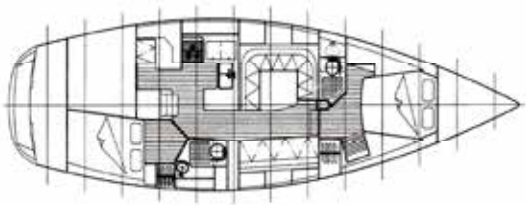
SELECTING AND PURCHASING AN OCEAN CRUISING SAILBOAT



by John Neal

Selecting and Purchasing an Ocean Cruising Sailboat

An indispensable guide to choosing and purchasing a sailboat for your ocean cruising adventures!

Mahina Expeditions
2nd Edition

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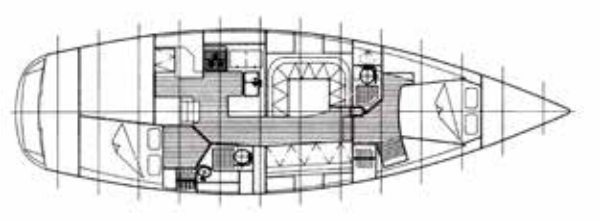


The dream of purchasing a boat and sailing to exotic islands and interesting countries is a powerful and exciting one. And an important part of achieving that dream is in selecting the right boat to take you over the horizon in safety and comfort. By keeping the boat in top condition while you're cruising, you'll find a line of fellow dreamers waiting to purchase it when you've completed your cruise allowing you to recoup most, if not all of your initial outlay. If you wish to succeed in this venture, here's how to do the necessary homework to make your cruising dreams a reality.

It's All About Sailing

One of the first things you'll need to do is to ensure that you actually enjoy and are comfortable sailing and living on a boat, and unless you plan on single handing, that your partner does as well. If you're new to sailing or self-taught, sailing and navigation lessons are an excellent starting point. To discover if you're comfortable living aboard, try a weeklong live aboard cruising/learning experience such as Offshore Sailing School's Fast Track to Cruising or Fast Track to Passagemaking. Even better, consider a course in an area you're interested in eventually cruising on your own. If the Caribbean is a possible destination on your own boat, you could select a Fast Track to Cruising course in the British Virgin Islands.

When to Purchase

Time, money, health and energy are the four factors that need to be present in order to buy a boat and realize your dream of cruising. Following is a summary of these factors and some tips for you to consider.

Time: There are several reasons why you should purchase your boat a minimum of one year, and optimally, 18-24 months before your planned departure.

1. It may take 6-12 months of serious shopping to find a boat that meets your criteria.
2. If the boat you purchase is over 15 years old and in need of some work it can easily take 6-12 months or longer to get it offshore-ready. You will be upgrading old equipment for new and sourcing refit options, both of which take considerable time.
3. You'll want to allow time to become familiar with sailing your boat and getting accustomed to living in a much smaller space than normal.

Your Age vs Boat Age: The older you are, the newer the boat you purchase should be if you actually want to go cruising.

If you're in your 20's, you may feel like you have more time and energy than money. You probably won't consider it necessary that your cruising boat is outfitted with a freezer, powerful windlass, or satellite communications. You'll have the energy and motivation to work hard on a bare bones boat and then be keen to set sail, with or without a lot of gear that older people frequently deem necessary.

If you are over 60 and inexperienced, you should consider a boat less than ten years old. If you purchase a 30 year old boat needing a refit, the chance of you having the energy to complete a refit and actually depart on an extended cruise is well less than 50%.

Cruising Timeframe: You may be looking at boats thinking you will be cruising for 5-10 years. However, we see very few people cruising for longer than 2-3 years. Take time to consider your cruising plan; where you buy the boat and start cruising, where you plan to sail and for how long and where

you think you may sell the boat. It is good to be open in your planning but it's also good to establish a Plan B, in the event your health or other factors change.

Boat Cost, Size and Age

If you're cruising as a couple, each of you must be prepared to singlehand your boat, being conscious of your abilities and limitations. Seasickness or illness may incapacitate either of you, leaving the other person to handle everything. Safety dictates a boat with manageable sails, a dependable wind-vane self-steering system and a powerful, dependable autopilot.

If you're planning on purchasing a boat over 42' and aren't as strong as you used to be, consider increasing your level of fitness and the option of selecting a boat with or adding a furling mainsail, bow thruster and possibly electric winches. This equipment adds cost, maintenance, weight and complexity but being able to easily handle your boat is important and adds to the enjoyment of cruising.

Crew: Crew difficulties are frequently a common and persistent problem. It's easy to find friends and family members excited about sailing with you when you first leave your homeport. As you get further away it becomes time consuming coordinating the logistics of crew arrival and departure points, and the timing of your passages.

You might also find that you may not be comfortable trusting your boat and life to people whom you don't know well and that pick-up crew can be more of a burden than help.

Go Newer and Smaller: In order to purchase a newer yacht that isn't going to need an expensive, time-consuming refit, you may need to downsize your ideal size requirements.

If this means purchasing a 12 year old 38' boat instead of a 20-30 year old 45'-50' boat, you will be far ahead; having more time to cruise and reducing your overall cost of ownership. Also, maintenance, insurance and moorage costs go up exponentially with the length of boat.

Age of Boat vs Time and Cost of Ownership: The older your boat is, the more time and money it will take to go cruising.

On a boat 20+ years old, you can easily spend an additional 50% to 100% of the purchase price replacing rigging, sails, tanks, engine, and electronics and upgrading the electrical system. This refitting process frequently takes one to two years. With a boat that is new or less than ten years old much of the refit time and cost and is saved.

Another good option is to purchase an older boat that has recently been refit by the seller and is ready to go. It will likely cost more than comparable boats of the same age but will cost far less than outfitting an older boat that has only coastal equipment aboard.

Overall Budget for Boat Purchase:

Boat Purchase: 60%

Outfitting: 40%

Outfitting Cost: You'll likely need an additional $20,000 to $50,000 for necessary offshore equipment including storm sails, liferaft, windvane or an additional autopilot, tender and motor, heavier and additional ground tackle, charts and spare parts. This cost excludes non-essential items such as watermaker, generator, solar panels, bow thruster, refrigeration, chart plotter and SCUBA compressor which are detailed in the Optional Equipment chapter.

Where to Purchase

It is wise to spend considerable time researching and deciding where you most want to cruise and just as importantly, where will be an easy place to purchase and outfit a vessel. Perhaps charter in your destined cruising grounds first, at the same time research the selection and prices of boats available, boat yards and outfitting services.

If you're interested in cruising specific areas before planning long passages, purchasing a boat on location may be a good choice.

Mediterranean: research Spain, France, Palma, Italy, Croatia, Turkey, and Greece. Turkey has excellent yachting services and marinas and is the least expensive country in the Med. As it isn't an EU member, VAT and Schengen time limits do not apply.

Caribbean: it is best to purchase on the East Coast or possibly in Florida where there is a large selection of potential cruising boats and excellent refit services. Although there are many boats for sale in the Caribbean, the condition, logistics of purchasing and outfitting make this option somewhat less attractive.

Mexico and the South Pacific: starting out anywhere on the West Coast will work.

Cruising Boats in Foreign Countries: In your search for boats you'll see listings of cruising boats that appear to be real bargains in foreign, frequently downwind tropical locations. Example locations include the Med, Florida, Mexico, Panama, Caribbean, Tahiti, Fiji, New Zealand, Australia, Indonesia and Thailand. Occasionally these boats are a good value, but often they are tired and require extensive repairs and upgrades to be passage-ready. As with the outfitting process, the owners have run out of time, money, energy or health and have walked away from their boat, leaving it listed with a local broker. On the other hand, if the owners are present and have conscientiously maintained the boat, it may represent a true value and savings of time.

High Latitude vs Tropical Locations: Boats that have spent most of their lives in higher latitudes where they are frequently only in the water for six months then stored ashore or inside a building during winters appear newer than sisterships in warmer, saltier water. Examples: Great Lakes and New England vs. Florida, and Scandinavia vs. Mediterranean.

How to Find Your Boat

Sites like Yachtworld.com are invaluable as they cover most of the world. Bargain basement boats priced under $30,000 may be easier to find on FSBO sites. If you are within six months of purchasing and have your financing in order, you may consider using a buyer's broker. They will have connections to potential boats that you may not be aware of and save you time by cutting through the "broker babble". Ideally your buyer's broker will have personal experience offshore cruising or delivering yachts. They should be truly interested in finding the most appropriate boat for you at the best price, not just encouraging you to purchase one of their own listings. This service shouldn't cost you any additional money as the listing broker

will split the selling commission with your buyer's broker. It is rare to find knowledgeable buyer's brokers interested on working with clients having a budget of under $150,000.

Selecting the Right Boat

There is a wide variety of boats on the market so it's up to you to decide on what is going to be the best boat for your budget and plans.

Educate Yourself: Read boat reviews, scan owner's group websites for troublesome problems specific to certain makes or models, read about yacht design and safety. Go sailing on as many different types of vessels as possible, and consider crewing on local races. Take courses on navigation, offshore passage making, marine weather, sail repair and diesel engine maintenance. If your cruising plans include ocean crossings, consider signing up for a sail-training passage where you'll be standing watch and learning 24 hours per day. The more time and energy you've put into obtaining skills important to cruising, the better yacht selection choice you're likely to make and the more self-sufficient you'll likely be once you're cruising. You may go into your boat search thinking you absolutely must have a heavy displacement double-ender with a long bowsprit and a centerline queen berth, for example. After educating yourself and completing an ocean passage you may decide that these are not necessarily criteria that add to the comfort or safety at sea.

Explore Boat Options: monohulls, multihulls and long-range displacement powerboat each have different merits.

Monohulls are frequently better suited and designed for cruising temperate or high latitude waters and most are better suited to maintain performance when additional cruising gear is added.

Multihulls advantages include very little heeling or rolling and tremendous interior volume and deck space making them very attractive for tropical cruising or cruising with children. Disadvantages include weight sensitivity, uncomfortable motion upwind, difficulty in finding moorage and haul-out facilities. Multi-hulls are ever increasing in popularity in tropical cruising destinations. An excellent book on multihulls is Gregor Tarjan's Catamarans; Complete Guide for Cruising Sailors.

Long-range displacement powerboats such as Nordhavn, Kady Krogen, Fleming and Selene provide a very comfortable ride and spacious living area.

Be Realistic: Many people searching for their dream boat have unrealistic expectations or get fixated on specific design issues. If your plans are for serious offshore cruising, ensure that safety and seaworthiness rate higher on your priority list than in-port comfort and interior volume. Compromise is important when selecting any boat. Chances are you will not find any boat in your price range that exactly meets all of your criteria, so be prepared to be flexible and keep an open mind.

Market Appeal: As most couples cruise for a 2-3 year period, it makes sense to purchase a boat that will hold as much of its appeal and value as possible. If you buy a boat with little market appeal you may end up having it on the market for several years only to finally sell it a drastically reduced price.

One Way Downwind Cruise Option: Some cruisers buy a boat with the anticipation that they will take advantage of strong economies and market for cruising boats in certain foreign countries. By purchasing an appropriate boat in Europe or North America, sailing downwind through the South Pacific, they then plan to sell their yachts in either Noumea, New Caledonia, or Queensland, Australia. Currently this is still very feasible, but could change at any time. There are yacht brokers in both Noumea and Queensland specializing in the importation and selling of foreign-flagged cruising boats.

Ex-Charter Boat Option: Purchasing a recent (5-6 year old) charter boat for shorter-term seasonal cruising or a one-way voyage from the Med to Florida via the Caribbean or from the Med, Florida or the Caribbean to Australia is a viable option. It wouldn't be wise to spend a lot on extensive outfitting (adding a windvane, generator, watermaker or electronics) as little of this cost would be recouped on selling.

Well known Builder: If you're considering purchasing a boat overseas and plan to eventually sail it back to North America or Australia to sell, if possible, select a well-known boat builder that ideally has dealers in the country you plan to sell in. You'll find it much easier to sell a well-known boat for a reasonable price.

Is the Boat Builder in Business?: With so few of the quality builders of offshore cruising boats still in business, this has become less of an issue, but it can save you time and money if you can get replacement parts and technical information from the original builder and it may make selling the boat easier.

Boat Purchasing Options

Four Purchasing Options:

1. New Production Boat. Because of a shortage of quality 5-10 year old ocean cruising boats plus the high cost of and amount of time required to upgrade a solid 10+- year old vessel, purchasing a quality new production boat is more attractive than ever. The problem is there are only a handful of boatyards worldwide still in business producing quality offshore boats. Here's an example: If you purchase a 25 year old boat for $80,000 and then spend $50,000 replacing the engine, rigging, dodger, sails, wiring, tanks, electronics and having the bottom stripped, dried and barrier coated, using up 1-2 years of your cruising time, you will end up with a 27 year old boat worth perhaps $90,000.

A better choice might be a new or nearly new (less than 5-10 years old) boat that initially costs more but returns much closer to 100% of your outlay. Your cost of ownership will be substantially less and hopefully you'll be out cruising 1-2 years earlier with far less time spent dealing with mechanical breakdowns and failures.

2. Custom Build. Choosing to have a boat semi-custom or custom built always takes considerably more time and money than planned and there are inevitably □bugs" to work out that would only occur on hull #1 or #2 of a production boat. Resale value on a custom boat is usually substantially lower than on a well-known quality production boat. Custom boats only make sense if you are the second owner. However, keep in mind that they will nearly always be more difficult to sell.

3. Used Boat. Cruising equipment generally adds little to the selling price of used boats, so if you can find a boat that has already been outfitted and lightly cruised, you may save tens of thousands of dollars. Conversely, if you

are considering a boat that has circumnavigated or cruised extensively, you may discover that much of the gear is worn out and needs replacing.

4. Home Built. Home building a cruising vessel makes the least sense unless you are an unemployed boat builder, unconcerned with time and expenses. It generally costs considerably more to build a boat than to purchase a well-built used boat and is nearly always more difficult to sell.

Market Trends: It is still a bit of a buyer's market worldwide, but the inventory of quality, offshore-capable boats in the under $100,000 and under $200,000 category is much reduced. In the $350,000-$400,000 category there are currently amazing values available on fairly recent high-quality boats that have been priced at over $600,000. This is true in Europe, North America and Australia/New Zealand.

Boat yards are finally starting to get orders for new boats as there have been a very limited number of new boats built in the past 7-8 years, resulting in a low inventory for buyers searching for a boat under eight years old.

Pete McGonagle, co-owner of Swiftsure Yachts in Seattle shares this: For the past five years, we've seen logarithmic depreciation on new boats. Due to the lack of new boat buyers, few yards have a backlog of orders and many are willing to provide discounts and swiftly build to order. A new boat loses 20% of its value as soon as it's delivered. It then loses about 5% of value per year for the first five years and the value loss tapers off to zero as the boats get to be 20-25 years old. By then maintenance costs will be higher and refit, maintenance and upgrade differences make values quite variable from one sistership to another. This is why an extremely well maintained, frequently updated timeless design will have the best chance of value retention.

Distress Sales: If you've been shopping for a cruising boat you've probably come across several vessels that have recently had substantial and expensive upgrades yet haven't gone anywhere. Many times these boats are the result of people who during the refit and preparation process have had health issues arise or become too exhausted to go cruising. If the sellers have done their homework, selecting quality equipment and assistance on the refit, these distress sales can represent an excellent savings of time and money for you. It is still imperative to get the right boat for your intended plans. A great deal on the wrong boat is still the wrong boat.

Shipping and Commissioning: When trying to decide whether or not it is logical to purchase a boat out of your area, make sure to factor in all shipping and commissioning costs if you don't plan on sailing your new vessel home.

The cost of trucking a sailboat with a beam greater than 12' and a trailer height of over 14' rises significantly as a pilot car at $1.00 per mile is required in some areas. Add approximately $200 for trucking insurance rider, and $1000 to $2000 for decommissioning and recommissioning, depending how much of the work you do yourself. Here are some recent examples of trucking prices:

Fantasi 44 Pilothouse (15'1" tall) San Diego to Seattle.....$11,000

Outbound 44 Florida to Seattl.....$16,600

Island Packet 44 (14'4" beam) North Carolina to Seattle $19,995

The cost of shipping a 45' boat from Europe or New Zealand to the U.S. is approximately $35,000. Sevenstar Yacht Transport, www.sevenstar-yacht-transport.com.

Purchase Process

Broker: Purchasing from a licensed yacht broker, particularly if they are a member of a professional oversight organization such as CPYB (Certified Professional Yacht Broker-cpyb.net) is often safest and simplest. If you're purchasing from a private seller, you have little protection once you've turned over your deposit (frequently 10% of offering price). If the seller decides to keep your deposit, even if your conditions for purchase are not met, you have fewer recourses. A knowledgeable broker can provide invaluable assistance with boat selection, survey, sea trial, closing, registration and post sales service and logistics.

Initial Offer: I frequently advise my boat purchase consultation clients to make their initial offer 18% less than the asking price unless the boat is exceptionally clean and well-equipped or there are other customers seriously interested.

Factors used to determine how much your initial offer include:

1. Selling prices and length of time to sell of sisterships. (available at soldboats.com - a broker-only subscription site
2. Amount of time the vessel has been on the market.
3. If there have been any offers to date, and if so, for what price.
4. If there are any known or disclosed extenuating factors, i.e. winter about to start, seller has health issues, estate sale, etc.
5. Initial impression of the boat. Does it looks neglected? If so, the seller won't be getting any full-price offers.
6. Are there any known defects (osmotic blisters, soggy deck or hull core material, non-working equipment, etc.)?

Any offer to purchase should have these following terms and conditions:

1. Subject to acceptable survey and sea trial.
2. Subject to buyer finding acceptable financing. (This can always be an "out" for you if needed).
3. An inventory of all included and excluded gear and equipment.
4. A requirement for the seller to provide a completed disclosure form revealing if the vessel has ever suffered a grounding, fire, sinking, blisters, etc.
5. A specific timeframe for acceptance of the offer, acceptance of the yacht after survey and sea trial, and a final closing date.

Frequently there will be negotiations back and forth on the price. Assume the seller will negotiate until they say otherwise. During the final phases of initial negotiation or post survey negotiations, don't ruin a seller's goodwill by being overly aggressive and demanding. Squeezing the last few hundred dollars from a seller is not worth losing the value of them sharing their extensive knowledge of the boat and removing non-inventoried spare parts, charts and other gear that is often left aboard.

Loans and Insurance: At this time you will want to secure a quote or verbal assurance that the boat you're considering can be insured for your intended purpose. If you're planning an international cruise, note that many countries including Mexico, all of the EU and most marinas require at least liability, or third party insurance.

If you're planning on financing your purchase, you'll want to have a loan pre-approved before you make an offer. All lenders will require comprehensive insurance, not just liability, to protect their collateral.

Insurance may be difficult to impossible to obtain if you can't document boating experience on a similar sized and type of vessel. In some instances insurance companies will require up to a week of one-on-one instruction from a licensed skipper/instructor with a sign-off from them before their underwriter will agree to insure your boat. Very few lending institutions will allow you to take a vessel outside your home country waters and only a handful of insurance companies worldwide will insure ocean passage making. This means if you lack passage making experience it will be difficult financing your boat purchase let alone go cruising. No insurance companies will insure singlehanded sailors offshore.

Change of ownership and registration: Frequently, particularly when purchasing a federally-documented or foreign vessel, a vessel documentation service, similar to a real estate escrow company will be used. This company may hold your deposit in an escrow account and will search for and discharge any liens and will handle dispersal of funds and payment of taxes. You'll want to determine what company will be used before signing final acceptance papers. If you are using a buyer's broker, they can recommend a documentation service. Otherwise, the selling broker will frequently recommend one.

Marine Survey: Here are some points to remember:

1. Be very cautious in hiring a surveyor recommended by the listing or selling broker. Some surveyors are more interested in frequent referrals from brokers than in doing a thorough and complete survey for the purchaser. Contact other local brokers or boatyards and ask who they would hire to survey a boat they were considering purchasing.

2. Don't hesitate to ask the surveyor for examples of previous survey reports.

3. Ensure the surveyor is a member of a professional group such as SAMS or NAMS.

4. Top quality surveyors may have a 2-3 week backlog of work, so don't expect next-day service.

5. Plan on paying $15-$25 per foot for a survey plus travel time and expenses.

6. Buyers pay for the cost of survey haulout, regardless of whether or not a deal is consummated.

There are four types of surveys available: Pre-purchase, Insurance, Acceptance (for a new boat) and Damage.

On vessels priced over $200,000 it is common for the purchaser to request and pay for a separate engine and possibly rig and sail survey. Some surveyors will do a cursory check of the engine dockside and on sea trial, others may present you with an option for a more in-depth engine survey for an additional fee. Still others will simply recommend another company or surveyor specializing in engine surveys.

If at all possible, you should be present and attentive during the survey, taking pictures of everything and asking the surveyor to point out any areas of deficiency or interest as they go about the survey. Don't be surprised or disappointed if the survey turns up some deficiencies. Quickly separate the findings into structural, safety and cosmetic categories. If the structural problems are substantial (i.e. large areas of serious osmotic blistering below the waterline) be prepared to collect your deposit and resume your search. "Project" boats very rarely prove worthwhile. If there are easily repairable deficiencies that were not disclosed in the listing, it is normal that the buyer will ask the seller to either have the problems repaired or adjust the price to cover a quote for repairs. The seller has no legal obligation to remedy deficiencies. Certainly ask for remedy but realize that not all sellers will agree to repair, reduce the price or share the cost of repair of deficiencies. If the agreed purchase price plus the cost of repairs is still a good value, it may be advisable for you to pay for the entire amount of repairs vs. start looking for another boat and incur more search and survey costs.

Sea Trial: A sea trial is where the seller or their agent provides an underway demonstration, hopefully with you and your surveyor aboard to test and operate all systems. This should include running the engine up to maximum rated RPMs while checking for overheating, vibration and smoke. All ancillary systems and equipment should be demonstrated including raising sails, operating anchor windlass, all pumps, radios and electronics, generator, cabin heater, air conditioning, lights, inverter/charger and stove. If the boat is hauled out for winter storage and it isn't possible to have a sea trial and engine test until spring, it is normal for a "hold back" amount to be set aside to cover any possible problems discovered in the sea trial.

Regroup, Repair and Outfit

After your transaction is complete it is time to complete your insurance application (you should have an insurance binder before closing on the boat), find moorage and assess the list of deficiencies outlined by the survey. The sooner you get these items repaired, the better chance necessary repairs won't be put off indefinitely. Start with safety issues, next inventory items that may need to be replaced or reconditioned.

Engine: Most surveys will turn up at least a few items in the engine room needing attention. If you're unfamiliar with marine diesels, hire a mechanic to show you how to make the needed repairs plus how to change the raw water impeller, replace the raw water pump, change the fuel filters and bleed the fuel system. Ask the mechanic what known, recurring problems affect your model of engine and consider replacing any components prone to failure, i.e. water injection elbow on Yanmars, transmission oil coolers on older Perkins, etc.

Rigging: Most insurance companies ask to have the rigging replaced every 10-12 years if the boat is headed offshore. If you have a rig inspection or quote for new rigging, ask the rigger to show you how to service the winches and furler(s). Furlers that are old, undersized or furlers from companies no longer in business should be replaced. It is an excellent idea to hire a rigger to go sailing with you for two hours showing you how to inspect and tune your rigging and suggesting any modifications for easier offshore sail handling.

Sails: The existing sails can be inspected and repaired, but if you are setting out on an extensive cruise, it is wise to consider replacing the working sails before departure.

Refit Evaluation: At this time you'll want to take a close look at how much money remains for repairs and outfitting and what your potential departure times are to utilize the best seasonal weather windows. Percent of original purchase price to prepare a stock 10+ year old boat for extended cruising: 30 - 100% depending on quality and condition of vessel. You'll find that quality boatyards in North America, Europe and New Zealand/Australia generally charge the equivalent of US$60-$120 per hour. It is easy to spend $10,000 per month having work done in a boatyard. Repairing and replacing gear if you don't know what you're doing can be a safety issue - best to get some help in planning repairs. If you have more time than money, one option is to hire pros to quickly show you the ropes and then to supervise you doing as much of the refit, repair and installation of new gear as possible. Although it will be slower, the savings can be substantial and you will continually be gaining important skills. Nigel Calder's Boat Owners Electrical and Mechanical Handbook and Don Casey's Complete Illustrated Sailboat Maintenance Manual are two excellent resources.

5. Ongoing Maintenance Costs

Epoxy bottom job every 8 -10 years, depending if blisters are present	2,000 - 20,000
Rebuild or replace main engine at 5000 to 10,000 hours	10,000 - 30,000
Pull mast, replace standing rigging and lifelines every 10 years	5,000 - 10,000
Stripping and repainting a painted, non-anodized mast every 10-15 yrs	8,000 - 10,000
Replace sails every 20,000 - 30,000 miles	8,000 - 12,000
Replace batteries every 2-6 years	1,500 - 3,000
Repack liferaft (1-3 years), replace at 12-15 yrs	1,500 - 5,000
Regalvanize chain every two years (tropical waters)	500 - 800
Replace chain every 6 years in tropical waters	1,500 - 2,000
Rebuild or replace windlass every 4-8 years	300 - 4,000
Drop rudder for inspection & repair initially then every 5 years	300 - 3,000
Replace tender and motor every 5-10 years	5,000 - 10,000

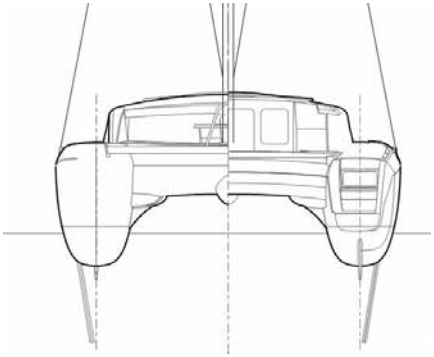
Replace failed or outdated electronics every 3-5 years	2,000 - 10,000
Replace fresh water and head hoses every 5 yrs	200 - 500
Replace thru-hulls and ball valves every 8-10 yrs	1,000 - 2,000
Replace solar panels and regulator every 4-8 years	2,000 - 5,000

Maintenance Costs while cruising

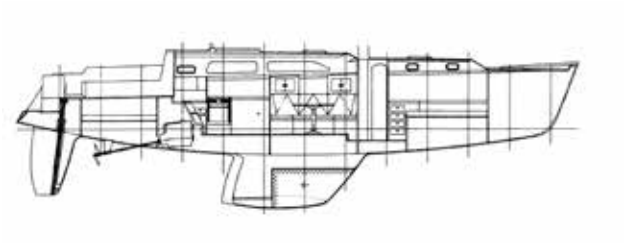
(Costs will be 20%-70% higher than in North America in most other countries)

First 1-2 years:	2% of original purchase price annually
3-4 years:	5%
5 years:	10%

I budget for a 10% of purchase price refit every 5-10 years.



6. 20 Qualities of an Ideal Cruising Boat



1. Comfortable Motion on the Ocean
   Without excessive pitching, slamming or rolling.

2. Quality Construction
   With quality components (tanks, steering system, rig, etc)
   *See Boat Construction Chapter

3. Ability to Withstand 6 kt Grounding
   With no or minimal structural damage.

4. Sailing Performance
   Upwind and downwind in 10-50 knots.
   Windward sailing performance is nearly as important as passage-making speed. On the other extreme, a very modern, light displacement boat with a flat entry will pound when sailing to windward and may lack directional stability when sailing downwind with large quartering seas. The ability to sail off a lee shore in an emergency is dependent on windward performance.

5. Moderately Stiff & Fast Enough to Sail 150-180 Miles a Day
   Few potential cruisers think of passage-making speed as important criteria in choosing an ocean cruising boat. After 40 years and 322,000 miles of ocean cruising, it is now high on my personal list of priorities. The shorter the passages, the less exposure there is to heavy weather conditions. A boat with good sailing performance requires less motoring and fuel, is faster, more responsive and fun to sail in the light to moderate wind conditions so common worldwide.

6. Protected Helm Position
   Providing protection from sun, wind, spray and rain and having good 360A visibility.

7. Ability to Carry Substantial Payload
   A moderate displacement boat will handle the additional weight including additional anchor and chain, liferaft, additional batteries and fuel better than lightweight designs.

8. Helm that is Responsive and Maintains Directional Stability
   Making steering by hand, autopilot or windvane easy.

9. A Comfortable Interior
   Both at sea and in port with sufficient handholds for safe movement. As most cruisers are at sea less than a quarter of the time, comfort at anchor is also important.

10. Simple Rig and Sail Plan
    Easily singlehanded without severely swept back spreaders.

11. Good Engine Access
    From all sides and access allowing for easy engine removal.

12. Fuel tankage sufficient for 800-1000 miles under power

13. Moderate draft
    Of around 6' without T or wing keel.

14. Keel, Prop and Rudder that Won't Snag Lines

15. Deep bilge sump
    Ideally with substantial tankage located below the waterline and cabin sole. All interior areas of the boat should drain to the bilge.

16. Adequate Interior and Accessible Deck Storage Capacity
    Ideally space under most of the main salon settee should be available for storage and not taken up with tankage. Lockers provide much more efficient storage than open shelves.

17. Comfortable Cockpit
    With room to relax and entertain and seatbacks high enough for good back support.

18. Low Exterior and Interior Maintenance
    Oiled teak interiors grow mold in the tropics and lots of exterior brightwork is difficult to maintain in any climate. Dark-colored hulls are hot, get salt-stained and fade fairly quickly in the tropics. Anodized, unpainted aluminum spars are much better than painted spars.

19. Swim Step
    A built-in swim step on a slightly reversed transom stern makes getting in and out of the water and dinghy or mooring stern-to easy.

20. Good Resale Appeal and Value

Suggested Reading

The Modern Cruising Sailboat, Charles Doane, International Marine, 2010.

The Best Used Boat Notebook, by John Kretschmer, Sheridan House, 2007.

The Voyager's Handbook, 2nd ed, Beth Leonard, International Marine 2006

Twenty Affordable Sailboats to Take You Anywhere, Nestor, Paradise Cay, 2007.

Inspecting the Aging Sailboat, Casey, International Marine, 2004.

The Boat Repair Bible, Adlard Coles Nautical, 2012

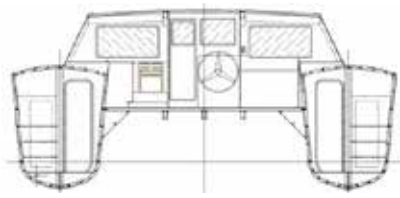
Don Casey's Sailboat Maintenance Manual, International Marine, 2006.

Practical Sailor's Practical Boat Buying, Volumes 1 & 2 from Belvoir Publications, P.O. Box 2626, Greenwich, CT 06836-2626 for $39.95 each or $59.95 for both. Also available from Armchair Sailor.

Surveying Yachts and Small Craft, Paul Stevens, Adlard Coles Nautical, 2010.

Surveying Fiberglass Sailboats, Henry C. Mustin, International Marine, 1994.

Desirable and Undesirable Characteristics of Offshore Yachts, John Rousmaniere, 1987.



7. Boat Design

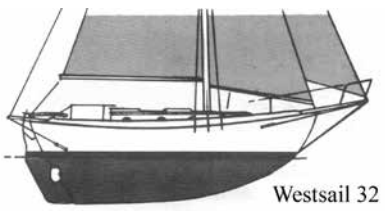
Design

If at possible, contact the designer before purchasing. Often the broker may be unaware or unwilling to share knowledge problems that have occurred with sisterships. The designer can tell you if the builder accurately followed the construction plans and may be able to tell you of any issues that have arisen, including problems with blisters, mast step, rudder, keel, etc. Some designs have structural issues that only appear after a period of time and ocean sailing. When first approaching a designer offer to pay a consultation fee out of courtesy for their time.

Underbody Design

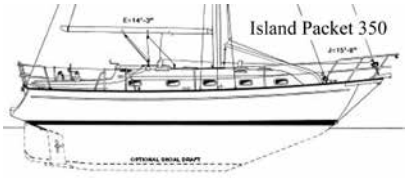
In the past, cruisers assumed a full-keel design with attached rudder was optimum for ocean voyaging. I have cruised on four different modern full-keel boats, plus on a boat with a longish keel and separate full-skeg and rudder. Our current boat has a semi-balanced rudder with partial skeg and for me the trade off of less protection is worth the ease of steering and added maneuverability.

Ten Types of Cruising Boats - Evolution of Yacht Design


Westsail 32

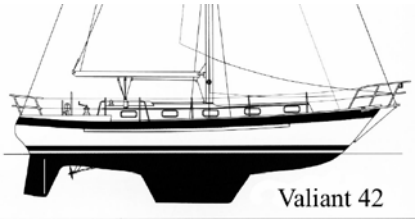
1. Heavy Displacement Full-Keeled Double-Enders based on Tahiti ketch or Norwegian lifeboat lines used to be a nearly automatic choice for long distance voyaging. However, yacht design has made great advances in the past 60 years, and you may choose to take advantage of these improvements which make for faster, more comfortable passages, and smaller, more easily handled sail plans without resorting to bowsprits and boomkins.

Having said that, there are still a few folks happily cruising on their Westsail 32s and Hans Christian's content that they have the best design for their cruising lifestyle. Remember that there is not one design or style of cruising that suits everyone.

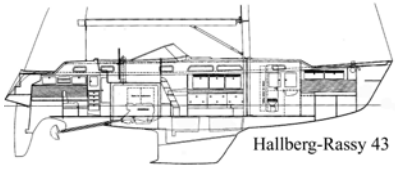


2. Modern Full Keel, with attached rudder and moderate displacement is another good choice for cruising in isolated areas where groundings or scrapes are common and the nearest shipyard may be thousands of miles away. The cutaway forefoot is a faster, more maneuverable design that will have fewer tendencies to trip or broach when running under storm conditions than a more traditional type of full keel boat. Having the rudder mounted slightly above and protected by the full length of the keel and the propeller enclosed in an aperture offers the best protection against damage from collision with submerged or floating objects. Careening or hauling out in primitive boatyards is easy with this type of design. Examples include: Island Packet, Rustler 36, Mason, Cape Dory, Freya 39, Nicholson 31.

3. Skeg Protected Rudder, detached from the keel is well suited for long distance cruising. The skeg protects the rudder to some degree, nd may increase directional stability. Examples of this type of design: Valiants, Pacific Seacraft 37, 40, 44, Amel, Rustler 37, 42, 44, Morgan 384 & 462 and all Oysters. There are many suitable, well-built boats of this design type and they are a popular choice for long distance ocean cruising.



4. Partial-Skeg Rudders are semi-balanced, reducing effort required whether steering by hand, windvane or autopilot. It is like having power steering. This type of rudder generally has three bearings, making it sturdier than a free-standing spade rudder which



generally has only two bearings. The partial skeg provides some protection from logs and debris and importantly provides directional stability if the rudder is lost. The downside is that the top of the rudder balance area is prone to catching lines and weed. Examples include Morris, Najad, Malo and the Frers-designed Hallberg-Rassys.

5. Long Keel/Spade Rudder is another viable cruising design. The longer keel provides more directional stability and importantly can more easily withstand a 6 knot grounding that a narrower, higher-aspect keel. The unprotected spade rudder is more vulnerable to being damaged by groundings or hard impact with objects. There are several very successful cruising designs that have a longer, substantially supported keel (not a thin, high-aspect keel) and strong rudderstocks. Some examples of this type of design appropriate for offshore voyaging are Niagara 31, 35, 42, Outbound 44, 46, 52, Sundeer, Deerfoot. If your cruise plans involve high latitude sailing or gunkholing in remote areas, you will need to be more cautious with this type of design.


Niagara 35

6. Fin Keel/Spade Rudder is by far the most common type of sailboats built today. Disadvantages for serious cruising include inability to survive a 6 knot grounding without substantial damage, high loading in a very small area of the hull which has resulted in sinkings due to loss of keels and inability to track in a straight line if rudder is lost plus tendency to pound when sailing to windward. These designs are frequently designed and built for bareboat charter market so generally have limited fuel tankage, deck and interior storage for extended cruising. It is possible to cruise on these type of boats as long as you understand the limitations.

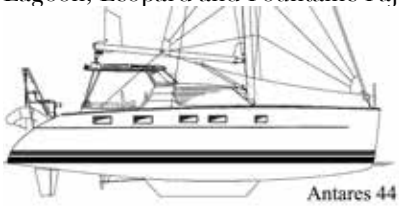

Beneteau
Sense 43


Garcia
Exploration 45

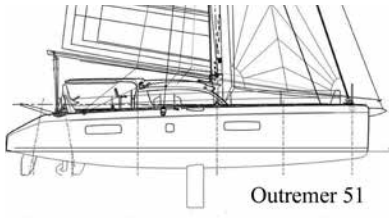
7. Centerboard/Lifting Keel is a design that French yards have popularized with the ubiquitous Ovni series and now the popular Garcia and Allures series. Jimmy Cornell's new Garcia Exploration 45 is a very sturdy and exciting design with good sailing performance. Southerly Yachts in England have built many sturdy and attractive lifting keel designs. Traditional centerboard designs by Bristol including their 35.5 to 53.3 and the Tartan 37 are well-proven.


Moorings/Lagoon 4600

8. Charter-oriented Catamarans are very popular for tropical cruising. Primarily designed and built for the charter trade they sport many double cabins, maximum interior volume and unimpressive sailing performance, particularly upwind, similar to or slower than a modern monohull of the same length. Their low bridge deck clearance produces interesting noises upwind and their saildrives, unprotected spade rudders and balsa cored hulls are vulnerable to damage from groundings or impact with objects at sea. However, if you're not planning extended ocean passagemaking or are cruising with kids in the tropics, these boats are very comfortable and stable. Examples include: Lagoon, Leopard and Fountaine Pajot.


Antares 44

9. Cruising-oriented Catamarans not designed or built for the charter trade present an attractive alternative. Frequently storage, tankage, engine access and overall quality (and price) are higher than on charter boats. Examples include Antares (in a category of its own in terms of design, construction quality and customer service), Manta, Dolphin, Voyage/Norseman, St. Francis, Island Spirit, Admiral and Chris White designs.



10. Performance Cruising Catamarans feature higher bridge deck clearance (no kabooms from wave slap), substantially better sailing performance and better overall design and construction. At the more expensive high-performance end we find Outremer, Catana, Switch and the very expensive Gunboat, several of which utilize carbon fiber and composite panels instead of plywood for interior furniture and bulkheads.

Negative Design Aspects to be Avoided

Bowsprits longer than 24" often prove to be a liability when anchoring or maneuvering in close quarters.

Low freeboard may indicate a design that will ship a lot of spray and water with the wind forward of the beam on ocean passages.

Excessive freeboard may cause poor windward performance, difficulty boarding from a dock or dinghy and the tendency to "sail" back and forth at anchor.

A small amount of weather helm as the wind increases is desirable, but an excessive amount that cannot be decreased by sail trim or rig tuning may mean that a boat will be difficult to steer by hand, windvane or autopilot.

If the design is excessively tender, you'll have to get used to living, cooking, navigating and sleeping at 25 to 30 degrees angle of heel every time you are sailing to windward, something you will find fatiguing. A comfortable motion at sea is very important.

A vessel with a short waterline and long, graceful overhangs will be slower and often tends to hobbyhorse or pitch when to sailing to windward making upwind passages uncomfortable and difficult. Another drawback is frequently a lack directional stability when sailing downwind in a large following sea.

Excessively broad sterns make for large cockpits and big interiors but can increase motion and decrease directional stability in a seaway or gusty winds.

Keels

Some keel designs are better suited to withstanding a hard grounding without damage.

A longer keel with external lead ballast attached to a substantial stub that is an integral part of the hull absorbs groundings well. When external ballast is used, keel bolts attaching the keel to the hull must be accessible, the root of the keel (where it attaches to the hull) shouldn't be narrow and keel loading must be spread out through a substantial grid or floor system. Lead absorbs impact much better than cast iron and because it is a denser material, results in stiffer boat. Preventing corrosion on a cast iron keel is a near-constant maintenance issue.

Another option is internal lead ballast that is lowered into the keel cavity and then fiberglassed into place. Internal lead ballast eliminates some potential problems with keel attachment, but check closely during survey for any voids or water penetration in the keel area between the ballast and fiberglass. Read Surveying Fiberglass Sailboats for more details. Cast iron or mixtures of iron and cement are less desirable internal ballast materials, resulting in a boat that heels more quickly and has less room for tankage above the keel.

Centerboards and lifting keels are an option if your plans include more coastal cruising than ocean voyaging, but the increased complexity and lowered stability are slight drawbacks for windward performance and ease of maintenance.

High aspect fin keels (deep draft but narrow fore and aft) are best suited for racing boats. Running aground can result in loss of the keel or damage to the area where the trailing edge of the keel meets the hull and can cause leaks around the keel bolts.

Wing keels reduce draft, but the tradeoff is that with a shape similar to some types of anchors, it can prove very difficult to get the boat off following a grounding without damaging the keel. The loading on the keel when attempting to kedge or be towed off is enormous because of the extra surface area of the wings.

Aft vs. Center Cockpit

Nigel Calder makes a clear argument as to why he prefers aft cockpit design. I can make a reasonable argument for either design, but personally prefer a center cockpit in boats over 40'-42' as long as the cockpit isn't unduly high off the water. Some of the advantages I appreciate with center cockpits include more privacy, much better engine access and less danger of the cockpit being filled from breaking following seas. Some designers try to maximize interior height in the aft cabin and engine room, resulting in a high cockpit sole with minimal cockpit seatbacks.

Steering Position

The location of the steering position is also important. If the wheel is mounted at the far aft end of the cockpit, it is difficult to protect the helmsperson with a cockpit dodger.

Transom

The ideal stern for a cruising boat includes a built-in swim step on a slightly reversed transom stern. This not only makes getting in and out of the water and dinghy easy, but allows easy access when moored stern-to a dock or wall, common in less developed cruising areas. Double-enders may look salty, but the loss of valuable, hard-to-replace lazarette storage space and buoyancy aft must be taken into consideration. Frequently double-enders have a tendency to "squat" in the stern and hobbyhorse sailing to windward when loaded with cruising gear. Valiants are the exception to this because their beam is carried well aft with little overhang.

Rig

Sloop rig is the simplest choice and what the majority of long distance cruisers are choosing. Many yacht designers and cruisers are adding a removable inner forestay on which a very simple, hank-on storm staysail can be set after furling the headsail.

Cutter rigs work very well on vessels over 45'. On boats under 45' they add clutter and complexity.

Ketch rigs were popular before dependable roller furling. After sailing 70,000 miles and seven years on our ketch-rigged Hallberg-Rassy 42 we were delighted to have the cockpit and aft deck free of a mizzen mast when we changed to our current vessel, a sloop. Amel of France builds excellent cruising boats. Why they still offer only ketch rigs is a total mystery!

Engine

The ability to maintain at least six knots under power will get you in most passes and channels at the time of least current. A rule of thumb is two horsepower per thousand pounds of displacement for a sufficiently powered cruising sailboat. Purists may say that this is excessive, but in my experience it has been an advantage to have sufficient power to deal with currents and the ability to motorsail to windward for short distances into steep chop when necessary.

Saildrives are a negative, but not quite a deal breaker. They are substantially more vulnerable to damage from floating debris and to corrosion from stray electrical current. For many servicing points, the boat must be hauled out of the water.

Points to Consider on an Engine:

How good is everyday access? Can the raw water pump be removed without dismantling the engine or engine mount? How easy is it to make hourly visual inspections when the engine is running?

Can the engine be removed if necessary for rebuilding or replacement without having to destroy the cockpit or companionway?

Is there a working engine hour meter and logbook showing maintenance history?

What is the range under power? A very minimum of 600-800 mile range under power for long distance cruising where fuel may not be available for months at a time is only marginal, from my experience.

Ideally the boat you are considering will have a common make of engine that will be easy to find parts and service for in less-developed cruising areas.

Best manufactures for worldwide parts availability are Volvo, Caterpillar, and Cummins.

Next best: Yanmar, Perkins,

Most difficult to obtain parts for are Westerbeke, Beta, Universal, BMW, Isuzu, Mercedes, Pisces, Sole, Pathfinder and Bukh.

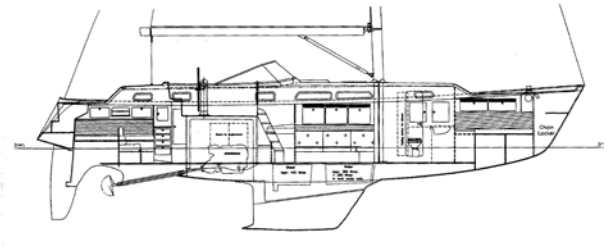
Some companies, Bukh and Beta for example, don't have parts distributors in many companies (countries?) but have excellent availability and quick shipments from their headquarters.

When I bought my Hallberg-Rassy 31, I thought the 25 hp diesel engine was overkill for a displacement of only 9,500 lbs, but the top speed of 7.2 knots, cruising speed of 6.5 knots and maximum range under power at 5 knots of 1,200 proved useful.

My 42' ketch displaced 25,000 pounds and was powered with a 62 hp engine which proved very adequate in areas like Patagonia, Antarctica and Alaska where conditions dictated powering for weeks at a time, encountering strong currents and tidal rips and fierce katabatic winds daily.

Our present 48', 38,000 lb boat has a 95 hp. engine which provides an 8.3 knot top speed, and a 1,500 mile range at more economical 6 knots. I have supplemented standard fuel tankage with jerry jugs stowed in cockpit lockers (but not on deck) with each of these boats.

8. Boat Construction



Hull Construction Material

1. Fiberglass is the second least maintenance-intensive material (following unpainted aluminum) for cruising boats, but construction quality varies greatly from one builder to the next. The majority of fiberglass boats were never designed or built for extended ocean sailing and may eventually start falling apart if pressed into this type of service. The other extreme are designs that are so heavily built and overweight and do not have the sailing performance that makes for fast, comfortable and enjoyable passages.

Pearson Vanguards, Tritons and Alberg 35's are examples of very well built, reasonably priced earliest fiberglass boats. After 50 years many of these boats are still going strong, although their short waterlines and modest volume make them less attractive than more modern designs.

Hull thickness doesn't necessarily translate into strength. A thick hull with a high resin to glass ratio may actually be more brittle than a thinner hull where the resin has been carefully squeegeed out.

Some builders have a history of serious osmotic blister problems, sometimes the result of lack of temperature and humidity control during lay-up. In some cases blistering may be serious enough to require a bottom peel; removal and replacement of part of the hull laminate. This can be very

expensive and time consuming and may occur again later. A knowledgeable surveyor will be an excellent resource and frequently will recommend looking for a different boat if the blisters are deep and extensive.

If the hull is balsa-cored and the core material becomes saturated because of improperly installed thru-hulls, or if the boat has "gone on the beach" you may want to look at a different boat because of the cost of repairs and potential for future problems. This is frequently an issue with ex-charter catamarans.

Foam-coring provides excellent insulation above the waterline but there can be problems with water absorption if coring is used below the waterline.

Read Surveying Yachts and Small Craft by Paul Stevens, Adlard Coles Nautical, 2010 or Surveying Fiberglass Sailboats by Henry C. Mustin, International Marine, 1994 for a clear and concise view of hull and deck design, structure, and condition

2. Steel is an excellent boatbuilding material, frequently the choice of sailors who have done extensive offshore cruising. The impact resistance and total watertightness of the hull, deck and fittings is an advantage. With sandblasting and new epoxy coatings, steel takes less time to maintain than it used to, although it still requires more time and cost to maintain than an unpainted aluminum or fiberglass boat. Some of the steel boats on the North American and Australian markets are owner-built hard-chine designs. Although strong and stiff, they are not particularly fast or attractive to many people's tastes. A poorly-built steel boat will have places on the inside of the hull that will trap water and rust through from the inside out. Access to every part of the interior of the hull makes checking for corrosion and painting much easier.

Some attractive, modern steel cruising boats are the Waterline Yachts built in Sidney, BC (an excellent yard), Kanter Yachts, Brewer-designed Goderich Yachts built in Ontario, and the Amazon 37 and 44 which were built in Vancouver, BC. Dutch and German-built steel boats are frequently of very high quality.

3. Aluminum boats are generally lighter and faster than steel boats, have less impact resistance and may be slightly more difficult to have repaired in remote shipyards. Painted aluminum boats often tend to develop paint

blisters after five years, requiring an expensive paint job if you want a fair and shiny hull. There are hundreds of unpainted French aluminum boats cruising the world, and although you may not find their concrete-colored oxidized aluminum hulls attractive, they are sturdy and practical. Aluminum suffers from electrolysis more severely than steel; if you own an aluminum boat you'll need to be very careful when installing gear and and when moored in electrically "hot" marinas. Quality aluminum builders include Allures, Garcia and Boreal in France and Kanter in Ontario, Canada.

4. Wood boats often offer a lower purchase price, although the cost and time involved in keeping them in good shape is more than with other materials. If you have a limited budget, and don't mind the additional work, a well-built wooden boat could be a reasonable choice. It may be difficult to find long-distance offshore insurance for traditionally built wooden cruising boats.

Perhaps because there are so many potential sources of problems on wooden boats in the tropics we see fewer of them long distance cruising each year. There is the special warmth and appeal of wood that some people find irresistible, whether or not it takes more care and maintenance.

Wooden boats built utilizing wood epoxy saturation (WEST System) technique are lighter, stronger and often faster than traditionally built boats and have a better chance of being insurable for ocean cruising. The best areas to find modern cold-molded boats are in the New Zealand and NW and NE US.

5. Ferrocement is the only material that has no advantages other than inexpensive construction materials. It is the most labor-intensive material to build with, is difficult to finance, insure or repair, and has the lowest impact resistance of any material. Having said this, I have met two cement cruising boats that have completed two and three circumnavigations respectively.

Tank Material

Stainless steel is the best tank material for water and fuel. Aluminum tanks are less expensive and lighter but frequently develop pin-hole leaks after 15 years. Chlorine, present in most municipal drinking water dissolves aluminum. Chlorine can be filtered out when filling tanks, but without a small amount of chlorine in the tropics, bacteria and algae can foul drinking water. Aluminum fuel tanks are also subject to corrosion and leaks.

Frequently builders install tanks, build the interior over them, and then install the house and decks. Removal and replacement of the tanks can be shockingly expensive. In December 2014 Practical Sailor, Patrick Childress relates how he cured leaking aluminum water tanks on his Valiant 40 using Amerlock 2. He also recommended more acceptable "food grade" two-part tanks designed specifically for potable water systems including: Rust-Oleum W9200, Hempel Hempadure 3556 and Sherwin Williams Tank Clad HS Epoxy.

Steel fuel tanks, commonly called "black iron" and found on many Taiwan boats nearly always needs to be replaced and quotes to replace with stainless often run over $12,000 per tank if the interior woodwork needs to be removed before the tank.

Bulkhead Attachment

On a fiberglass boat bulkheads need to be securely glassed to the hull and deck on both sides with multiple layers of tape. High production builders skip this labor-intensive step, gluing bulkheads in instead. Once these boats have had a hard grounding or made several ocean passages, bulkheads and interior wooden cabinetry frequently come unbonded from the hull and deck, allowing the hull to flex more than it should. The repair is complicated, messy and expensive, involving grinding and fiberglassing in some difficult to reach areas.

Internal stiffening systems (grid floor systems, and/or full-length and transverse glass over foam (not wooden) stringers) contribute greatly to the stiffness and rigidity of a boat. If the interior woodwork is just glued or lightly attached to a hull liner pan or to the hull, it's not uncommon to discover it breaking loose after a few thousand miles of ocean sailing. Access to hull and deck areas is generally restricted when fiberglass liners and pans are used in construction, making equipment installation and leak stopping difficult. From a manufacturing standpoint, hull liners are substantially less expensive than □stick-built" interiors, but you won't find them on top-end ocean cruising designs. This is one of the reasons for the large price difference between high-volume mass-produced French and German yards and higher quality, lower volume builders.

Deck Construction

The deck surface must provide adequate non-skid without being overly abrasive on bare knees. If you plan on living aboard or cruising in non-tropical areas, insulated decks will reduce condensation and moisture.

Teak decks look great at the boat show, but on older boats thin or improperly laid decks will present additional leak potential and maintenance and the cost of removal or replacement is often a deal breaker.

In the "70's and "80's, many Taiwan yards installed teak decking over plywood or random bits of wood. Serious water absorption problems started occurring once these boats were 10-15 years old. If the plywood core material is not marine grade (it commonly was not) or if insufficient bedding compound was used, water follows the screw threads to the core material which becomes saturated and rots. This is a deal breaker. Check with any marine surveyor to verify this and avoid these boats.

I would recommend having a surveyor look very carefully at any boat older than six years with balsa-cored decks. Unless the core has been eliminated in favor of a solid laminate where stanchion bases, genoa tracks, cleats and other deck fittings are placed, water will penetrate the balsa sooner or later, and repairs may be extensive and expensive.

If the boat has foam-cored decks, the marine surveyor will check all horizontal surfaces carefully for voids or delaminating by tapping with a small hammer.

Hull to Deck Joint

There are several methods of attaching the hull and deck of fiberglass boats. The most common method utilizes bolts or screws protruding through on the inside of the hull to the deck joint. This a mechanical clamp joint is relying on the bond of a sealant adhesive (3M 5200 is often used) to stop leaks. After 10 to 12 years and several thousand miles of ocean sailing the sealant/adhesive loses some of its elasticity. Due to the working of the boat and the different climatic conditions the toerail and hull expand, contract and flex at different rates eventually weakening the bond, allowing water to follow the bolt or screw threads down, and drip on the inside of your lockers.

Two Methods of Solving Caprail Leaks

Remove the teak cap rail or aluminum extruded toerail and clean and re-bed each bolt.

Radius the inside of the joint with epoxy and microballoons and then lay several layers of fiberglass tape over the inside of the joint, totally sealing it and strengthening the area at the same time.

A more trouble-free hull to deck joint utilizes substantial fiberglass bonding on the interior of the joint, eliminating mechanical fasteners and leaks.

Mast Support System

Deck stepped masts work well if proper structural members transmit the load to the keel. They have no leaks and corrosion and are simpler to pull for inspection. With keel stepped masts, inspect for leaks and corrosion at the base of the mast. Check the mast step of any mast for settling or deformation. Check any mast for trueness.

Chainplate Load Transmission

The loading from chain plates must be evenly transmitted to bulkheads and structural members below deck to avoid lifting or distorting the deck. Separate chainplates for forward, upper and aft shrouds provides more stability for the mast and reduces the chance of deck loading distortion.

Swept-back spreaders mean a less expensive installation for the builder and a tighter sheeting angle for the headsail, but frequently present a chafe problem when easing the main out for deep downwind sailing.

External chainplates (fastened to the outside of the hull) look salty but have a much higher leak potential and restrict jib sheeting angles. Chainplates must be easily removable as crevice corrosion, particularly in warm climates can be a serious issue.

Steering System and Position

Some sailors prefer tillers on boats under 35' as there are fewer moving parts and installing most windvane steering systems is less complicated than with wheel steering.

If the boat you're considering has wheel steering, hopefully the system was built by a reputable company like Edson, Jeffa or Lewmar/Whitlock where you're assured of quality components and that you'll always be able to source spare parts if needed. Many Taiwanese-built steering systems suffer from poor initial design, inferior bronze castings and rudders that aren't able to hold up to the stresses of ocean sailing. This is less of a problem on higher quality Taiwan boats like Norseman, Taswell, Mason and Little Harbor.

Emergency Steering

Emergency steering means in best case you can steer the boat plus or minus 30 degrees. A very workable alternative if the rudder is undamaged but steering is not working is having an autopilot ram connected to a separate tiller arm bolted directly to the rudder shaft.

9. Boat Selection Prices

The boats on this list are a small example from the 147 builders listed on our "Boats to Consider for Offshore Cursing" list in the Offshore Cruising Companion. "Mkt" refers to the number of boats of each model currently listed on www.yachtworld.com. This changes frequently, but gives you an idea of how common or rare each boat listed is. The number and price of listings is as of March 28, 2023. The selling prices are a two-year average from January 1, 2013 to January 1, 2015 from boatwizard.com. All listings are North America only, except for * which includes worldwide to give a broader market picture.

If you are looking for a cruising boat, consider my professional Boat Purchase Consultation. The fee for this service is $950, with no time or geographic limitations. I will forward you an extensive questionnaire, evaluate the boats you are presently considering and suggest additional boats for you to consider.

When possible, I will help with information regarding honest, unbiased buyer's broker and surveyor, making an offer, negotiating repairs following the survey, title search, arranging shipping and insurance.

Since 1976 I have consulted with thousands of clients worldwide, with budgets ranging from $20,000 to $3,000,000. When I am at sea conducting expeditions I have daily communication via satellite email.

I am professional consultant, I don't sell boats or accept commissions from anyone. My only interest is helping you find a boat which will allow you to realize your cruising dreams safely and comfortably, while maintaining as much of your investment as possible.

John Neal
Mahina Expeditions
www.mahina.com
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P.O. Box 1596
Friday Harbor, WA 98250
Tel: 360.378.6163

Mahina Offshore Cruising Workshop - 2023

Featured Boats - Condensed from "Boats to Consider for Offshore Cruising" from
OFFSHORE CRUISING COMPANION

Boat (add'l models)	Mkt	Used	Sold	Change	Comments
Bristol 35.5 (41.1, 43.3)	5	$35-60	$32,000	New add.	Solid design and build quality
Morgan 382, 383, 384	5	$29-49	$41,000	+$1k	Brewer design, good value, not sexy
Tartan 37	11	$28-65	$43,750	-$19k	Strong S & S CB or keel, ck balsa core
Pearson 424 (385, 422)	4	$49-63	$64,300	+$10k	Cutters most desirable, very good value
Beneteau 40 CC (42,44)	1	$116,000	$106,333	New add.	Wauquiez-built, innovative, good choice
Island Packet 350 (380)	7	$99-175	$118,833	+$6k	Better performance than 35, well-built
Catalina 400 (420,440+)	10	$75-154	$135,166	New add.	Spacious, but short on storage and fuel
Beneteau 423 (393, 473)	31	$92-175	$135,857	+$28k	OK for downwind tradewind cruising
Caliber 40	6	$120-165	$182,750	+$12k	Good value, great tankage on LRC series
Ovni 395 (400, 435, 455)	4	$206-307	$201,500	-$139	Proven, innovative, solid value, high resale
Sceptre 41-43	3	$114-165	No sales	No sales	Stiff, fast, strong and fairly modern pilothouse
Valiant 42 (50)	1	$213-239	$245,000	+$35k	Solid boats, newer the better, V-drive is a neg.
Amel 52, 53, 54 (50, 55)	16	$140-310	$277,143	+$7k	Unusual but good choice, SOLID!
Hallberg-Rassy 43 (39+)	4	$309-383	$388,000	+$60k	Perfect for a couple, hardtop is excellent
Outbound 44/46	1	$400-750	$400,150	-$27k	Well-built, attractive and fast. High quality.
Garcia Exploration 45	0	$695	$695,000	No sales	High quality, go-anywhere SUV yacht!
Multihulls					
Privilege 39 (42, 45, 48)	1	$95	$142,660	-$21k	Good quality. Not all are ex-charter boats.
Fountaine Pajot Belize 43	3	$259-529	$268,660	+$17k	Newer models not as sturdy as older ones.
Manta 40, 42	3	$285-305	$260,750	+$55k	Solid, heavy boats with strong resale value.
Leopard 44 (46, 47, 48)	4	$350-650	$431,333	+$69K	Great choice, particularly non-charter boats
Outremer 45	2	$690-705	$776,400	+$143k	Fast, well-built. Less volume than slower boats
Catana 471,472	3	$355-484	$437,400	+$7k	Quality, lousy customer service on new builds
Antares 44i	2	$680-899	$691,500	-$66k	One of the best constructed cats, not fast

The boats on this list are a small example from the 147 builders listed on our "Boats to Consider for Offshore Cursing" list in the Offshore Cruising Companion. "Mkt" refers to the number of boats currently listed on www.yachtworld.com. The number and price of listings is as of March 7, 2023. The selling prices are a one-year average from soldboats.com. "Change" denotes the change in average selling price from the previous year.

If you are looking for a cruising boat, consider my professional **Boat Purchase Consultation** for $950, with no time or geographic limits. Complete and return the questionnaire located at www.mahina.com/questionnaire and I will evaluate the boats you are presently considering and suggest additional boats for you to consider. I will provide referrals to honest, unbiased brokers and surveyors, assistance in making an offer, negotiating cost of repairs following the survey, title search, flagging options, shipping, insurance, additional gear needed and overall weather and passage planning. Full details: www.mahina.com/consult or by emailing: sailing@mahina.com.

Why Some Boats Are More Expensive Than Others

Component	Lower Quality/Charter/Local Cruising	Higher Quality/Offshore
Structure	No or minimal grid reinforcing system Bulkheads & decks glued in place	Substantial grid system Bulkheads & deck glassed (tabbed) in place
Ballast	Cast iron: rusts & doesn't absorb impact	Lead, which absorbs impact, more expensive
Keel	Poor impact absorption and distribution, keel may fall off with serious grounding	Able to withstand 6kt grounding without structural damage
Sailing Ability	Great downwind	Equally good upwind & downwind performance
Bilge	Shallow & flat; <20 gallon capacity	Deep; >50 gallon capacity
Tank Material	Aluminum, plastic or black iron	Stainless steel or fiberglass
Tank Location	Under settees	Above keel, under cabin sole
Fuel Tankage	<60 gallons, <600 miles	>100 gallons, >1000 miles
Interior Storage	Space under settees taken by tankage	Substantially more storage available
Deck Storage	Minimal storage lockers	Substantial deck storage lockers
Deck Core	Balsa or non-marine ply	Inorganic closed-cell foam or none
Rig	Lower strength or complex (B&R)	Simple & strong, ideally w/ fore & aft lowers & removable cutter stay for storm staysail
Battery Capacity	<300 amp hours	>500 amp hours
Charging Output	<100 amps	>100 amps

Refit and Maintenance Costs

Initial Refit and Outfit Budget:
Percent of original purchase price to prepare a stock 10+ year old 40'-46' boat for extended cruising: 30 – 100% depending on quality and condition of vessel

Maintenance Items to Budget For:
(Approximate prices for 40' – 46' boat)

- Repower or rebuild main engine at 5000 to 10,000 hours 5,000 - 30,000
- Remove antifoul paint and epoxy bottom job every 8 -10 years 2,000 - 20,000
- Pull mast, replace rigging, repaint every 10 years 4,000 - 15,000
- Replace sails every 20,000 - 30,000 miles 10,000 - 20,000
- Replace batteries every 2-6 years 1,500 - 20,000
- Repack liferaft (1-3 years), replace at 12-15 yrs 1,500 - 5,000
- Regalvanize chain every two years (tropical waters) 600 - 800
- Replace chain every 6 years in tropical waters 1,500 - 2,000
- Rebuild or replace windlass every 4-8 years 300 - 4,000
- Drop rudder for inspection & repair every 5 years 1,000 - 4,000
- Replace tender and motor every 5-10 years 4,000 - 10,000
- Replace failed or outdated electronics every 2-12 years 2,000 - 20,000
- Replace fresh water and head hoses every 5 yrs 300 - 500
- Replace thru-hulls and ball valves every 8-10 yrs 2,000 - 10,000
- Replace solar panels and regulator every 4-8 years 2,000 - 5,000

Maintenance Costs While Cruising
First 1-4 years: 5% of original purchase price annually, 5-10 years: 8% annually, over 10 years: 5-10% annually
The older the boat, the higher the annual maintenance costs and the more time required for maintenance.

John Neal's

Boats to Consider for Ocean Cruising

Updated April 2023

Through Offshore Cruising Seminars and Boat Selection Consultations I have helped more than 12,000 sailors locate the best ocean cruising boats for their planned voyages and budget. If you need knowledgeable, experienced (400,000 ocean miles, 50 years) and unbiased advice from someone who has no financial interest in the boat you select, I can help. Details on www.mahina.com/consult.html or contact me at Mahina Expeditions, sailing@mahina.com, tel 360.378.7344. v4.23

Boat Model	Overall Value, 1 – 5, 5 being best value and highest quality	
Able 32, 42, 48	3	Superb quality, expensive, but old. Chuck Paine designs.
Alajuela 33, 38	1	33 is a good design, 38 is a classic dinosaur with long bowsprit and boomkin.
Alberg 30,35, 37	1	Proven, but ancient, narrow, short waterlines, limited interior volume.
Alden 38, 43, 44, 46, 48, 54, 58	3	Classy, well built, beautiful. Because of age, teak decks may be an issue.
Allied 30, 32, 33, 35, 36, 39, 42	1	Good value. Functional, practical but very old now.
Alubat (Ovni, Cigale) 36-58	5	Builders of innovative but simple lifting-keel aluminum cruising boats
Allures 40, 45, 51	5	Top quality, innovative, aluminum hulls/lifting keel design with fiberglass decks and house on newer models (a brilliant construction technique).
Amel 36-64	4	Strong, well designed passage makers, great value, but systems-rich and AC generator-dependent. Rare serious blister problems on older models.
Amazon 29, 37, 44	3	Steel boats, attractive modern designs, some corrosion issues.
Amphitrite 43	3	Wauquiez built, strong & roomy with good storage. Odd deck design, but solid boat and good value. Avoid teak deck models as teak is super thin.
Bayfield 29, 30-32, 40	1	Only moderate quality and interiors are a bit "plasticy" interiors.
Bianca 36-52	3	Quality Danish yard, now a winter refit and storage facility.
Bluewater 60	2	Modern, top quality Chuck Paine design, only a few built.
Boreal 44, 47, 50, 53, 63	4	Innovative design suitable for high latitude cruising, late delivery problems.
Bowman 36-58	2	Strong boats, good passagemakers, but shortish waterlines.
Brewer 42, 44	3	Improved version of Whitby 42.
Bristol 27-45	3	Good boats. Later models were better quality. Long since out of production.
Bristol Channel Cutter 28	2	Well built, but cockpit and cabin not comfortable.
Bruckmann 42, 480, 50, 65	3	Solid, roomy Mark Ellis designs, perfect for inclement weather
Cabot 36	2	Ted Brewer design. Very limited production a long time ago.
Caliber 28, 33, 35, 38, 40.	3	Fairly well-built. Michael McCreary designs. LRC models have substantial tankage but smallish interiors. The 47 is not an attractive boat.
Cambria 40, 44, 46	3	Fast, well-built, gorgeous and have held their value well, but getting old.
Camper Nicholson 31, 32, 35, 38, 39, 40, 43, 47, 56, 58, 70	2	Famous yard, long out of business now. Very seaworthy but watch for consistent serious blister problems on all models once in warm waters.
Cabo Rico 34, 36, 38, 40, 42, 45, 47	2	Crealock & Paine designs. Some problems with water absorption into balsa-cored decks. Newer Paine-designed models are substantially better.
Cape Dory - all models	1	Classic design, quality, but narrow and small interiors w/short WL.
Cape George Cutters 31, 36, 38	2	Many owner-completed, quality varies. Surprisingly fast, but look for deck rot.
Cascade 36, 42	1	1965-67 design. Narrow-beamed and sturdy, many owner-completed.
Catalina 385, 425, 445	3	Later models are impressive and keep getting better. These are not boats for Cape Horn but are totally adequate for low to mid-latitude cruising.
Cavalier 32, 39	2	Limited production, fairly good quality vessels, but narrow, dated designs.
Centurion 36, 38, 40/41, 42/45 47/49	3	Fast, attractive solid boats with very modest tankage and limited storage. Avoid any with teak decks as removal will cost $60k!
Cherubini 44, 48, 62	3	Semi-custom, absolutely gorgeous, great sailing & expensive. Limited interior space compared to modern designs.
Contessa 26 & 32	1	Tania Aebi & B.J. Caldwell both circumnavigated in 26's, but these are TINY boats. The 32 is small and sturdy and truly a classic.
Contest 31, 35, 36, 38, 40, 41, 42, 44, 46, 48, 55, 60	4	Newer models are very attractive and expensive. Wide wing keels on some models, think Bruce anchor. Yard continues to build top-quality boats.

Corbin 39	2	Roomy and strong but blisters if taken to warm water. Some owner completed.
Crealock 31, PH 32, 34, 37, 40, 44 by Pacific Seacraft	3	Good value and well built. Graceful overhangs, canoe sterns, short waterlines means these boats can hobbyhorse upwind.
CS 33, 36	2	Modern, fairly well built. Occasional blister problems.
CSY 37, 44	1	Sturdy, roomy & reasonably priced but very old now.
Dana 24 by Pacific Seacraft	2	Attractive solid, expensive and slooow miniature pocket ocean cruiser.
Deerfoot Yachts	3	Fast & innovative, aluminum & fiberglass hulls.
Dickerson 36, 37, 40, 41, 50	1	Nicely proportioned & well-built but ancient. Earlier 36's are very reasonably priced but lack interior space and are truly ancient.
Discovery 42, 48, 54, 55, 58, 68	3	Fairly high-quality yard, now sadly bankrupt.
Dufour 31, 35 - 45	2	1964-84 models had solid hulls & balsa cored-decks. Later models not brilliant.
Endurance 35, 38, 40	1	Peter Ibold design, some owner completed. Built by various yards.
Esprit 37 or Valiant 37, 39	2	Comfortable, well proven, good value but some have blisters.
Exploration 45, 52 (Garcia)	5	Innovative, impressive aluminum lifting keel designs with protected steering positions.
F & C 44	2	Semi-modern Frers designed cruising ketch built in Argentina.
Fantasi 37, 50	4	High quality attractive pilothouse boats built on Orust Island, Sweden.
Farr Pilot House 50, 56, 60, 63	4	Powerful, fast, good quality. Hold value very well.
Fast Passage 39	1	Some built in Canada, some by Tollycraft. WA. Canadian models better.
Fisher 30-46	1	Sturdy and slow classic motorsailers. OK for high latitude cruising.
Fraser 41, 46, 50	2	Good, sturdy, fairly modern cruisers.
Freya 39	2	Stiff and fast, but many owner-completed, so quality varies greatly.
Garcia 46-115	5	Strong, semi-custom, highest quality aluminum lifting keel designs built in France
Gladiateur 33	1	Sturdy, short on tankage, Wauquiez-built.
Goderich 35, 37,41	2	Attractive Brewer semi-custom steel boat but small production run and rare.
Gozzard 31, 36, 44	3	Good design & quality construction. Totally committed quality company.
Hallberg-Rassy, 31 - 69	5	Stiff, strong, fast, comfortable, good tankage & systems integration. Newer Frers designs faster than earlier models. Teak deck issues on some older models.
Halmatic 30	1	Similar to Nicholson 31. Watch for blisters.
Hinkley 30-64	3	Attractive classic lines, highest quality construction. Modest tankage & storage, shortish waterlines.
Hood 38	3	Hood design, Wauquiez-built, attractive but short on tankage. Solid choice.
Hylas 46,49, 54, 54 raised Saloon, 56, 70	4	Good performance, tankage & storage. Substantially better quality & fewer deck leaks on newer models.
Island Packet 32, 35, 350, 37,38, 380, 40, 420, 44, 45	4	Roomy & comfortable, good tankage & storage but some unusual features. Only consider IP's built after 1998 when chainplate issue was addressed.
Jason 35 from Miller Marine	1	Many owner-completed. Several have cruised extensively.
Jongert 50, 55, 60, 67, 73	3	Quality, heavy, expensive, semi-custom steel and aluminum yachts.
Justine 36	2	Gorgeous Paine design, Morris built cruiser. Rare.
Kaiser Gale Force 34	2	Well designed and built, good sailing qualities.
Kaiulani 34, 38	2	Lovely steel Brewer & Yohe designs. Semi-custom, very limited production.
Kanter 42, 45, 60, 65	2	Semi-custom steel & alu boats. Later alum. models much better than early steel ones. Chuck Paine & Ted Brewer designs. Some have serious corrosion issues.
LM 30, 315, 32, 380	2	Some have inside steering. Well-built and impressive pocket cruisers.
Little Harbor 42 - 90	2	Hood designed heavy displacement; semi-custom, very high maintenance means these are expensive to own. Strange pinched Ted Hood sterns.
Malo 36, 38, 39, 45	5	High quality offshore boats with good sailing performance. Multiple instances of skeg failure reported on 45.
Mariah 31	1	At least one circumnavigation. Pacific Seacraft-built. Slow and small.
Mason 33, 43, 44, 53, 54, 63	2	Handsome Ta-Shing boats, short waterlines and high maintenance.
Moody 38, 42, 47, 54, 64	3	Good designs of only modest quality. Compare to Catalina.
Morgan 382, 383, 384	3	Ted Brewer design for around $45-55K. Good value if they've been repowered
Morris 26, 28, 30, 32, 34,36, 42, 44, 45, 454, 46, 48.6, 52	4	Chuck Paine designs, superb quality, highest quality US yard building cruising boats. Semi-custom and expensive.
Mystic 57, 60	3	Dubois design, Bowman built, beautiful. Very limited production run.

Mystery 35, 43	3	Top quality, fast and attractive. Good choice!
Najad 330, 361, 370, 390, 420, 490, 520	5	Quality, attractive boats. Excellent sailing performance. Good tankage, storage and high level of craftsmanship.
Nauti-Cat 351, 39, 40, 42, 515, 521	2	Later S & S designed models are much better performers than older tubby models. Newer boats are very high quality with inside steering.
Niagara 31, 35, 42	2	Well-built & roomy. Good value, but watch for soggy deck cores.
Nordborg 30-40	2	High quality but classic, narrow Elvstrom and S&S designs.
Nordic 34,37,40,44,45	2	Attractive boats, some solvable problems with mast step deflection and leaky hull to deck joint on the 40 & 44.
Norseman 400,447	2	Have held their value well but require a lot of maintenance. Rusty fuel tanks present an expensive repair issue. Attractive and good sailing characteristics.
Nordship 35, 360, 380, 430	3	High quality Danish yard. Gorgeous deck saloons models.
North Wind 43,50, 58	3	S&S designs, fairly good construction quality. Very few in NA.
Ocean 60, 71	2	Powerful boats, many have had blister problems and seriously old now.
Ocean Cruising 42	*	Only a few built by Hank Hinkley. Classy, top quality.
Outbound 44, 46 52	5	Fast, well-built boats with excellent customer service. New company owners now
Ovni 35, 395, 445, 495, 58	5	Sturdy, low maintenance excellent aluminum, lifting keel. Newer the better.
Oyster 42, 45, 485,49,53, 55, 56 61, 62, 63, 66, 70, 82, 100	4	Attractive, expensive and good quality. Weak resale value on larger models make these a good choice.
Pacific Seacraft 34, 37, 40, 44	3	Well built, classic lines with graceful overhangs & short WLs mean slow & small.
Pearson 35, 365, 385, 422, 424, 520	2	Moderate construction quality, but good value. The 385 has amazing use of space and 424 cutter is tough to beat for value.
Passport 40, 41, 415, 435, 44, 456, 470, 50	3	Modern Perry cruising design. Good storage/tankage, soggy wooden deck cores common on older models.
Pretorien 35	3	Strong, solid & attractive, built by Wauquiez. Great value. Modest tankage, many have saildrives, a negative. Later models better.
Regina of Vindo, 38, 43, 49	5	Gorgeous, exquisitely built, highest quality deck saloon. In a class of their own.
Rival 36-41, Rival Bowman 42	3	Strong, good-looking and sailing boats. RB 42 very impressive.
Rustler 36, 37, 42	4	Totally impressive, high-quality boats and excellent company.
Sabre 34, 362,38, 402, 42, 402, 425, 452	3	Built in Maine, modest quality, limited tankage and storage, but very pretty. Doctor's boats for New England.
Sadler 34	3	Unsinkable, fast, great performance. Good choice.
Santa Cruz 52, 53	3	Strong, fast is fun, but pounds upwind! Last boats were built in FL
Saturna 33	2	Attractive and roomy Bill Garden-designed pilothouse cutter.
Scanmar 33, 345, 35 & 40	3	Limited production but good design & quality construction.
Sceptre 41, 43	3	Modern quality pilothouse with good sailing performance.
Seawind 30, Seawind II 32	2	Solid old boats, good value only if they have been refit.
Seguin 44, 51 by Lyman-Morse	2	Semi-custom, Maine-built, powerful and attractive boats. Builder does refits.
Shannon 32, 36, 39, 43, 47, 53.	2	Good reliable, solid, traditional and slow boats. Some deck issues…
Skye 51	2	Similar looking to Swans. Soggy deck problems common.
Southerly 330-590	3	Quality built, attractive and innovative swing-keel yachts.
Southern Cross 28, 31, 35, 39	2	Moderate quality, limited on deck storage, old.
Spencer 35, 42, 44, 54	1	Ancient, solid boats, built in Vancouver, B.C. Quite dated now.
Stellar 52	2	Quality S&S design, well built, good detail work. Very limited production.
Sunbeam 32, 34, 37, 38, 40	3	Not bad! Built in Austria.
Sundeer 56, 64	3	Innovative design & excellent offwind performance. Good systems layout. Some need extensive refits. Built by TPI.
Swan	3	Newest models poorly suited for ocean cruising with open cockpits and limited tankage & storage. Teak deck issues on older models.
Shearwater 39, 45	2	Sturdy, traditional appearance, fairly good performance.
Sweden Yachts	2	Racer-cruisers, short on tankage and storage and having rudder loss issues.
Tartan 34, 3500, 37, 3700, 41, 4100, 4600	3	Moderate quality, some have centerboards. Modest storage and tankage. Several 37's have circumnavigated – look for ones that have been refitted
Taswell 43, 49, 56, 58, 60, 72	3	Good quality and sailing performance. Limited tankage on some models.
Tashiba 31, 36, 40	2	High maintenance Perry designs built by Ta Shing.
Topper Hermanson 40+	3	Semi custom steel or aluminum Van de Stadt designs.
Trintella 35-47	3	Roomy and well built. Newer designs are aluminum and expensive

Triton 29 by Pearson	1	Earliest fiberglass production boat. Ancient, small but sturdily built.
Twister 28	1	Long production run. Sturdy but narrow, built by Tyler Yachts.
Valiant 32, 37, 39, 40, 42, 47, 50	3	Few problems with the newer, Texas built boats. Proven designs. Double ender means limited cockpit stowage and no possibility of a swim step.
Vancouver 27	2	Also built in Taiwan & England. Solid pocket circumnavigator for the patient.
Vancouver 28, 34, 36, 38	2	High quality semi-traditional yachts built by Northshore Marine.
Vangard 32	1	Sturdy but truly ancient Phil Rhodes design, built by Pearson.
Vega 27, by Albin Marine	1	At least six have circumnavigated. Inexpensive, light and fast.
Victoria 30, 34	2	Chuck Paine design, Morris built.
Vilm 116, 117	3	Quality motorsailers, solid and good for higher latitudes
Vindo 29, 34, 38, 39	1	Attractive, well built, but very high maintenance.
Vineyard Vixen 30, 34	1	Attractive design, quality boats but rare.
Westerly 26 – 43	2	Not flashy, but moderately well-built boats. Similar to Moody or Catalina.
Westsail 28, 32, 39, 42, 43	2	Sturdy boats traditional design. Watch for leaky aluminum tanks.
Whitby 42, 44	2	Brewer designs, roomy and fairly well built but slow and old.
Yamaha 33, 35CS, 37	2	Solid, no-nonsense sturdy, low maintenance.
Yankee 30, 38	2	S & S designed. Inexpensive and very capable. Great value.

Catamarans

Antares 44	5	Most impressive construction details and quality. No saildrives!
Atlantic 42, 48, 55	3	Chris White design, quality construction.
Catana 401, 431, 471, 521	4	Good design, but customer service seriously lacks at delivery, complicated systems and expensive to maintain.
Dean 400, 441	2	Fairly well built, roomy & comfy, moderate performance, good engine access.
Dolphin 46	2	Daggerboards, good performance/comfort balance.
Fountaine Pajot 38, 43, 44, Casamance 45, 46, 56, 60, 75	3	Attractive designs, quality keeps improving, so newer is better. Stick-built means stiffer and lighter than Leopard with better bridge deck clearance.
Garcia Explocat 52	5	A development of the very successful Garcia Exporation monohulls. Aluminum, go-anywhere in the world construction. Expensive with a serious waiting time.
Gunboat 48-90	4	Expensive, innovative rocketships now built in France.
Kronos 45	2	Wauquiez-Beneteau built. Study but heavy and only 13 built.
Knysna 440, 480	2	Sturdy but a little odd; poor engine access. Foam-core, no balsa
Lagoon 38, 41, 47, 57, 67	2	Beneteau built, great charter boat, not as well built and don't age as well as Leopards.
Leopard 38,42,44, 46,47, 62	4	Good designs, well built, easily maintained. Moderate bridge deck clearance. Leopard 44, & 48 breakthrough design with forward cockpit. Look for non-charter, owner 3 cabin versions.
Manta 38, 40, 42	3	Well designed and built. Great cruising boat. Slightly heavy.
Outremer 40-64	4	Fast & strong, lightweight construction, no balsa coring. Expensive and fairly high experience level required to sail these safely. Narrow hulls.
PDQ 32, 36, 42, 44	3	Long successful production run. Now called Antares 44.
Privilege 40-62	4	Good build quality & performance. The 435-465 hits the sweet spot for couples.
Prout 37, 38, 45, 50	1	Reasonably priced, well proven, long production run.
Seawind 33, 39, 41, 52	1	Marginal quality, originally built in Australia, now in Vietnam
St. Francis 50	2	Below average quality & sailing performance, low bridge deck clearance.
Soubise 46	4	Excellent, super-fast and high quality, semi-custom.
Voyage 380, 440, 500, 580	2	Lightweight, luxury-focused, low freeboard & bridge deck clearance.

10. Resources

Recommended Books

The Modern Cruising Sailboat, Charles Doane, International Marine, 2010.

The Best Used Boat Notebook, by John Kretschmer, Sheridan House, 2007.

The Voyager's Handbook, 2nd edition, Beth Leonard, International Marine 2006.

Twenty Affordable Sailboats to Take You Anywhere, Nestor, Paradise Cay, 2007.

Inspecting the Aging Sailboat, Casey, International Marine, 2004.

The Boat Repair Bible, Adlard Coles Nautical, 2012

Don Casey's Sailboat Maintenance Manual, International Marine, 2006.

Practical Sailor's Practical Boat Buying, Volumes 1 & 2 from
Belvoir Publications, P.O. Box 2626, Greenwich, CT 06836-2626
$39.95 each or $59.95 for both.

Surveying Yachts and Small Craft, Paul Stevens, Adlard Coles Nautical, 2010.

Surveying Fiberglass Sailboats, Henry C. Mustin, International Marine, 1994.

Desirable and Undesirable Characteristics of Offshore Yachts, John Rousmaniere, 1987.

Twenty Small Sailboats to Take You Anywhere, John Vigor, Paradise Cay, 1999.

Catamarans, Completer Guide for Cruising Sailors, GregorTarjan

Marine Diesel Engines, Nigel Calder

About the Author - John Neal

Born on the banks of the Blue Nile, John sailed away from Seattle on an Albin Vega 27 for the South Pacific in 1974 at age 22, wrote Log of Mahina, a best seller, and has now sailed 400,000 miles. Since 1976, John's passion has been sharing his knowledge of ocean cruising. John has conducted 177 Offshore Cruising Seminars and over 210 sail-training expeditions to locations including the South Pacific, Antarctica, Africa, Europe and the Arctic aboard Mahina Tiare II & III and other boats. John has rounded Cape Horn under sail six times and holds a USCG 100-ton master's license and an FAA private pilot license. He has started, operated and sold a successful yacht brokerage, marine retail and sail repair/canvas businesses.

Magazines Contributed to: Blue Water Sailing (contributing editor), Yachting World (UK), Australian Yachting, Cruising World, Cruising Helmsman (Australia), 48 North, Latitude 38, SAIL, Sailing, Yachting, Practical Sailor, Castoff, Santana and Bay and Delta Yachtsman.

Books Authored: Log of the Mahina, Mahina Tiare, Pacific Passages (with Barbara Marrett), Offshore Cruising Companion, Offshore Expedition

Companion, Storm Survival Tactics.

Books Contributed to: World Voyage Planner, World Cruising Survey by Jimmy Cornell, Surviving the Storm by Steve Dashew, NOAA-PVS Crew Safety Manual, Sharks of Tropical and Temperate Seas, R.H. Johnson and Fifty Places to Sail Before You Die by Chris Santella.

Videography: Heavy Weather Sailing (1981-contributor), Sailing to Cape Horn (1995), Sailing to Antarctica (1996).

Areas of Experience: Caribbean, Mexico, Atlantic including Azores, Canaries, and Madeira, Patagonia (Chile and Argentina), Cape Horn, Antarctica, Pacific including Galapagos, Easter, Pitcairn, Fr. Polynesia, Cooks, Samoa, Tonga, Wallis, Fiji, Vanuatu, New Caledonia, Australia, Tasmania, New Zealand, Alaska, British Columbia. Europe including Ireland, England, Scotland, Orkney, Shetland, Norway, Spitsbergen, Sweden, Denmark, Holland, Germany, Spain, Portugal, Gibraltar and the Med including Morocco.

Boat Purchase Consultation

Since 1977 John has helped over 12,0000 sailors worldwide locate, evaluate and purchase the best possible boat for their proposed cruising for a flat fee. www.mahina.com/consult.

Mahina Offshore Sail Training Expeditions

John offers several 10-day training expeditions annually in locations including Scotland, British Columbia, Washington and New Zealand. View details at www.mahina.com/sailing-schedule. To view past expedition log updates visit www.mahina.com/past-expeditions/logs.

Mahina Offshore Cruising Seminars

To help sailors prepare for safe, self-sufficient voyaging worldwide on their own boats, John offers a full-day Mahina Offshore Cruising Seminar annually at the October Annapolis Boat show and also a two-day hands-on Offshore Workshop each March at the renowned Marine Tech Center in Anacortes, WA. Both seminars include the invaluable 260-page Offshore Cruising Companion.

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