' authority. This question is probably better put to Tom Allen Sr., Bill Clausen, Jim Carson, or Dick Hallagan. But I'll share some general information.

The transition of professional built production boats was quite rapid occurring between about 1962 and 1967. Hull numbers below #8,000 are almost all wood and hull numbers over #9,000 are mostly all fiberglass. At the time, of course, there was much concern for keeping the older boats competitive. But the ease of maintenance of the glass boats and the simpler construction drove the market effectively killing production of wooden boats in very short order. Simultaneously people upgraded their boats and the competitive issues quickly disappeared.

From what I read in old yearbooks, back in the late 40s, a much bigger issue was competitive imbalance between wet and dry sailed boats. The weight difference was often a hundred pounds or more.

FINDING VALUE IN WOOLIES

What has Happened to All the Old Lightings?

A big piece of what Craig Thayer and I work on. As boats have been bought and sold so many times over the years, people move, or they don't join ILCA, the Class records have become out of date. As we learn of boats we enter them into a database we maintain. Every year or so, I try to reconcile with the Class membership data. We have located perhaps two-hundred boats in the past seven years.

That means there are still thousands out there waiting to be found. Sure many have been destroyed but many are still out there on the water. All day sailors and so many happy owners. They are invisible to the bulk of ILCA membership, who are primarily the racers but none-the-less happy Lightning sailors.

Let me put in a plea. If you know of an old boat somewhere, let the Class office know about it. Our goal is to provide a level of support to these folks and by extension encourage them to join the ILCA.

What is Happening to Preserve the History of the Class?

Not enough. The fact that #1 is in Mystic is fantastic and very important. But how many people know that #2 wasn't built by Skaneateles and it has a single plank bottom?

Most Lightning sailors don't understand that Skaneateles Boat Works was not trying to build a high quality boat. They were building a price point sensitive, production boat, using high speed construction techniques. They sold so many boats because they were a great design and low priced family fun.

We have a long term project scanning the old yearbooks and putting them on the internet. These old books are a wealth of information and I often spend my evenings looking through them researching questions people have emailed or phoned in. The pictures are great, but I think the old advertisements are the best part.

So many builders have produced the Lightning. So many crazy ideas for spinnaker design. The innovation of materials and evolution of fittings. You see it all in the history of the Lightning.

It would be great someday to compile a directory of who built which boat. How many were home built. How many were built by each of the production builders and when. How many hull numbers were sold, but no boat was ever measured.

What are the hull measurement differences and how have they evolved over time.

So many questions. These are the topics of conversation at our annual Get Together. The fact that we actually race the old boats is really fun but only part of our events.

So What is The Value of the Lightning and in Particular the Classic Lightning?

Impossible to measure.

You've got to start with fun and friendships just like the modern glass racing boat. Different in that it is not competitive but every bit as much fun.

It is about meeting all the people that just walk up in the launch area and tell you that they too sailed a Lightning just like yours fifty or sixty years ago.

It is about the challenges of maintaining something old in useable condition or giving a second life to a boat headed toward the landfill.

It is about the skills one develops in doing this. It is learn as you go. It is about challenging yourself to do what you've never done before. It is developing creative solutions to problems.

It is about family fun and family projects. It is about preserving the history of the Class or the time period in which your boat was built. It is researching the history of each other's boat. Who owned them, were they fast, where did they sail.

And it is about passion for something beautiful. Nothing prettier than a group of Lightnings with their Jumper stays rocking through the chop in ten knots of breeze.

SPARKMAN & STEPHENS BROCHURE

Courtesy of Sparkman and Stephens

SPARKMAN & STEPHENS



Lightning

SPARKMAN & STEPHENS BROCHURE

SPECIFICATIONS

★ *Double Planked Bottom* of selected vertical grain clear cedar. The side planking is full length vertical grain clear cedar ship-lapped.

★ *Mahogany Frame and Trim.* The keel, bottom and deck frames and practically all hardwood parts are of Philippine Mahogany, resulting in a strong, light hull of superior weight distribution.

★ *Bronze Fittings,* plain finish, specially designed for LIGHTNING. More efficient and attractive than stock fittings. The tiller is pivoted to permit raising and lowering. The centerboard is operated by a specially developed winch.

★ *Racing Finish.* Three coats of the best marine finishes carefully rubbed between coats. Bottom, racing copper bronze; topsides, gloss yacht white; deck, Skaneateles gray-green; inside of hull, French gray; spars, cockpit trim, transom, rudder, tiller, gunwales and centerboard case, three coats of best spar varnish.

★ *Light Weight Spars.* Expertly made of material carefully selected to give the greatest strength and lightest possible weight aloft.

★ *Racing Sails.* Jib and mainsail nicely finished and of good cut and material are standard equipment. They are complete with headboard slides on hoist and foot, battens, bag, LIGHTNING emblem and racing number. See separate list for spinnaker prices. We will quote and supply sails by any sail maker, allowing credit for standard sails.

★ *Rigging.* Two lower shrouds, two upper shrouds with spreaders, two jumper stays and struts, and permanent backstay all of 1 x 19 double galvanized plow steel wire rope. Complete running rigging of manila. See separate list for prices on spinnaker rigging, which includes double ended spinnaker boom with fittings for tack and guys at both ends; hal-yard with snap shackle, block and cleat; guys, sheet and cleats for both.

★ *Outboard Well* permitting the use of standard outboard motors can be supplied at small extra cost.

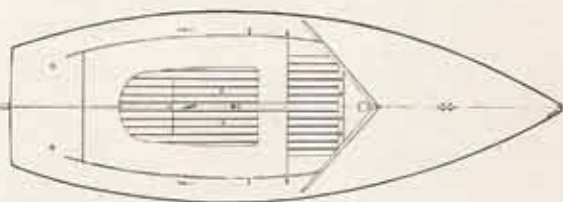
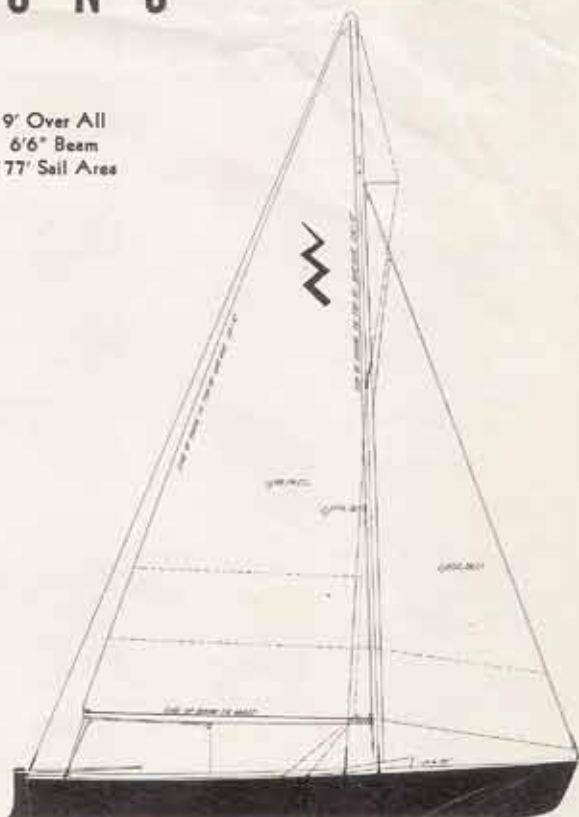
★ *Weight* in racing trim approximately 820 pounds, crated for rail shipment approximately 950 pounds.

★ *Truck Delivery* can usually be arranged to destinations in eastern United States, effecting an economy and having the added convenience of delivering the boat to the exact spot you wish, often including launching.

★ *Easy to Buy.* We can arrange a time payment purchase plan for customers in most states which necessitates a down payment by the time of delivery, amounting to \$175. The balance may be paid over a period of ten months. Otherwise terms are 30% with the order and the balance on delivery.

★ *Note.* If at any time it is, in our mind, for the improvement of the boat or our service, we reserve the right to alter these specifications without notice.

19' Over All
6'6" Beam
177' Sail Area



SKANEATELES BOATS INC.

Fine Boats Since 1893

SKANEATELES, NEW YORK

Printed in U.S.A.



SPARKMAN & STEPHENS BROCHURE

Lightning

WONDERS can happen! LIGHTNING is one of them. What a thrill is waiting for you when you first step aboard this remarkable new boat! That thrill becomes an exciting reality when you take the tiller and marvel at her convincing performance under sail, her roominess, her amazing versatility.

LIGHTNING is the answer to long-felt needs of sailors and clubs all over the world—a moderately-priced, *faster* boat for the challenging demands of the crack racing man, and at the same time meeting the requirements of a very comfortable and seaworthy day-sailer for larger parties. You'll agree that LIGHTNING does everything a fine boat should do. And you'll find that she keeps right on doing it—without ever losing her lovely balance—long after other boats have scurried to their moorings. It remained for the designing genius, the experience and superior technical knowledge of Sparkman and Stephens to achieve the ultimate fulfillment of such diversified needs.

NINETEEN FEET OF FL

Designed by SPARKMAN and STEPH

A Faster Boat—Beautifully Balanced!

In LIGHTNING, Olen Stephens has designed a boat that is fast—distinctively faster than other boats of her size and sail area. Close winded and beautifully balanced, you feel that unmistakable thrill of a thoroughbred as you take her up to weather. The thrilling response and effortless speed in light weather give no hint of her reassuring stability and docile, yet awe-inspiring power in rugged going.

The complete lack of irritating helm will be a constant source of wonder to you. In addition to this inherent quality, the long narrow centerboard is designed to shift its center with the raising pennant in such a manner that, whatever the weight of wind or combination of sail, the feel of the boat may be adjusted to a nicety.

In what would normally be an overpowering wind, one man can sail with ease under jib alone or close reefed mainsail, and so regulate the balance that he may actually leave the tiller and walk about the boat! Going to windward under such a rig or lugging full sail, there is no pound but the determined, sea-kindly motion of a deep, heavy yacht.

Running under working canvas or tearing along behind her tugging parachute spinnaker, LIGHTNING is steady on her course, without the yawing or rolling you'd normally expect. That's why you'll say, in performance, she's the smaller version of a large racing yacht. Yes, Sparkman and Stephens know boats—not only how to make them sail, but how to make them sail at top performance all the time.

An Aristocrat Afloat

Along with this built-in performance you'll see distinctive character in her appearance. You'll like the graceful ends, the sheer, splendid freeboard and handsome rig. You'll like the aristocratic sail plan with its high fore triangle, permanent backstay, double jumper stays and spreaders. LIGHTNING has the beauty of functional simplicity, *plus* the very essence of efficiency and ease of handling.

Notice how the modern parachute spinnaker completes the picture of a fine yacht. You may know the thrill of sailing—even fast sailing in all kinds of weather—but this kite, lacking in other classes of similar size, adds that enviable touch of finesse and develops the skill demanded by the large racers.

Whatever may be your wonder at the exhilarating performance and sparkling beauty of LIGHTNING, the relaxing comfort of ample room so subtly blended into her trim appearance will be your most agreeable surprise. It makes the miracle complete.

On stepping aboard, your first impression is her remarkable steadiness. Here, you will say, is a big, steady, able boat. Then you walk about, forward or aft, around the deck, with complete freedom. Plenty of deck space to loaf about, and new comfort in the roomy cockpit. But wait—

You'll have to use this cockpit to know how right it is. Seats the right height for leg comfort—the right width to stretch out on—coamings just high enough and at the best angle for back comfort—a low centerboard case that crowds nothing, and a handy, clear space forward where you can stand while working halyards or setting the spinnaker.

Sailing parties? Bring along those friends who want to share your sailing joys in LIGHTNING. Even a group of ten envious



S K A N E

SPARSMAN & STEPHENS BROCHURE

LASHING PERFORMANCE

YACHTS . . . Built by SKANEATELES . . .

people will not overtax her generous accommodations. It's almost impossible to ship water, and any spray that comes on deck is stopped by the graceful Vee-coaming forward. All this is worked into the deck plan in a practical way that you'll like.

In fact, it's a sure bet you'll like everything about LIGHTNING from her looks to how she lives up to them. Whether you are a veteran of many seasons or a novice seeking relaxation and wholesome pleasure in sailing, LIGHTNING is the boat you've dreamed and built so often in your mind. Now she can be yours.

What it Means to have your LIGHTNING Built by Skaneateles

How fortunate that you can match this excellence of design with unmistakable soundness of construction and refinement of detail in a SKANEATELES-BUILT boat! Here in the SKANEATELES LIGHTNING is the culmination of over forty-five years of sailboat experience.

You will get a far better boat today at a much lower cost than was even imagined a few years ago—thanks to the great strides which Skaneateles has made through constant study and the advantage of highly specialized quantity production. Skaneateles is the largest builder devoting their efforts exclusively to sailboats. In the SKANEATELES LIGHTNING price and quality meet.

For instance, consider the double planked bottom—an outstanding feature of Skaneateles construction. Long recognized as the finest building practice, its use was confined to the most costly yachts until adapted to boats of this type a few years ago by Skaneateles.

Two layers of plank are used. The inner layer runs athwartships, and the outer layer fore and aft in the conventional manner. Each layer is fastened to the frames and the layers are fastened to each other. The total thickness of the two is the same as the thickness of the ordinary single planking.

Crossing the plank in this manner obviously creates a tremendous increase in strength, with no increase in weight. Not a seam runs continuously through both layers of plank, not even at the garboard, and no caulking or putty is necessary. These flush seams mean a fast, beautiful bottom. Not a leak from drying out! And it will stay tight for years.

In the specifications you will see that the SKANEATELES LIGHTNING has mahogany for practically all hardwood parts. This has been done as a result of a long study of weights and proper weight distribution, so essential to the best performance of center-board yachts.

Again, notice how the efficient centerboard winch, installed under the fore deck, makes handling the board extremely easy and possible from any point in the cockpit. The specially designed bronze fittings are attractive, and do their jobs better than stock products available for the purpose. You'll like the seamanlike execution of the rigging and how naturally handy it is from the hinged tiller to the pin rail.

When you check these and the many more exclusive features of SKANEATELES LIGHTNING in the detailed specifications, remember that long established master builders who specialize in this type of craft are making such extra quality possible. And possible at a price which means the fulfillment of life-long ambitions for many a sailor or would-be sailor in moderate circumstances—to own and sail a truly fine yacht.



Heavy weather finds Lightning in her stride. Here are thrilling requirements and Lightning meets every challenge.



Running under working canvas or tearing along behind her tugging parachute spinnaker, Lightning holds steady on her course.

The thrilling response and effortless speed in light weather gives no hint of her reassuring stability and docile, yet awe-inspiring, power in rugged going.

SKANEATELES BOATS

THE VALUE OF A LIGHTNING



BILL CABRALL

On October 15, 1938 Rod Stephens came to upstate New York and took Lightning #1 (then only a few weeks old) out for a sail on Lake Skaneateles. It was a blustery day, blowing 25 to 30 miles per hour with a nasty chop. For several hours he sailed the boat in every imaginable way, with and without the spinnaker, with and without the jib, with the main reefed without jib, without a reef with the jib, the centerboard clear down, the centerboard half way, etc., etc.

Finally, Stephens took her out alone, beating against the wind without touching the rudder merely by lowering and raising the centerboard. He came back on a reach the same way, stepped out of the boat and remarked, "It is beyond all my expectations. To my mind she is the finest small centerboard boat ever built."

This story comes from a History of the Lightning Class written in 1947 by Ben Ladenburger, then Honorary Commodore of the Lightning Class. It demonstrates that from their inception, Lightnings were something special. Note: it also shows that Rod Stephens was something special—anyone want to try single handing their boat in 25 knots without touching the rudder?

The boat was designed by the legendary Olin Stephens of Sparkman & Stephens to be a fast comfortable daysailer suitable for racing. His brother Rod's feat with the very first boat shows that they succeeded in creating something truly special.

Early histories of the Lightning Class also record that the boat was designed with the idea of a strong Class association in mind. Sparkman & Stephens gave the rights of the design to the ILCA so that the royalties from each boat would go to strengthen and preserve the Class.

The ILCA was formed on January 12 of 1939. By then twenty boats had already been sold. By 1941 seven hundred boats were registered and forty fleets had been formed. By 1947, 3,014 boats were registered. By 1955, 5,900 boats had been built. The 10,000th hull was registered in 1967. The rate of increase has slowed a little since then as fiberglass boats last longer.

By any standard, this is phenomenal growth, especially since it occurred during the Great Depression and the Second World War. Think about that for a minute. I am writing this article in 2010 at the tail end (hopefully) of the greatest recession since those depression years that spawned our beloved boat. We have also been a nation at war for most of the last decade. Has your response to these events been to buy a set of plans and a pile of cedar? Have you called Nickles or Allen Boat Works to order that new hull? Our grandparents did and as a result we are the beneficiaries of the greatest small boat organization ever formed.

I believe that this combination of an inspired design, coupled with a strong one design organization, and generations of dedicated small boat sailors sharing the skills and technology to create, maintain, and sail these boats at a reasonable cost is what makes Lightnings the best value in sailing today.

Go back to the design. Lightnings are a large open dinghy with hard chines, a moderate, well controlled sail plan, and a big spinnaker. The hulls are easy to build or buy at reasonable cost. The big open cockpit means you can take the kids and your friends out for sail. It's easy to get five or six people in a Lightning cockpit on a nice day. For the price of a dinghy you can have a small yacht.



Bob Astrove's Lightning and Caddy

THE VALUE OF A LIGHTNING

I've never heard it said, but I personally believe that Sparkman & Stephens knew exactly how big an American two-car garage was. A Lightning is the biggest combination of car, boat and mast you can fit into one. The mast has to go in on the diagonal up in the rafters but it fits. This makes it possible to keep a Lightning at home, in the garage you already have, and makes it easy to care and maintain the boat. After all, it's right there, just past the washing machine. No other boat offers performance like this – smaller boats won't carry the people and bigger boats won't fit in the garage. Own a Lightning and your whole family can go sailing from your own front yard.

The size of the boat also means that there is plenty of room for a three person crew to race the boat. They can be three normal sized people of either gender to boot. According to the latest ILCA newsletter, data from last year's World Championship indicates crew weights averaged 498 pounds, from a low of 423 pounds to a high of 620 pounds. Better yet, there was no statistical correlation between crew weight and finishing position. This means that any three people can be competitive in the boat. You don't need to cherry pick a crew based on weight, height, or gymnastic ability. You can race, and race well with your spouse, your kids, or the kids next door. This makes Lightning sailing a multi-generational activity, where many of our best competitors are third or even fourth generation Lightning sailors. When you take your whole family racing, you can race every weekend. And downwind, the three-hundred square foot spinnaker means you can really fly!

The International Lightning Class Association (ILCA) was created when the first boat was only four months old. Through the years a tremendous amount of work has been done to create and maintain the specifications, manage the growth and evolution of the design, support the local fleets and promote the Class. The Class has a full time secretary which provides for tremendous clarity and continuity in our operations. While other classes live or die on volunteer enthusiasm,

Rod Stephens



the ILCA keeps right on growing every business day, maintaining our history and traditions, and building for the future.

In most one design classes, if seventy boats showed up for the National Championship, press releases would get written touting such a wonderful year. In the Lightning Class, we wonder why the numbers are down from one hundred, then we do something about it. Recent initiatives include a very successful boat grant program that provides competitive boats, sails and coaching to several young teams a year, and the International Fleet Development program that subsidizes transportation of boats to new or growing fleets if the gaps created are backfilled with new boats.

Even more important than a great boat, however, are the fantastic people that make it a legend in its own time. I have only been in the Lightning Class since 1992, so I am just beginning to have enough experience to understand the magic. The Lightning Class is filled with the best people I have ever sailed with. In addition to being addicted about their boats, Lightning people are casual, easygoing, friendly, and fantastic sailors. Regattas feel as much like family reunions as sporting events, visiting the same great places again and again. The beer is always cold at a Lightning event, the smiles are always there, and even though the racing is as close and competitive as any you'll ever find, there are very few protests at major Lightning events.

I think the heritage of the Class has been crucial to creating/attracting multiple generations of fantastic people. When Sparkman & Stephens granted the rights to the design to the ILCA, they established a standard for generosity, setting the bar for all to follow. During the wooden



Marty, Martha and George Fisher

THE VALUE OF A LIGHTNING



Courtesy of Sparkman and Stephens

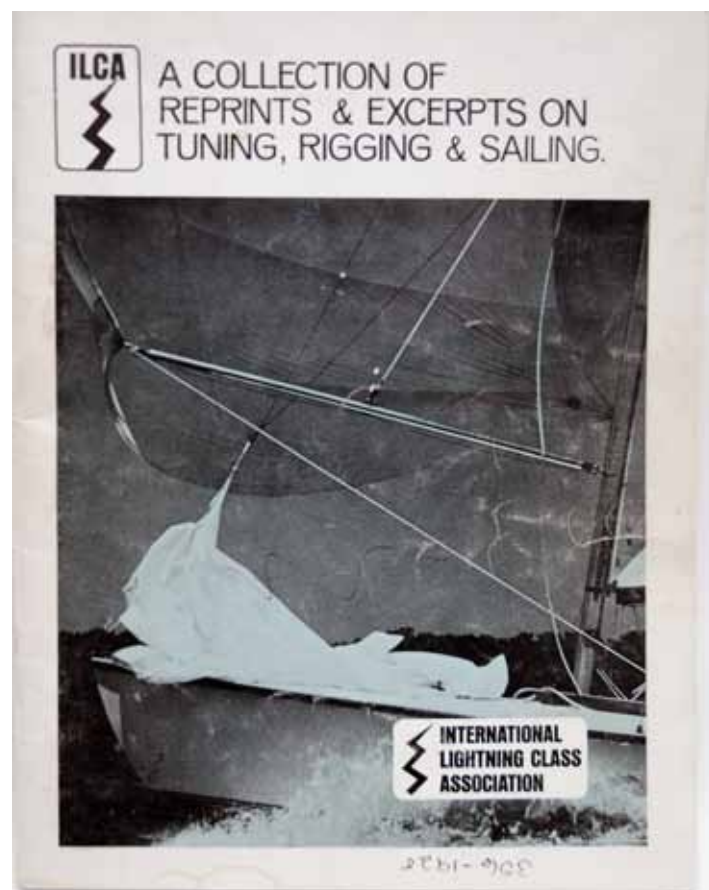
ILCA Fund, the Boat Grant Program, the Limbaugh Fund, and the History fund). Most one design classes are lucky to survive on efforts of a dedicated volunteer or two. We have an army.

A month ago I rescued the fourth wooden Lightning that's surfaced since I moved to Denver in 1995. Along with the stuff that came with the boat is a Lightning specific magazine containing sixty-five pages of articles published in 1971. On the inside front cover I found a paragraph that reads "This book has been published and donated to the Lightning Class by Lightning Sailor F.C. Jacobson through the Jacobson Advertising Agency and Universal Printing. Paper stock donated by Lightning Sailor Bill Hayes of Steen Macek Paper Company. Make up and preparation donated by Lightning Sailor Tryg Jacobson. The Authors and Photographers who prepared the original material are again thanked for their contribution to Lightnings." As I hold this book in my hand and realize how much effort it took to create, I want to thank them too.

One result of all this is that the Class and the wonderful people in it grow on you after a while. I am beginning to discover a need to live up to their standards, to try and be wonderful myself, at least occasionally. I don't know if I could ever come close to being a Greg Fisher or a Jan Davis or a Tommy Allen, Jr. (Although my girlfriend does wish I could be as good looking as his dad! Alas, some things are impossible.) I have discovered though, that I can volunteer to be a Fleet captain for two years, instead of one. I have

era, when incredible numbers of boats were being built each winter, a strong sense of camaraderie developed. Class records indicate forty fleets were organized and seven hundred boats were built in the first two years. That's a lot of varnish, a lot of time out in the garage with your friends, and a lot of beer. When the spring came and that boat hit the water, you could sail with your kids, or the neighbors kids, or everyone that had a hand in creating your new boat. Then the next winter you were in their garage building their boat. On the water you were going to race hard but clean also because those other boats were your friends, your neighbors, their kids, and the guys that knew how to plank your hull and glue up your mast. If there is one cardinal rule in yachting, it's that you never, ever piss off your boat builder!

As a result we now have third and fourth generation Lightning families, full of people in their twenties and thirties who are genetically primed to sail the boats, be the Fleet captains, organize the regattas, and run the Class. When I go the Southern Circuit this year I will be going to the 52nd annual Lightning Miami Midwinter Regatta, and the 63rd Annual St. Petersburg Winter Lightning Championship. We have an organization with five executive officers, a paid executive secretary, thirty-one Vice Presidents around the world, and thirty District Commodores. According to the 2009 yearbook (yes, we publish a yearbook in addition to a Class newsletter), there are four separate charitable funds you can donate to in order to help promote the Class (the



THE VALUE OF A LIGHTNING

to drive from Denver to Miami and back each March for the Southern Circuit, and I don't care if there is a blizzard in the way. I'm prouder than I'm willing to admit that I finally qualified for the Master's (another great regatta to go to and I only had to wait fifty-five years to get in). This year I am going to go the Class meetings and discuss safety lines and other thrilling topics. "I'm sorry Miss but he drove 2,500 miles through the snow to vote for towlines. I'm afraid there's nothing we can do. Just give him a cold beer and send him down to the lake. We don't think he's dangerous or anything..."

So young sailors, beware! when some guy from your club buys you a beer and gives you an application for the Boat Grant Program. You may think it's because you can win, and that a North American Championship trophy or a Rolex Yachtsman of the Year award would look good on your mantle. But we know it's because after thirty or forty years of Lightning sailing, you might make a great District Commodore or your kids might make a pretty good Class President. After all, your grandfather did.

Implicit in the idea of value is the concept of cost and the return you get on your investment. Lightnings shine here also. It takes a surprisingly modest investment to own and race these boats. They fit in a standard garage and can be towed by a standard size car. Yep, buy a J-24 or the latest sport boat and you have to buy an SUV and all that gas just to move it around. A Lightning can be towed by almost anything you can put a trailer hitch on.

Historically, Lightnings have cost between one-half and two-thirds the price of a family car. The increasing cost of petrochemicals is pushing that some but it is still a valid ratio. Good used boats are surprisingly affordable and some may have even appreciated in value! According to the classifieds on the Class website, the guy I sold my last boat (#15004) to could resell it at a profit. (I knew that boat went too fast....!) In short, an evening's search online will demonstrate that you can own and operate one for an order of magnitude less cash than anything bigger and get a lot more out of it than anything smaller.



Three generations of Haydens



Caption Bob, his son and the kid next door, Matt Klise

And what does the Class expect in return for all of this? We want you to go sailing! Take your Lightning and put it in the water, day sail it, camp cruise it, join your local Fleet and race it Thursday nights at the local lake.

If you ever wanted an antique sports car but can't afford a Bugatti, there is a wooden Lightning looking for a new owner in a barn near you. Did you know fresh varnish lowers your blood pressure? Don't know what a paint brush is but have a computer that runs at sixty-four Terabytes per second? Your Fleet needs a website.

When you win your first local race, write an article for your sailing club newsletter about how you did it and how it felt. Send that article to the ILCA and see it published in our newsletter. Once in your life, sail the Southern Circuit. Actually, it's impossible to do the circuit just once; you'll have to come back – ten or twenty times.

Join your fleet, your sailing club, and the ILCA and make sure your crew does too.

But most importantly, this is what you must, once in your life, do with that new Lightning of yours. That kid-the one down the block that walks real slow past the house each time your boat is in the driveway. Yeah, that one. Take that kid out for a sail, put a live spinnaker sheet in his hand for the very first time and watch the look on his face that no video game could ever produce. Then you'll know the value of a Lightning.

Side Note: When Bob Astrove was buying his new home, he measured the garage prior to signing the contract. At the time he did not own a Lightning (the only time since 1978). But he knew he would have another one sooner than later. The 1960 boat cost \$100 and the 1980 Cadillac was free. Most importantly, they both fit into his garage!

