

The following was put together by Susan and I* as the final chapter in a book for our grandchildren about our 7000 mile sailing cruise in 2005 thru the Great Lakes, Canada, the East Coast and the Gulf of Mexico. Our grandchildren may look at buying a sailboat someday. This chapter will hopefully give them some principles to use in boat selection and a description of why we chose the boat we used for our Canadian adventure. It may also be of use to others that are looking at a sailboat purchase. Jul '07

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Chapter 15 Why the 3rd Bayou Baby was a **SAGA 43**

(& Boat Description)

We spent seven out of eight months sailing and sleeping on a boat on our 2005 Canadian Cruise. Were we ready to get off and stay off? Not at all. But we had gotten back home and sadly all parties end sometime. This chapter describes the boat (a SAGA 43), we used for our Canadian adventure, and some of the author's comments and prejudices on the boat selection process.

'OUR' BOAT SELECTION PROCESS

The following describes our boat search methodology and key questions we addressed.

Some of 'Our' Early Boat Buying Consideration

The gross majority of sailboats are used in bays and lakes. Three boat builders each produce hundreds of boats per month to meet that need. Many of these boats are also used successfully offshore. Yes, and one can haul firewood in a Cadillac too, but it's a silly reason to buy a new Cadillac. i.e. get a vehicle (or a boat) for what it will be most used for. Susan and I wanted a boat that was specifically designed to sail offshore. Offshore is where we'd been sailing for the previous seven years and that's where we wanted to expand our sailing.

One of the chief criteria for an offshore cruising boat is its 'comfort factor' in a seaway. That's a formula that gives a rough screen on how boat geometries compare for being tossed about in heavy seas. More on the formula details later, but the primary numbers of interest are weight and beam. Beam? A narrow boat is tender (heels more) but once the heeling is balanced by the keel, a narrow boat locks down more and is less sensitive to rolling. It rides up over the waves vs rolling with the waves. That's why deep sea fishermen on wide flat bottomed motor boats are often excellent chummers.

Bay boats don't often face heavy seas, where rolling is an issue, and for them narrow just means standing on the sides of the seats to sail. A narrow boat also pays a penalty in cabin space for dockside entertaining. Conclusion, the mass boat marketers design boats that the most people want, wide.

That put Susan and me in an awkward position because the specialty offshore boats don't have the economics of scale. i.e., Specialty boats 'ain't' cheap. That made us look into whether we were really O.K. with the longer distance cruises we were getting a bigger boat to do. We had a lot of overnight

sails behind us, but how about just the two of us on multiday (and night) passages? We checked it out with a two day passage on our old 1984 HUNTER 34 from Freeport, TX to South Padre Island, TX. Conclusion: it worked well so we pressed on with finding a new boat. To our surprise, multiday passages are easier than overnights because one gets into a routine and sleeps better. (Yeah, yeah the fatigue makes you start sleeping, too)

Bigger? Yeah, the first mate's enjoyment is key to sea time and her comfort adds to her enjoyment. Bigger is 'generally' more comfortable, at the dock and offshore. How big? Well, how much money do you have available? But it's more complicated than that, as will be discussed later.

This chapter describes how Susan and I picked out our SAGA 43 and why. Along the way, this chapter also gets into some of the things almost everyone should think about as they consider a boat purchase. Our SAGA 43 is not the best choice for every sailor's needs, but the checklists of things to consider and prioritize are fairly universal. The comments are designed for our grandchildren but may be of use to others as well. Priorities will vary, but isn't that great.

Who is Going to Use the Boat?

As one looks for, 'What's the best boat for you?', the first issue is the definition of 'you'. Is it singular or plural? Is the boat something to use as an individual, a couple or a family?

Let's start at the back and work forward. Family usually means children. If they're small, you need to take their safety seriously. But they can go to sea at 'any' age. Just use your head about how. The cleverest thing I've seen was a pair of children's car seats strapped into a cockpit. If they are teenagers, one needs to take their school/work schedules into account. Specifically, having enough sleeping space is a reasonable requirement. Children helping run the boat are children having fun and children learning to be responsible. But 'depending' on the skills and availability of children (of any age) to be able operate the boat is not a reasonable assumption. i.e., Don't buy a cruising boat that has to be operated by a large 'free' crew.

Couples. Ah, here's where it gets interesting. A couple with the same dreams regarding boats is both blessed and rare. But it happens. The key is to get at least close to the same wave length before putting money down. No, you don't want to waste money, but even more important, remember the old joke about trying to teach a pig to sing. The result is a waste of your time and an irritated pig. The animal reference is offensive? O.K. how about, why make someone you love miserable?

Short answer: Fellows, make SURE your wife is having fun. Boat clothes, after sail dinners, dock parties, whatever. She wants to sail to a certain place. Hey, it's sailing. Let her steer, navigate, pull ropes or whatever she feels comfortable with. Also important. No one is having fun when they are scared xxxless. Start with easy, short FUN sails. (In our case Susan's fun included topping off a sail with wine. Hey that's O.K., we were back on shore and I was driving.) Pay attention to mal de mer, nausea, too much 'feel' of the sea. Use whatever pills, patches, etc. that help, but address the issue as needed. The good news is that repetitive sailing, without too long in between, sees the problem alleviate.

Working at making sailing fun for a wife cuts both ways. If you are a wife with a husband who has a boat dream and wants to share it, how about giving it a serious try. You do love him too, don't you? The key for wives is to think of the adventure thing. Sailing is proactive involvement, not being entertained as with movies and TV. Some and/or occasional discomfort is the price one invests for the rushes of amusement park excitement and the joys of postcard scenes. It's physical, but so is being a

gerbil at a gym. Are you a wife that dislikes being left alone? Then go join the adventure. It was togetherness that brought you together in the first place. (More on couple sailing is in Chapter 1.)

Crew size is important when looking at boat layout. If you're in the couple category, you're actually in need of a boat that can sail single handed. Why? Aren't you a couple? Yes, except when one of you is off watch and trying to grab some sleep. Single handed means things like having cockpit adjustments for sails, things like autopilots and things like navigation equipment that provides critical info where you need it and when you need it (at the steering station and doesn't need a lot of adjustments).

Don't know much about boats? Hey, most of us started there. My strong suggestion in this case is to start small and plan to move up in size later. How small? As small as the wife can enjoy. Susan and I went thru four boats: 11 ½, 25, 34 to 43 feet. That gave us three advantages. 1. As we moved up, we knew much more about what we wanted. 2. We learned sailing (read, made more of our mistakes) at a smaller scale. 3. We appreciated (with both definitions) what we had as we moved up in size.

Learn what was wanted? Sailing is the stuff of dreams, not logic. Dreams shift as experiences grow. If you share the early experiences you will more likely share the later dreams. I was looking at a catamaran as a second boat. Susan's dream was more along small cabin boat lines. She was right (again). The point is: Her participation as a willing boat partner moved us way further down the boating lane. Common sailing goals are almost second nature to Susan and me, because we have the same sailing experience base. Specifically, we don't always agree, but our discussions of pros and cons have the same reference points.

Learn at a smaller scale? Although grandmothers don't like getting tossed in the water in small boats, a small daysailer gets one used to the quick response instincts one needs in storms in larger boats. Important? We know one couple that started with a 40+ footer and started with an ocean cruise. Sadly, she died. Very, very rare, but it can happen. The time to learn is not offshore in a storm. Susan and I have been in nasty weather (if one calls 55 knot gusts and double digit seas nasty) but we knew what to do and had picked out a boat to do it on. No, no one is bullet proof, but experience does matter.

If at least one of the couple is a novice, avoid the high speed daysailors. Dumping crew in the water on a fast, tender boat is missing the point. The need is for an easy to sail boat (preferably with both a main and a head sail) that is good for both putzing around to enjoy the water and for learning the basic principles of sailing.

Again. If part of the crew are new to sailing, start as small as the crew can enjoy it. That may vary from 12 to 27 feet. Part of the issue will be a dignity factor. Dignity, what's that got to do with it? For the guys, bloody little. But wives don't like showing up in a 12 foot daysailer on a bad hair day, when their contemporaries are stepping off their cabin boats, dressed to the nines for diner and not a hair out of place. I mention this because I've seen some strange attitudes that transcended any logic I knew of. A little reflection noticed the above factors were probably more in play than the stated objections and comments made. The point is, let the first mate have situations where she can be proud of her sailing achievements vs feeling put down. Specifically, be careful with how you handle fancy yacht club entrances. On the other hand, her pride may have y'all looking at bigger boats.

Appreciate the new boat? We've seen people that complained about the size of their on-board showers? This was someone who never had to go over the side with a bar of soap after three days without a bath.

So when does one scale up to a bigger boat? One set of criteria might be when you have confidence you can handle the current boat and when the wife says she's having fun but would have more fun with a bigger boat. Economics may also rear its ugly head and may delay the size and timing of the jump up. BUT, you have a boat to play with in the meantime.

BUT BOTH OF YOU ARE EXPERIENCED SAILORS? Go for whatever your pocketbook, confidence level and sailing objectives dictate. ('Experienced' does not mean one charter or daysail where someone else operated the boat.)

You want the boat for racing? In this case, your worries rarely involve a wife. Your concerns are finding a boat that can win and a crew that has the same dedication to winning that you do. That last one is tough, because people with that much dedication often have their own boat. Sadly, I don't have that much blood and guts racing experience so I will defer racing boat discussions to others and concentrate below on cruising boats.

Where is the Boat to be Used?

One reference (who deserves better than for me to forget who he was and what magazine I read his article in) segregated boat usage into three categories: inshore, coastal and ocean. That coincidentally is how the Coast Guard also categorizes licenses. The categorization has significant impact on boat design and should have significant impact on boat selection.

The size of the seas are the major separation of the categories. As one moves from bay boats thru to the ocean crossers, there is an upward progression of robustness, offshore comfort factors, weight and cost for the appropriate boat. There is a counter progression as speed, dockside comfort and stiffness (level sailing) decline in boats designed for ocean crossing vs bay sailing.

The coastal sailors are in the middle. Why? Aren't they in oceans also? Yes, but they have more options to wait for better weather than boats already in the middle of an ocean. Coastal boats also have to be robust and need good comfort factors. But they don't have to go that last inch and give up so much in sailing performance, especially when 'a well designed coastal boat' can use that sailing performance to get on thru the storm and get into harbor. In the middle of an ocean, getting in is not often an option. If you're looking at coastal sailing, you want BOTH sailing performance AND offshore robustness and wave action comfort factors. Expect to do some searching and wallet cracking.

There may be some bragging rights to having a blue water boat but if the crew 'ain't' going there, at least for an early boat, then why pay the cost in money, bay sailing performance and entertainment comfort. Do the bay stuff first.

The good news with bay boats is that is where the customers are. Specifically, most people sail in bays and the high volume boat producers build boats for that market. That keeps costs down and availability up. One word of caution. Be careful with selecting 'used' bay boats. They were not built for robust usage and time is not kind to all of them, especially the ones that have been pushed a lot in races.

Can one sail offshore in a bay boat? Of course, but like that Cadillac hauling firewood, do it with some judgment. The main judgment factor is the weather of course. One item to note. Almost any boat will handle bad weather better than the crew. The problem with a bay boat offshore is the extra bouncing the crew gets from a small wide, flat bottom boat. The shoal draft keels of bay boats also take longer to get back home if home is upwind. Longer? Oh yes, the upwind penalty of slower, shoal draft boats is significantly magnified when plowing into heavy seas. One has to weigh that against the extra care and

limitations of a deeper keel in a shallow bay. The BIG issue is buying a boat suitable for where you are going to sail it.

The 'where is the boat to be used' also gets into 'how is the boat to be used'. Are you looking at: Caribbean retirement? Short/long duration cruises? Local/foreign cruises? Etc, etc? Are you getting a boat because you like to sail or are you getting a boat to be on the water going somewhere? This is not a trivial question? One of the issues that comes into play here is the draft. Deeper keel boats are a dream come true when going upwind. Not interested in tacking into heavy seas? When the wind is on the nose, you are perhaps happier turning on the diesel and/or cruising the ICW? Then focus on the shallower keels. The only wrong choice is one that doesn't fit 'your' preferences. Just think about those preferences 'before' you select your dream boat.

O.K. so which kind of boat do you want? If you go thru a sequence of boat purchases from little to big, you will likely also go thru a sequence of boat usage from day sails to weekend cruises to vacation cruises. As such, you will have ample opportunity to extend from inshore to coastal. Ocean? It's fine to sail in an ocean, but for the sake of keeping my taxes down supporting Coast Guard costs, please don't start by trying to cross one. Take your boat onto offshore water and see how it does. See how y'all do. As one scales up in boat size, water size and skill, the enjoyment goes up as the range of places to go scales up.

Boat Brokers

These guys (& ladies) earn every cent they make. They have to kiss a lot of frogs to find a prince to buy a boat and get them commission money to feed kids. Almost all brokers are knowledgeable. How they use that knowledge is the separation point. For openers a sailboat has no utility as does a car/truck. It's ALL emotive. And oh how the emotions vary.

As with every profession, there is a mixture of people in it. Some brokers are ethical with a capital E. They are interested in maintaining a reputation that gets them repeat and/or referred customers. Of course there are a few that are almost comical in how they prey or try to prey on newcomers. We wanted a boat with sailing performance and commented negatively on the speed of a particular boat being offered. Salesman's response: Oh, I was dead wrong, that type of boat won the Harvest Moon regatta. What he didn't mention was what class that boat won or what a whopping handicap that boat had because it was so inherently slow. We wanted a boat that would get across a finish line early, not one that got a trophy because of a high handicap.

Another example was our desire for a boat with a rub rail vs the one being offered. Salesman's answer: He would give me docking lessons. I could always use more docking lessons, but the ugly truth is I already had a captain's license (which the salesman had been told) and after hundreds of docking exercises, I still wanted a rub rail.

The moral to the two stories above is that the boat brokers are there to sell the boats they have vs sell you the boat you want. Since it's an emotive purchase, their approach is sometimes to tell you what you want (& which corresponds to what they have). Conclusion: Listen to the advice and expertise of the boat brokers, but remember their objective is not the same as yours.

Internet

The internet is great, but only after you really know what you want. You're putting money down for a pure toy. As a minimum, y'all need to walk around on what you're thinking about buying. Brokers can help with that. If they have what you want, they can also help guide the boat buying process.

Our previous boat, a 1984 HUNTER 34, sold to my surprise on the internet. I listed the boat while polishing it up to take it to a Clear Lake boat broker. People came from as far as New Orleans to look at it. A Houston couple bought it the day they saw it. My six months project took less weeks. I guess I'm showing my age but I'm continually surprised at how purchases, especially of larger boats, have become a national search, using the internet, vs a tire kicking visit to a local lot.

This was also where I learned to appreciate what brokers have to go thru. Use the internet to sell a boat, IF you have the time. Ridiculous counteroffers (Gee, you want money for the boat) were not as time consuming as having to listen to couples argue about whether to buy a boat at all. Hey, couldn't y'all work that out before chewing up my afternoon.

Houston newspaper ad? Waste of time and money. If you're going to advertise a sailboat, do it in something mostly read by sailors.

Some Boat Number Descriptions

As one gets into picking out boats, several numerical descriptors come into play. They are a way to screen boats for safety, comfort and performance. The emphasis one puts on the compromises depends on where one will use the boat the most. The objective here is to provide 'some' of the descriptors for one's compromises.

Safety.

With 133 degrees of positive stability, the boat is supposed to come back up if a wave and/or gust knocks the mast 43 degrees under water, If stability numbers are not mentioned in the brochure of a bay boat, it may be because said bay boat may not be that stable. However, does that matter if you're not going to be sailing in the heavy seas that need it? Why pay big bucks for a boat that recovers from heavy seas you won't see.

A daysailor (10-19 feet) likely uses crew rather than a weighted keel for stability, so the issue is moot. However, as mentioned above, if crew training and fun experiences for the wife are the guide, avoid the super sensitive fast daysailors. i.e. get one that's easy to sail to start with.

There are many many other safety issues. The point is the safety issues vary depending on where the boat is to be used. Just remember, the most hazardous water you will use, for however little, will determine what you need. i.e. You 'may' need to be especially careful about weather offshore with some boats, that have less offshore safety equipment or safety built into their design. Again however, all that safety comes at a price in \$ and in other performance. What compromise suits 'your' needs is worth a lot of thought, consultation and family discussion. Don't be surprised at how quickly the first mate actually takes the lead in coming up with safety stuff to add.

Comfort.

The softness of bunks and size of salons is dockside comfort. The key criteria for comfort in a seaway has more to do with how much the seas toss the boat AND CREW about. There is a guideline formula that helps screen out the ultra light flat bottomed racing machines that will get you there fast, but beat you to a pulp. The standard 'comfort factor' formula =

$$\text{Displacement}/(0.65 \times [(0.7 \times \text{LengthWaterLine}) + (0.3 \times \text{LengthOverAll})] \times \text{Beam}^{1.33})$$

What on earth is that all about? To start with, a heavier boat gives a higher comfort factor. That means the Queen Mary is more comfortable in a seaway than a Sunfish. Duh. The rest gets a little more interesting. The comfort factor is penalized by more length. However, the affect is ameliorated by a reduction factor, the 0.65. Also, an increase in overhang (LOA minus LWL) improves the comfort factor. I assume the objective with the length numbers is to try and quantify the pitching effect.

The real kicker is the beam. For example a drop in beam from 14 feet to 12 feet will give a 22% increase in comfort factor. That 'to the 1.33 power' in the denominator means the width effect on the comfort factor is magnified. That's why beam was such an early consideration for us, as discussed at the beginning of this chapter (the rolling effect described on p 471).

The comfort factor number is not the whole story. A round vs a flat bottom, etc also comes into play, but I don't have the marine engineering expertise to discuss that feature in detail. The comfort factor formula, used above, came from Ted Brewer and is based on 'his' empirical observations. 'Emperical' as in based on 'Brewer's' experience vs a mathematical derivation. Other experts, such as Robert Perry, do not use Brewer's particular formula. Perry, Nigel Calder, et al all like the idea of narrow boats for offshore sailing, but formulas vary and get a little opinionated.

Another point of opinion divergence is the overhang factor. More is better according to Brewer's formula. I have heard others opine that less overhang gives less hobby horsing. Brewer's experience based formula may or may not have had benefit of some of the newer, more plumb bowed boats. Only he can answer that one. Again, my limited personal expertise disallows a strong opinion of that particular feature. Although overhang is a part of the formula, it's not near as mathematically influential as the beam. Maybe that's a good thing.

I have strong opinions on the need to factor in offshore comfort for boats mostly cruised offshore. I have no marriage with a particular formula, but Brewer's formula (described above) did a good job for us in screening out the 'beat you to death' boats.

Not a math major? Want a simpler way to get at the sailing comfort factor? As it turns out the wave effect on boats is not only an offshore phenomena but waves also affect boats at docks and in anchorages. There is a small marina behind Willy G's restaurant in Galveston, TX. Buildings block the wind from three sides, but the wave action from passing tugs, etc still surge into the harbor. It's not bad but is enough that one can get an appreciation for how boats handle waves and the buildings negate the complication of the companion influence of wind effects.

Specifically, look at the masts of different boats at anchor and in harbor when wakes wash thru. Some boats will remain fairly calm. Others will have masts doing a conga dance. Brewer's formula does a reasonable job of picking out the conga dancers.

Is dock and anchorage stability important? How important is a good nights sleep or even more important, spilt beer. But again, that wave resistance comes with a price in other features, e.g. \$.

Speed.

The PHRF numbers, used to handicap sailboat races, are an outstanding way to get a feel for sail performance. A boat that points poorly, has a slow sail plan and/or a slow hull will get a high PHRF (racing handicap). High PHRF numbers are great to get trophies but don't do spit to get one thru storms and on into harbor. Neither do high PHRF numbers allow high mileage per day on a cruise.

Is the sailing performance discussion a sneaky way to get a racing boat? If you like. But the point is, cruisers need speed and pointing also. For some reason, the wind often comes from where cruisers want to go (or come back from). Our boat search requirement was that the boat had to point upwind and had to have speed. Why speed? The wind not only gives tacking challenges but the wind also builds contrary waves and current. A slow, poor tackler will make so little 'velocity made good' against all those negatives that, at best, day cruises turn into after dark arrivals. At worst, the only reasonable course is back home or to not go.

Oh well, we'll just motor. Not in a seaway, you won't. A diesel is great in the ICW, but plowing into heavy seas with just a diesel sometimes gets fractional numbers on the knotmeter. Also, sailboats make lousy motorboats in a seaway. You will be one beat up crew when you 'finally' get there.

Size.

You math majors have already figured out that the simple answer to all the above is size. Since speed is related to waterline length, longer is better. Since displacement is 'generally' a cubic function of length, the comfort factor problem of a bigger, wider boat is more than offset by the displacement jump. However, there is one other factor that starts to creep in beyond 40 feet. Crew. If the crew is a couple, a larger boat is a risk. Any piece, that one 65-70 year old man can't handle alone manually on a violently bouncing boat, is a potential problem. (Feel free to substitute what you wish for the 65-70 numbers.) Sails, anchors, etc. are examples of these 'pieces' that really get heavy on boats over 40 feet and are potential problems because electrical winches, etc. will fail and not in calm circumstances.

There is an exception, as always. Boats in the 50 foot range are big enough for washer-dryers. If the boat is the home, that's a meaningful consideration vs the size problems.

Yeah, yeah, size is also related to money. I'm just rolling the variables around for you to think about. A great buy on a large boat will solve a lot of comfort/performance problems. Just make sure it's not 'really' too good to be true. A fixer upper is not only about money. It's also about buckets and buckets of time and about breakdowns when and where you really don't want them.

Draft.

Draft is a major focus of a lot of boat buyers. Deeper keels = better sailing. Shallower drafts = use of more marinas and anchorages. Deeper keels = more distance anchored from shore. That would be further for dinghys to motor in and mosquitoes to fly out. Remember the earlier comments about what the boat is to be used for. A lot of anchoring? A lot of sailing? Marina selection issues? Shallow bay sailing? Offshore sailing? We wanted a boat to sail multiday passages. Upwind performance was important to us. We have to be careful about marina selection and routing, but we love the offshore performance of our 7' 10" keel. That's not a universal preference, but it suits us. Suits? The sea is not always kind. If the seas and winds get ugly and are coming from the harbor you want to reach, it sure is great to have a boat that can not only get you there, but can get you in out of the cold and the violence in less time.

Electric/Electronics

We got a genset from the outset to feed the six heavy golf cart batteries. Why? To avoid later electric power limitations. Double chart plotters, radar, autopilot, refrigeration and lots of lights are only examples of a boat's electric power hogs. Solar panels or wind generators provide power also, but each of the three approaches has negatives. Each buyer has to choose which negatives are least odious to them.

We got the 4kw radar (vs a 2 kw) to be able to punch thru rain to find ships. It also reaches out twice as far to see storms and at least give one at chance (sometimes) to steer around a thunderhead. We got the autopilot, fluxgate compass, instruments, radar, GPS and chartplotters all from the same manufacturer. At least we have minimized interface issues.

Some notes on the radar/chartplotter. I am still capable of writing letters by hand and putting them in my mail box. But like much of the world, that has become a tiny fraction of my email communication. I still have an old slide rule, but it never comes out of the attic to replace a calculator. Likewise, we used paper charts, a pelorus and parallel rules when we first navigated the Great Lakes in the 70's. We carried over a hundred paper charts with us on our Canadian cruise in 2005 and never pulled out one. O.K. if one is going to go electronic, how far?

Depends of course on what kind of sailing/cruising you will be using it for. But like the examples with email, etc., you will be getting into the electronic age whether you want to or not. With electronics, costs come down. That's because the old stuff is obsolete before you get it out of the box.

We enjoy the second radar chartplotter display in the cabin, but the cost /benefit ratio is poor. We have the second unit because I bought the wrong one first. So what is the right display? Large screen, color and will overlay a radar image on the chart. Isn't that expensive? Sadly, yes. But what is the value of your boat, and more important, what is the value of the people on the boat? Another SAGA owner commented, "There is nothing quite so wonderful, on a dark and stormy night trying to find safe harbor, as being able to see your boat on a clear screen and see the way thru rocks, reefs and buoys."

Why big screen? Because by the time I had enough money to get a bigger boat to go to the places that needed the electronic stuff, reading glasses became a requirement to read the 'smaller' screen. The reading glasses are still helpful with a larger screen but are no longer a requirement to see anything on the screen. Also, the larger screen allows one to zoom in more and still be looking at a larger piece of the water.

Color? Needed to have meaningful radar overlay. Color also helps to see critical depth contours at a glance.

Radar overlay? It's fantastic to see five radar splotches and be able to tell instantly that four of them are buoys. Buoys of course mean harbors/congestion where 'instantly' is important.

Chip speed. Our display equipment (purchased in 2002-2004) takes so long to redraw the screen when scrolling, that 'course up' is not a realistic option. We use 'north up' so the screen is not constantly redrawing itself. Newer stuff is better.

SSB? If you're a ham operator, it's a great way to take your hobby to sea. It is not something one uses with the ease of a VHF or a satellite phone. We have one. We use it to get long range weather reports and to phone home in the middle of the Gulf of Mexico. Just get a satellite phone? Good to have, but as a substitute for an SSB? There are a few thorns on that rose. Missing satellites (and it has happened) cause blackouts in the middle of transmissions. Satellite phone email connections are costly enough that some have opted to not receive anything but short messages and no attachments. SSB seems to work better for emails. Routinely listening to news, weather, piracy reports, etc and calling for help to anyone within range to get to you are things that SSB's do well. Calling Great Aunt Gertrude (the one with the money) on her birthday is something the satellite phone does well.

Looking at Boats

Numbers were nice to screen out boats. But then we got down to up-close looking. Pulling up floor boards. Test sails. As described, there were a limited number of boat builders that met our needs and those builders were not producing hundreds of boats per month for the mass market. i.e. not much of what we were interested in was near by to look at. We ended up arranging factory visits. I wanted to know:

1. What the owner told the designer to design the boat to do
2. What the boat building wrench turners were like. Uh, how long have you been here?
3. How a test sail went. I had a serious list of things to try.

Uh, what were all those generic boat buying guides again?

Boat Buying Summary

1. Who is going to use the boat?
2. Where will the boat be mostly sailed?
 - a. Inshore (Bays, Lakes)
 - b. Coastal
 - c. Crossing an ocean
3. What is the boat going to be used for?
 - a. First boat (for part of the crew)
 - b. New water
 - c. Entertaining
 - d. Cruising
 - e. Racing
 - f. Scaling up to a bigger boat
 - g. Other
4. What is the boat's intended use:
 - a. No schedule, retirement cruising?
 - b. Specific voyages or/or time limits?
 - c. Local or long distance cruising? (weekends or years)
 - d. Anchoring or marinas?
 - e. Etc.
5. Limitations
 - a. \$
 - b. Big enough or small enough
 - c. Draft
 - d. Number of bunks/cabins
 - e. Other

Suggestion summary:

- A. Just starting out cruising? Start as small as the first mate can enjoy it (and scale up later together).
- B. If you have cruising experience and are sure of what you want to do and where, buy the biggest boat you can afford, that has the features you want.
- C. Look at performance (speed & pointing) AND comfort (dockside, at anchor and/or offshore)
- D. If you're looking beyond Bays and Lakes, 'robust' is good (and is expensive, but what is safety worth?)

Also remember, if the first mate's fun of adventure is less than the discomfort she pays, the season will be short. (Comfort isn't cheap either, but a more comfortable mate sails more.)

'Our' Specific Boat Purchase Criteria

As mentioned, Susan and I had a 1984 HUNTER 34. We had based it at a Freeport marina, close to our Lake Jackson, Texas home. Because our location was not on or near a bay, but right at the Gulf of Mexico, offshore sailing is what we had been doing for seven years. We had gotten use to 'feel of the sea' sailing. Specifically, bay sailing for us had become analogous to someone used to Six Flags over Texas going to a mall carnival ride.

O.K. where did we start? The first cut was to find a boat that had BOTH a better (higher) comfort factor AND a better (lower) PHRF (performance) number than the boat we had, the 1984 Hunter 34. Because I was the one hauling the heavy stuff, I set a limit at 40 feet. (Susan of course rounded that up to include 43 footers.) Susan and I put together OUR tentative spec sheet:

40 foot 'range'
Comfort factor: 28 plus
PHRF: below 110
A boat Susan 'liked

(Boats with widths below 12 ½ feet were especially interesting to us because of the width effect on the comfort factor and the importance of offshore comfort to us.) Yes the SAGA 43 did well against everything on our list.

Why all the number work? Why not just look for a performance cruiser? Because sadly that term has been so overused as to be standard and meaningless verbiage on almost all brochures.

We put together a table that listed various boats and their critical numbers. The first pass was a disappointment. It was easy to find boats with low PHRF numbers but they also had low comfort factors. They were fast but would beat us to death getting there. The other end of the scale were the so called cruising boats with high (and highly desirable) comfort factors, but their PHRF numbers were also disappointingly high. They could handle a hurricane, but they had to because there was no way they could get up wind and upcurrent to get to harbor. They had good diesels but again they had to because they were mostly suitable for ICW motoring.

Don't let me denigrate the classic cruising boats. They bring pleasure to the hearts of a huge number of people. It's just that Susan and I prefer the longer distance passages that require multiday (and night) offshore sailing. The poorer pointing, slower classic cruising boats have too many days (for us) that they can't do the offshore performance thing that well.

It turned out SAIL magazine's annual boat buying guide gave a great summary of options available, including many of the numbers needed (but sadly not PHRF's). We found 4-6 boats in the 40 foot range that on paper met our needs for the two criteria, sail performance and comfort factor. Now the third criteria kicked in. Read carefully guys. It had to be a boat Susan liked. Remember, I was happy with the paid for Hunter. It was Susan that wanted a bigger boat. Those that have noted the bio on the inside back cover have noted that by then Susan had over 700 days of sea time on three other boats, including quite a bit offshore. i.e. She had some specific prejudices.

- She had enough sea time to appreciate (and relish) the value of speed. In-mast roller furling was off the list. Poor sail shape.
- Ketch rigs may be better for ocean crossing and for megayachts, but were off our list as sloops normally sailed better.
- A rub rail. (They don't call us the slip killer for nothing)
- Limited deck teak to maintain.

She fell in love with SAGA's twin headsail rig and its easy headsail changes.

Why did she want a boat with two heads? Re: She had enough sea time to know it 'ain't' always dry out there. She wanted a second head (and with its own hatch) to provide a place for wet clothing, ropes (lines), bumper's, etc. She did not want her cabin full of wet stuff nor did she want to have to move wet stuff to get to the head. The boats without that option fell off the list.

Center cockpits failed the cut. Their height is good for seeing out, but may not be so good in a rolling sea. They allow for large aft cabins and great engine access, but sail handling on top of a bimini located under the boom is a hassle (especially when doing exciting things like reefing in a storm). A rear cockpit allows a crew of two to have someone at each end of the boat when docking. Center cockpits have appeal to many. It just wasn't something Susan and I preferred, as we had limited need for the dockside advantages and more concerns about the offshore disadvantages.

Canoe sterns fell off the list. Susan had enough experience to not want to have to walk on top of seats to get to the wheel. She had been in the water once at the dock when a leg gave way. The memory was used to avoid risk of that happening in a storm during a watch change. She liked the entertainment value of a large cockpit. She liked a stern entry option. Which was most important? Hey guys, does it matter? Canoe sterns dropped off the list. Remember, we were looking for a coastal cruiser, not an ocean crosser. i.e. the reported extra storm benefits of the canoe stern weren't worth it to us. As with many of the other design options, it was first critical to have a really clear picture of what the boat was to be used for.

There were other technical features. But now we were starting to get down to a short list of boats where the separation was going to be which boats Susan thought were pretty and that she would be proud of. Not a trivial issue as any broker will attest

A plant visit to SAGA exposed Susan to the actual boat (vs a brochure).

Susan loved the SAGA 43's general layout, interior and quality. (of course she had some adjustments for the factory, but they were no problem.) The narrow beam required some basic design compromises on salon layout. Susan wasn't thrilled with all the interior compromises but accepted them because she recognized the needs. The compromises may not be so acceptable to those not going to use their boat mostly offshore. Susan's approval/selection was the critical final step. It's emotive and it was Susan's call. She loved the light cherry finish inside and many other features. That was good enough for me.

Discussions with Allan Poole, SAGA Marine owner, disclosed the design criteria was not for 'around the cans racing' but was for comfortable rapid multi day passages. The plant tour revealed SAGA construction people were multi year experienced boat builders that took obvious pride in their work. The test sail performed significantly better than my expectations. Susan liked the double head sail, the interior, the general boat layout and the appearance of the boat. We ordered Hull # 45 built for Susan.

SOME DESCRIPTIONS OF BAYOU BABY, OUR SAGA 43

O.K. let's talk about the boat we chose, a SAGA 43. It was designed by Robert Perry for Allan Poole, the SAGA Marine owner. Allan wanted an offshore performance cruiser that could be easily handled by a couple and single handed if desired. Performance cruiser? As mentioned earlier, that verbiage is on every sailboat brochure? But unlike the gross majority of boat designs, Perry and Poole actually did it. As of this writing, about 55 SAGA 43's have been built. The owners are not first time boat buyers.

They had specific things they wanted in a sailboat, based on sailing experience. Cost is always of interest, but they were not just trying to get as big a boat as possible for x dollars. For performance, the SAGA 43 has a hull speed over eight knots (see page 133) and has the sail power to get there. Allan wanted as much mast height as could get under 65 foot ICW bridges. That not only gave serious sail area but allowed a lot of the frontal sail area that helps with upwind performance. The bow was filled in to give a sharp water entry angle and to provide longer water line length with an almost plumb bow. Keel variations ranged from 5 1/2 to 7 3/4 feet of draft. Bayou Baby has the deepest one and has little slippage upwind. (I think SAGA has standardized on 6'7" and 5'7", but Mars Keels likely still has the mold for a 7'10" draft keel.)

What's the big deal on performance? Weren't we cruisers? Absolutely. But we want to get there, even if it's up wind. We also like the option of enough speed to bypass a place with unavailable marina space and still arrive in daylight. We like getting in early enough to have lots of daylight left to enjoy more than an evening dinner. We like the ability to get across the Gulf of Mexico in less time. To my surprise, we've been fast enough to 'sometimes' sail around storms. Our Bayou Baby, SAGA 43, has treated us well and often on speed and arrival times.

For cruising pleasure the SAGA 43 list of design features is long. For openers, the canoe body tracks surprisingly well in spite of its thin, high lift keel. That tracking is helpful in two places, steering offshore and docking. The steering is further helped by the balanced sail plan. There is weather helm for safety but the large wheel, balanced sail plan and huge aft mounted rudder make steering something Susan can handle in gusts over 40 knots. Most of the time it's fingertip control for her.

The Saga 43's tracking was an especially pleasant surprise to us. Our old fin keel boat, with a more traditional hull shape, would jump 20 degrees off course if I reached over for a Dr. Pepper. The old boat would also head up so badly in a gust, that I was sometimes anxious when passing a barge in the ICW. The new Bayou Baby is a dream by comparison.

No boat is bulletproof against wind and current, but the SAGA 43 is far easier to dock than our old 34 foot boat. Docking is aided by: 1. The tracking that keeps the boat going where you point it. 2. The fin keel that lets it pivot. (Yes, 1. and 2. are a delightful, unusual contradiction.) 3. The mammoth far aft rudder lets one steer the boat at very low docking speed (I hate crunching sounds around docks). 4. A powerful 56 hp, 4 cylinder diesel. 5. A feathering prop that has the same thrust in reverse as in forward. (Why do I like a lot of effective reverse thrust?) 6. And a narrow hull that lets me get into those tricky, narrow slips.

Why so much interest in docking? They don't call me the 'Slip Killer' for nothing.

The hull shape is not the traditional wide midsection and tapered stern. The aft is almost as wide as the middle. Susan loves the entertainment sized cockpit. The narrow mid section makes a SAGA 43 look like a 30 footer bow on. It's the side view that gives one the true impact of her size.

Another major cruising feature for us has been the higher comfort factor. While offshore, shortly after the boat arrived from the factory, Susan commented that the SAGA 43 didn't feel that much better than our old 34 foot boat. I laughed and had to point out that we were in eight foot seas vs six and we were plowing upwind into those seas a good 20 % faster. At that speed (which our old boat couldn't match) and in those seas our old boat would have been bruise city. The SAGA 43 has a good comfort factor number, but I think the rounded hull further detaches the effect of waves on rolling as well as reduces slamming effects coming down waves. Others will have to explain the effect better, because my engineering degree does not cover marine designs.

SAGA 43's are distinctive in a crowd, if for no other reason, because of their double headsail. That was a feature that pulled on Susan. One changes headsails from the SAGA 43 cockpit. Roll one up and the other out. She had seen me pulling down and changing headsails forward on our Hunter 34 on a violently heaving foredeck three times in one 24 hour period, while I had her on the wheel. She remarked I was too old to do that. I keep asking what the xxx is wrong with old.

The SAGA 43's forward forestay, at the outer end of the pulpit, supports a 130 % masthead headsail. A short distance back, at the base of the pulpit, a second forestay sports a 95 % masthead self tacking jib. The inability to tack the outer headsail without rolling it up is awkward for 'round the cans' racing. BUT for long distance stuff, that's a non problem. We use the smaller self tacking headsail for tacking out a channel or dancing in front of a start line. The start line issue is interesting. How many times have you done all that timing to get to the start line at the start, only to have some jerk pull across your bow at the last minute with the right of way? On the SAGA 43 one just tacks out of the way and then immediately swings back on course. That self tacker is beautiful for that. Once across the line, just roll out the big sail and roll in the smaller one.

As mentioned earlier the SAGA 43 is fast but not designed as a racer. Too heavy. For us, no problem. We can certainly live with a fast, up wind boat that is comfortably heavy.

The mainsail has full width battens that feed into bat cars on the mast track. I was pretty proud of how I could eschew the winch as well as the winch motor and pull the large main up by hand when I first bent on the main. My pride took a bit of a fall when I released the main halyard and reached up to pull down the sail as previous boats required. Yep, the xxx thing came down so fast it almost knocked me in the water as well as putting a welt on my cheek. However, that fast drop into lazy jacks is real handy when one wants to become a motor boat in a hurry. You know, like when the channel is suddenly full of barge.

The SAGA 43 has two coach winches (one manual/electric) and two coaming winches as well as a winch on the mast. The windless is also electric.

Bayou Baby carries two anchors forward and one aft. We have a 4 hp outboard for our 9 foot inflatable.

Safety is always a concern. We considered the 133 degree positive stability of the SAGA 43 to be a critical need. As mentioned earlier, IF a wave and gust knocked the mast 43 degrees under water, it is supposed to come back up. I say 'supposed', because like several items on the boat, I would just as soon not know for sure.

Bayou Baby has a self inflating life raft, an EPIRB (to automatically call a Coast Guard satellite if things are really going poorly), a whole family of radios (from a couple of hand helds to one that can call Lithuania), etc. The continuing list of safety items is consistent with a boat that calls offshore home.

Some notes on geometry. Bayou Baby, a SAGA 43 has a catalog weight of 21,000 pounds. However, we've seen 29,000 pounds on lift gages (which may or may not have been well calibrated) when loaded. The keel is almost four tons of lead and much of that is concentrated in a bulb at the bottom. The leverage lets her keep up a lot of sail. Her masthead antenna clears a 65' ICW bridge at mean high water with 4 1/2 inches to spare. Her hull is 43' 3" long. It is 46' 4" from the tip of the diesel exhaust pipe to the end of the bow pulpit. The bulb at the base of the keel extends 7' 11 1/4 inches under water in fresh water when Bayou Baby is fully loaded for long distance cruising. The draft is closer to 7' 10" when loaded normally and in salt water. (Some more numbers are on the back of the front cover.)

Don't we run aground more with that deep keel? The basic difference in running aground is that shallower draft vessels run aground in shallower water. One goes where there is enough water for 'their' boat and sometimes the charts, the tides and new shoals bring surprises. No one is bulletproof. Bayou Baby's draft is great for deep water upwind work. The draft also limits the marinas and coves she can use. Our itinerary demonstrated care was needed, but Bayou Baby still went to a lot of places.

The SAGA 43 has NO deck teak. There is nothing more beautiful than well kept brightwork. But think about how much work would be needed to keep one's dining room table looking good if they kept it outside on their patio. My past teak maintenance experience was as joyful as cutting the grass on a hot day.

The interior shocks people. You approach the boat and step aboard attractive, but sterile, fiberglass and stainless. You go below and enter a world completely enclosed by warm light cherry wood. The basic boat is set off by Susan's lamps, large oval mirror and oriental rugs centered on the teak-holly soles. Some people do a jaw drop the first time they see the interior warmth and comfort. The boat almost extends forward forever as one looks past the large galley, the salon, the forward cabin and on into the forward head. The aft cabin has less floor space than the forward one, we use, but the bunk is big enough for four. (I'm just making a size reference, not a social suggestion.) The more often used aft head has a shower separation so the rest of the head stays dry. Of course one can get another reaction by letting people enter a closed salon and then let them open the attractive cherry wood doors around the main cabin. Ooh, there's another large room here and here and here.

The interior is huge to us as we came from a 34 footer. Susan has served dinner for eight at our Salon dining table. But the 12 foot beam has nowhere near the floor space of boats that are nearly 15 feet wide. However, the reality is that the boat, as advertised, was built primarily for a couple. That suits us perfectly, because the % of time we have more than two on board is a low single digit number. i.e., losing the better offshore sailing comfort is nowhere near a price we would suffer for the occasional comfort of more interior main cabin floor space. That is not a general conclusion but a personal choice that fits Susan and me.

We didn't go looking for it, but another feature we have come to love in our Saga is the redundancy. The boat came with two: head sail furlers, anchor rode lockers (and mounts), fuel tanks, water tanks, propane tanks, heads, showers, sinks, sea berths, air conditioners, bilge pumps and cabins. We added two chart plotters, two GPS's and a second engine. Isn't two just twice as many things to fix. Yes, but you have one to operate, while you assemble the parts, tools and TIME to fix the other. A head plugged with salt is an "Oh xxxx, I'll have to fix that when we get in.", vs a more interesting but not so printable set of sea stories. Second engine? I built an extra dinghy motor mount that can fit at the swim ladder. Yeah, fuel tanks run out in the harbor and yeah, there are special ways to break prop shafts.

In general, our boat has everything one has in a home, except a washer-dryer. (That's for the next size up and/or live aboard.) The Bayou Baby has central heating/air conditioning units, hot/cold water, heads (toilets), showers, sinks for the heads and galley, refrigerator/freezer, stove/oven (propane), microwave, TV, VCR, DVD, stereo AM/FM/CD/tape (that also plays in the cockpit), dining table in the cabin, breakfast table in the cockpit (Susan's veranda), two sofas (seabeds) in the salon, etc., etc. 110 v electrical outlets are throughout for computers, hair driers, coffee pots, table lamps and whatever.

There are some items that look strange to non sailors, e.g., a stove that gimbals and all the wooden hand rails on the ceiling. They aren't for show. In a sea way they keep the stove level and keep the people from getting violently thrown against the furniture.

Another item is the fact that all the stuff mentioned can be operated at sea as well as at the dock. The 12 volt lighting is obvious, but Bayou Baby's diesel powered genset can charge her six golf cart batteries and at the same time can power the 110 volt system that includes the air conditioners, microwave oven, heaters, etc., etc,

Navigation. Bayou Baby has almost all the basic stuff a cruise ship has. Like a cruise ship the stuff is at the main steering station. The chief difference is our main steering station is outside in the cockpit as opposed to an enclosed (read dry) ship's bridge. Nevertheless, Bayou Baby has: radar, GPS, chartplotting, radar/chartplotting overlay, autopilot, VHF radio and SSB radio. No, we don't have a transponder (yet?). A second chartplotter in the cabin can also read the charts, course and position that is on the cockpit display as well as read/operate the radar and read all the instruments.

The above is an over view of the boat, a SAGA 43, that we spent eight months aboard on our Canadian adventure. Short answer: The boat behaved well offshore, it moved us along quickly and we were comfortable. It met and exceeded all our expectations.

Are there things one could upgrade? Do they gamble in casinos? The tricky part is that upgrades swing cost/benefit ratios and shift critical compromises. But, hey I'm a retired engineer, with what Susan calls an overactive head (in her kinder, less graphic moments). An example? I've had a hard time finding boat designs from hardly any builder that planned well for a genset from the beginning. These high maintenance toys are invariably an afterthought that has to be shoehorned into some place that Houdini would have trouble getting at to work on. I heard of one motor boat that needed chainsaw work on fiberglass to get at a genset to work on it.

SAGA 43 vs 'Our' Needs

How did it work out? We wanted more speed and comfort. We got at least 20 percent more speed. We are more comfortable in eight foot seas than we were before in six foot seas. And Susan loves the boat.

I repeat some comments from chapter 2.

"The sails down Lake Huron from the St Mary's River to Presque Isle and later on to Saginaw Bay were tacking exercises in 15-25 knot winds and 6 foot seas. The boat, a SAGA 43, outweighed our old Great Lakes cruiser of 25 years ago, a MACGREGOR 25, by about ten to one. There were also major differences in comfort factor, speed, upwind sailing angle, amenities, etc., etc. The Saga design criteria also provided much reduced rolling in the sharp, freshwater seas. We would not have even tried this trip this early in the season with the MACGREGOR even though the crew was 25 years younger then. The Saga 43 brought through a pair of cold but not beat up sailors."

What's the big deal with six foot seas? They were fresh water seas. Fresh water is lighter than salt water and the seas are steeper (read more uncomfortable). Remember the Edmond Fitzgerald, the ore ship that Lake Superior fresh water seas broke in half?

O.K., How about salt water? Ah, that's what we bought the boat for, geography gobbling multiday (and night) legs across open water. Chapter 14's discussion of the Key West to Texas leg pretty much describes it all. One of our Key West choices was a three week ICW cruise around the northern Gulf of Mexico and being home in Texas for Christmas. That was our original plan. But Bayou Baby's speed had put us ahead of schedule enough that a direct cut across the Gulf of Mexico would put us home with family the weekend before Thanksgiving.

Problem: November is when the cold fronts start dropping into the Gulf with a vengeance. At some point, a Gulf crossing was going to involve at least a day in the Warring blender seas stirred up by sustained winds over 30 knots. We chose the direct route because we knew both the boat and the crew could do it. Yes, we got our butt kicked for a day or so on the 4 ¾ day crossing, but the SAGA 43 design proved itself again. The rolling was kept manageable for a crew in their 60's and the speed got us rapidly thru the front and on into port. One could have kept more sail up for even more speed, but enough bouncing was enough. We weren't racing and certainly weren't trying to prove anything.

We bought the SAGA 43 because its design often allowed us to continue with a schedule in spite of weather or wind direction. The only exception was a couple of extra days in Beaufort, NC, waiting for a hurricane to decide where it was going. (The boat may or may not be that good, but pushing it that far goes beyond dumb.)

I close this chapter with the notation that our boat (a SAGA 43) was a major part of the enjoyment of our eight month adventure. Sailing on good days was great. Sailing on poor days was still good.

Can one have the adventure with a different boat? Of course. A different boat will call for some different planning. A lower draft opens up more cove and marina options to the schedule. A slower boat will need more stops and/or longer time at sea between stops. A lower comfort factor will mean more shore leave waiting for better weather. But the SAGA 43 fit OUR priorities and pleasure points.

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