

## **CUBAR Odyssey 2015**

**San Diego Yacht Club**

Initially created by John Houts (Dos Abigados) during FUBAR 2007. Updated for CUBAR Odyssey 2015 by Bill & Sue Houlihan and others.

In addition to these tips take a look at Latitude 38's First Timers Guide to Mexico. <http://www.baja-haha.com/Guide/GuideIndex.html>. It is an excellent resource.



Anchorage at El Cardonal on Isla Partida



With apologies to Jan, I endorse the following quote, which hopefully will put you in the proper frame of mind for the article that follows:

**I spent all my money on booze, boats and broads. And the rest of it, I wasted. -**  
*Elmore Leonard*

## PRIORITIES

John's first entry in his notes from the Sea of Cortez written in May 2008: "Be gone long enough for the magic to happen." You must and it will.



John and Han Houts enjoying life in Mexico (Do they look stressed?)

There are many ways to sea Mexico by sea and from our experience all of them enjoyable. Whether you have time to spend the season, or must commute from the frozen north it is all good. More information will follow, but here is a quick look at the choices at the conclusion of CUBAR:

- Leave La Paz and head north for a month or so. The water and air will still be warm.
- Turn South towards Puerto Vallarta – A wonderful place to spend the winter.
- Continue south after PV. Plenty of calm anchorages and an occasional marina.
- Stay in La Paz and visit the local islands and fishing communities.

## **CUSTOMS/CHECKING IN AND OUT OF MEXICAN PORTS**

Everything got easier a few years ago. Now, in theory, one need only check in or "clear" customs once on the way in and once on the way out. As a practical matter, this is not quite true, but close enough.

On Fubar One, and probably for the first time ever in the history of anything like this; Fubar participants actually cleared in San Diego before departing by special arrangement. I can't imagine how Bruce Kessler who ran Fubar One accomplished this, but he did. Of course, he had the able assistance of Donna Palmer Wilson of equally amazing stature. I mean the two of them did the impossible, herding about 55 diverse power boating types from San Diego to La Paz. They have my utmost respect and gratitude for the extraordinary job they did.

Absent a special CUBAR arrangement, the thing to do is to "clear" customs in Ensenada at the beginning of the trip. I have friends who go non-stop from San Diego to Puerto Vallarta and then clear into Mexico, but I think that's a stretch and if you had to explain yourself to someone in Turtle Bay without proper papers, in might make for a long discussion.

Once cleared in, however, each port has its own policies. For Example, La Cruz requires a visit to the nearby Port Captains office for clearing in and out.

In La Paz staying at Marina de la Paz, we only had to sign in on a log book kept at the Marina office. In Mazatlan we got some "papers" from the Marina lady who cleaned up our act as we had "forgotten" to check in and out of Puerto Vallarata, and Barra and had only our papers from Ensenada. This cost about \$15.00. Paradise Village in Nuevo Vallarta insists that you clear in and clear out with the port captain across the way and that's what you should do.

On the way home, the Baja Bash, if you have a crew delivering your boat, the back of Rains and other sources have an authorization form for your delivery crew or captain. Mexico is big on having things Notarized. Notaries charge a lot. What I've done with the delivery authorization is have the Port Captain at the last place I leave from----where it's handy---like Vallarta, stamp the authorization with his official stamp. I think this is way more impressive than a notary stamp and gives you more oomph if queried. Oomph being a term of legal art.

Clearing out of Mexico to the United States is not required by US Customs. However, the Mexican authorities are computerizing their systems and if you go back to Mexico in the future, you could face some tough questions. As anxious as you may be to get back to the good ol' USA, a short stopover at Coral or Cruise Port in Ensenada is a good policy. You can check out from Cabo or Puerto los Cabos for the US, so if you don't want to make another stop in Ensenada, clear out there. There are no other "Ports of Entry" along the Baja coast, so you should be home free.

On the CUBAR, clearing in at Puerto los Cabos will be handled. The next port is La Paz and that will also be handled by the Costa Baja people.

## FOOD/ COMMENTS BY THE ADMIRAL

Admiral Jan offers these comments on food and provisioning:

Cooking while underway is not as formidable as it first appears. It should be stressed that there are few stores, grocery or otherwise, between Ensenada and Cabo, however, so your refrigerator-freezer should be adequately stocked to feed you and your crew for up to two weeks. It is probably a good idea not to overstock, meaning that if you have a spare freezer, it probably shouldn't be loaded, as there is always a chance that the freezer may stop working (as happened to us) or the Mexican customs agents may seize your meat (as happened to our friends). There should be no alarm however, it has happened to cruisers in the lore of Mexican boaters.

While underway, it is recommended to serve food that requires as little cooking as possible. Microwaveable pasta dishes, already made casseroles, sandwiches that have been pre-made, canned tuna, etc., are recommended. It saves a lot of trouble to have an electric frying pan on the countertop, as long as you watch it every second while underway.

When you do get to Cabo, most everything is expensive, so if you can wait, you can buy anything you want in La Paz, including European imported food at CCC (pronounced say-say-say) or City Club. If you are staying in Mexico for the long run and not going right back, please bear in mind that although you can buy almost anything, imported food is expensive. In some cases, it is worth it. Local Mexican brands of cheese, for example, are very bland, but European cheese and American cheese are expensive. Since chocolate, crackers and canned nuts are prohibitively expensive, they are the items always asked for when friends who live in Mexico ask you to bring something from the states. (A few Hershey's kisses will cost you about \$5.00, as do crackers if you can find them, and a small can of Planter's peanuts is about \$10.00). Speaking of snack food, the potato chips (Sabritas) and the tortilla chips in Mexico are very good, as may be expected.

Dairy of all kinds is a little different in Mexico. Milk usually expires before the due date because of the hot climate, so look to buy the boxed kind, which lasts longer and actually tastes better. Sour cream is more liquid than at home, I never found cottage cheese, and coffee creamer is hard to find. Mexican butter is an acquired taste, so it is better to bring it frozen from home, and then, when needed, to buy American. Yogurt is good, but you won't usually find Ready-Whip, just heavy crema a batir. We actually found Thrifty's ice cream stores in Barra and La Paz, and some grocery stores have Haagen Dazs for about \$14.00 a quart! There are some cheaper brands, but you have to look for them.

Produce is lovely, but limited, and even nice stores run out of things. I remember waiting days for green onions and avocados in Nuevo Vallarta so I could make my "famous" guacamole. That's about all I could make for an appetizer! The avocados are awesomely creamy and very cheap. The main staples are tomatoes, lettuce, chiles, green onions and avocados. There is not a lot of fruit, which surprised me. Bananas and limes are wonderful and plentiful, but it is a rare treat to find berries, peaches or pears. All the fruits and veggies that you don't peel should be washed in a solution of water and anti-bacterial liquid which can be purchased in the produce sections of most Mexican markets.

The best meat to buy is chicken, and of course, fish is good (especially when you catch it!), and shrimp is wonderful on the west coast of Mexico. I never really liked the steak, even from Puerto Vallarta's Costco or Wal-Mart. Hamburger was non-existent, although now near American style hamburger is available at the new Costco in Puerto

Vallarta. I am sure there are butcher shops that I haven't found (since I didn't have a car). You can always buy lunch meats, mostly ham and turkey.

As for bakery products, they look better than they taste. I don't recommend the croissants, breakfast cakes, or muffins. I do recommend the bollillos (hard rolls). The bread is ok, but mostly people substitute tortillas. For those with a sweet tooth, you should stay with the churros and the tres leches (3 milk) cake. The cake lasts in the refrigerator for weeks and is better than anything at home. There are some boxed cookies that are ok, but there aren't many. I met an American lady living in PV who made a game out of dessert for her guests by having canelitas (cinnamon cookies) with a can of white icing and polvorones (orange shortbread cookies) with chocolate icing and having her guests ice their own dessert. That is how limited the sweets are! In the big stores, the bakery section is separate. In other words, you must have it bagged and priced separately before you pay for it at the main check out counter.

All of the big stores in La Paz, Cabo, PV, Mazatlan, and Manzanillo have paper products, soap, cosmetics, and drugs (that require prescriptions at home, but not in Mexico). I mentioned Wal-Mart and Costco, City Club and CCC. There is also Commercial, a nice market chain, and Soriana, similar to Kmart, and of course, small tiendas. No West Marine (there are marine stores, but very expensive ones, like Zaragosa's in PV), no clothes shopping except in PV, unless you count locally made blouses and beach cover-ups near the touristy places. And it took us two trips to Mexico before we realized there are movie complexes with first run movies from home in English (with Spanish subtitles)! With McDonald's and Subway and Baskin Robbins and Domino's, why was I surprised? There is also a new Home Depot north of the airport on the main road in Puerto Vallarta.

A final tip which I had to learn. You are expected to tip the helpers who bag your groceries! Not much, just some of your change.

Caution: Don't bring any, repeat ANY, cardboard aboard. Particularly corrugated. We (Bill & Sue) take everything out of cardboard even before we walk down the dock. That includes cereal boxes and beer holders. Critters love to live in the paper packaging, and even the eggs can be in the glued joints. Keeping your boat critter free is a constant challenge. Be cautious.

La Paz has an excellent Marine Store called Lopez Marine Services SA de CV plus a few smaller places. There is a Walmart and Handyman a short cab ride away. Also the newer Mexican superstore <http://www.chedraui.com.mx> is walking distance from Marina de la Paz.

## CLOTHES

One degree of latitude is 60 miles. San Diego is at about 32 plus degrees. It's really a lot warmer by the time you get to Cabo at 22 plus degrees. You may be pretty bundled up when you leave San Diego, by the time you hit Mag Bay at 24 plus degrees it'll be time for shorts and lighter clothing. You need warm weather clothing and cold weather clothing. Space is always a little tight, so try for one jacket, one hooded sweat shirt, one or two pairs of long pants; and then put all that stuff away until you head for home. Tropical, no iron shirts are a godsend. Expect to be living in T shirts and shorts for most of the time.

The first half of the trip can really be quite cold especially overnight between Ensenada and Turtle; and light weight capris and shorts and flip flops and a light sweater for the rest of

the trip; also many bathing suits. Morning decisions might be 'what bathing suit do I wear today? After all, it is summer all the time after you reach Cabo.

Shorts with Dry-fast material and zippered pockets for securing important things are great to have. Sandals or Flip-Flops are standard when leaving the boat for routine excursions.

### **FUEL MANIFOLD/FUEL USAGE/TANKS**

Dos Abogados IV is powered by two Caterpillar old school 3208 diesels at 435 HP. We hold 1000 gallons of diesel in three tanks. The center is 400 gallons, the two sides are 300 gallons; and, switching between tanks is accomplished by using a fuel manifold in the engine room.

Your boat will also probably have more than one tank; you need to know how to switch between the tanks. No two boats are the same. Even boats made by the same manufacturer will vary. Most tank control manifolds have a supply and a return to the engine or engines. The supply takes the fuel from the tank to one or both engines if you have two; same for the diesel generator that you probably have.

The return simply returns unused fuel to the tank to which the return is directed. There is return fuel because the fuel is also used for cooling and on a Cat 3208, about 10 gallons per hour (GPH) is returned by each engine to the tank from which the return is directed. Note the supply can be set using the control manifold from one tank and the return to a second tank. This is ok if you are really keeping track and you are transferring fuel from one tank to another by running the engines.

It is not ok if you forget it is set that way. At a combined for both engines 20 GPH sooner or later the tank to which the return is directed will overflow and spurt fuel out the tank vent or worse. Also the tank you are taking supply from will go dry in a hurry with up to an additional 20 GPH going into another tank instead of being returned. The general practice is to set the supply and the return to the same tank.

Regardless, you need to know what you've used out of a tank to avoid going dry and losing prime. Priming a diesel engine that has run out of fuel is not the best experience, especially if the sea conditions are not flat calm and if you completely lose power you could wind up sideways to the sea state and life could get very dangerous very fast.

If you can practice priming an engine, that would be perfect. Once done, you'll know how to do it. Everyone swears it will never happen to them. Sooner or later it happens to every powerboat skipper. It's a rule. Whose rule, I don't know, but it is a rule.

You can keep track of fuel use by knowing your boat, your approximate GPH use, keeping track of time; using a stick in the tank; using a Hart Tank Tender system; using Flocans. However you do it, you need to be really good at doing it. There should be no mystery and you should probably have at least two ways to check fuel used and fuel remaining.

### **DIESEL FUEL IN MEXICO**

There is no shortage of diesel in Mexico. It is generally clean and I believe has a higher sulphur content that most diesel engines seem to appreciate. This will not be OPEC oil. It comes from the ground in Mexico and it is good stuff. It is not dyed and looks like 7 Up or Bubble Up.

Make sure your fuel tank vents are clear. It can be very frustrating to hold up other vessels from fueling because your tank vent line is clogged. In the past the 'Baja' filter was a good idea, however there seems to be an abundance of good clean fuel. After 3 seasons cruising Mexico we never received bad fuel.

However, it might be a super idea if they are trying to fill you out of a truck and the truck nozzle is huge and your fuel opening is standard. The Baja Filter has a smaller end to place in your fuel deck fitting, so you could use it as a funnel as well as a filter; otherwise it's a real pain when you are trying to grab a few hundred gallons and it's taking forever. We only had the problem once; at Cruiseport in downtown Ensenada where they were using a tanker truck to fill boats by special arrangement. I also saw a larger powerboat being fueled from a tanker truck at Marina Mazatlan and the nozzle size could have been a problem there. However, Marina Mazatlan now has a nice new Pemex dock up the channel in the back Marina area so you don't have to deal with the tight fuel dock situation at El Cid aka El Surge.

Participants can expect to top up in Ensenada, receive some fuel in Turtle Bay, and then fill again in Los Cabos. The next fueling stop would be in La Paz, or in Mazatlan, or down to Banderas Bay/Puerto Vallarta on the mainland. The individual fuel requirements will be dealt with prior to departure. You will have enough fuel for the trip.

## Charts

It is important to have paper charts for an overview of where these ports are and the relative distances between them. You should also be able to keep track of your position on a chart so that you can "dead reckon" your way to where you are going in the event everything fails but your compass.

The Operations Manual 2015 will have the course plotted for you and all the GPS way points between each stop. You should manually input the way points into your own navigation gear. It's about 300 miles from Ensenada to Turtle, and about 400 to Cabo; and about 300 between Cabo and Banderas Bay; about 150 from Cabo to La Paz; and, about 200 from Cabo to Mazatlan.

It is strongly recommended that each boat carry more than one 'Guide'. We carry four guides and check each one when entering a new port or anchorage. The various guide books, Raines, Charlie's, Cunningham, and 'The Sea of Cortez' by Shaun Breeding and Heather Bansmer. All have waypoints in the back and in the text describing hazards and places to anchor. I think it's useful to input those points into your chart plotter as well. I have marked the hazards with a red dot and Garmin has an anchor symbol that I used for anchorages.

This can take a lot of time. John has over 1000 waypoints plotted. We have generally plotted waypoints ahead of time, and often on our way to the next location. Trying to plot dozens at a sitting can be taxing.

If you purchase a guide book that is hard bound I strongly suggest that you take it to a Kinko's or similar store and have the binding cut off and plastic or metal inserted so that the book can be opened and laid flat on a chart table or even wrapped around so it will rest on your lap with the proper page open. This is a MUST DO!

## FUEL MANAGEMENT

You will find that most everyone cruises in Mexico at 8.5 to 10 knots. Period. San Diego to Catalina blasts of 15 to 20 knots don't happen on 300 mile legs.

Most power boats can get about one mile per gallon at hull or displacement speed which is about 1.7 times the square root of the waterline. Figure hull speed is about 8 to 9 knots for most of us. On DOS IV we don't get one mile to the gallon. We are too fat. We have too many sets of dishes. We carry too much and we are pretty beamy at 16 feet 8 inches. It's a lot to push through the water. Narrower, lighter and longer is more fuel efficient.

Displacement speed cures weight. Displacement speed is basically no wake.

300 miles at 8 knots = 37.5 hours

300 miles at 10 knots = 30.0 hours

Fuel usage factors: How the props are set up, weight, speed, and how clean is the bottom.

We like to see close to or just over .80 nautical miles per gallon. Therefore 300 miles will use more than 300 gallons, more like 500 gallons----why so much; well you have to allow for your diesel generator, that's one reason; also the world gets a little boring at 9 knots, so sometimes you push a bit and get into .75 MPG (nautical); now this is pretty much truth time; there are skippers out there who really do see one mile to the gallon or even better. Longer hull, newer common rail diesel technology helps in this game.

## FUEL - A ROUGH CALCULATION

Basically 15 GPH will give you 300 horsepower. The ratio will always be about 1 to 20. Or, 20 to 1 if you look at it as 300 horsepower costing 15 gallons per hour.

Simple arithmetic: How big is your boat? How much does it weigh? How many horsepower does it take to push it?

Our old boat DOS III was a 38 foot trawler powered by two 120 HP Lehmans. Hypothetically, it took only 50 horsepower from each engine, or 100 HP total to move the boat at 8.5 knots. OK so that's 5 GPH total or maybe only 4 GPH. I would like to see those numbers on DOS IV but it's never going to happen. The 3208's on DOS IV are rated at 435 HP, per each.

If we need 300 HP total to move the boat at a little over hull speed then that's 15 gallons per hour and 300 gallons will take 20 hours to burn; and that will get us only 160-

200 miles; so what's it going to take to get to Turtle from Ensenada; the answer is usually around 400-600 gallons.

If we pulled back to 8 knots or a little less, maybe 7.5 knots, then we'd need less than 200 HP to push the boat, or 10 gallons per hour total. 300 miles divided by 7.5 knots is 37.5 hours of cruising, so we'd burn 375 or so gallons to Turtle from Ensenada.

### FLO SCANS - DO YOU NEED THEM



This is the flow scan for the port engine showing .86 GPM at 9.6 knots; the stbd engine floscan was set to show GPH, and at the time of this photo showed 5.1 GPH, which was the same for port at same RPM. Each show cumulative gallons used per engine. MPG is in nautical miles.

Nice if you have them, don't bother if you don't, new common rail electronically managed diesels have fuel burn calculation displays built in. If you use your boat enough before you leave, you'll know where the two sweet spots are and you'll be getting that .8 to 1.0 MPG figure. That's why you should be able to carry at least 600 gallons of fuel. After market FloScans are expensive. We have them and we use them. If they are in the budget, then they may be worthwhile. Just pulling back on the power to less than 10 knots will probably do it. FloScans will show you where the sweet spots aren't. Past ten knots and before the second sweet spot of high cruise may well show you that you are burning a ton of fuel just off plane at 11.5-12 knots, far more than you would at high cruise on plane with the trim tabs helping.

### PROPELLERS

Most powerboats are "over propped" by having too much diameter and too much pitch. Their engines will not reach wide open throttle ratings (WOT). This happens as the weight of the boat gradually increases over time. For example, if your boat is rated for 2800 RPM at WOT, and you can only hit 2500 RPM at WOT, then you are over propped; and

the engine loads are wrong at all RPM ranges, wasting fuel, cutting speed, and shortening engine life.

The simple thing to do is have the props tuned at your next haul out. They will balance and tune the props by taking out cup and reducing pitch until you get the RPM you need. This can make an amazing difference. Less propeller can somehow produce more speed and better fuel economy. Instead of running your sports car around in 6<sup>th</sup> gear you may find your boat very happy with a downshift.

While a diver can get the props off and reinstall them; it's not a good idea; have it done while the boat is hauled out; the turn around is not a big deal and can usually be accomplished before you have to put the boat back in the water. Someone should be responsible for the "keys" that are part of the prop installation, along with the nuts. There is a right way and a wrong way to put props on; make sure the yard knows what they are doing.

One inch of pitch is one inch your boat goes forward with every propeller revolution. 24 inches of pitch means the boat goes about two feet forward with every revolution. More cup can have the effect of lifting the stern and pushing the bow down.

In San Diego contact Pacific Marine Propellers 3781 Dalbergia Street, San Diego, CA 92113 or call 619-239-0129. They have an excellent reputation

### **BOAT DIESEL.COM**

[www.boatdiesel.com](http://www.boatdiesel.com) This is a membership site and costs \$25.00 per year and well worth it; read over the articles; you can also check out forums dealing with your particular engine or genset; there are useful calculators for proper propeller pitch and other formulas. Good stuff.

### **DAVID PASCOE WEBSITE**

[www.yachtsurvey.com/diesel\\_maintenance.htm](http://www.yachtsurvey.com/diesel_maintenance.htm)

I don't recall when I first found this site. The link above takes you to a maintenance section on diesel engines in powerboats. His whole site is loaded with information and needs exploring. He is very opinionated. He also sells books. I wouldn't bother with the books. Everything is on the site. It's all very worthwhile.

### **HAUL OUT**

Good idea just before departure; get the bottom done, get the through-hulls working; see what else may need attention.

There are numerous places to haul out in Mexico, but it is probably a good idea to have the initial work done in the US for two reasons: You will have a fuel efficient 1,000 mile run to La Paz; If you have any equipment or repair issues you can have them completed before you leave and sleep well at night.

## **POWERBOATS VS SAIL BOATS**

As a practical matter, everything is pretty much different. This is true on many, many levels. For one thing, an experienced sail boater, as a personal impression, may well know a lot more about his/her boat than the average power boat skipper. It's not a criticism; it's just a factor of the personality types that I perceive to be involved. In fairness, powerboats are a lot more complicated. Turn the key and go vs. all those sails and going back and forth all those times.

Think about it this way. The 16 KW Northern Lights generator on DOS IV is 37 HP; the average sail boat main engine is about the same, 35-40 HP. If that was all the engine you had to worry about, long distance cruising would be a snap or a breeze or something.

So back to fuel; 37 HP under load for our genset; make that 30 HP — 1.5 gallons per hour. A thirty hour run with the genset on requires a fuel allowance of 45 gallons which is never measured by the FloScans, or fuel management displays on the newer boats. Over time, the generator uses a bunch of fuel.

Torque and the power of the cruising powerboat is something never ever understood by sail boat types. They have their own set of problems, but the care and feeding of one or two or three (counting the genset) diesel engines isn't among them. On the other hand sail boat ladies contend privately that they cannot compete with powerboat ladies what with the latter's access to hair dryers, curling thingies and other high watt beauty items. After a while, you really can tell power boat ladies from sail boat ladies, but it's a dangerous discussion. (This was all revealed in an overheard conversation between my power boat lady and a slightly tipsy sail boat lady at Loreto Fest in Puerto Escondido.)

## **ELECTRICAL CONCERNS**

Next to the care and feeding of the diesels, this area is huge. A diesel only really needs air and fuel; the ins and outs of electrical power on a boat shame even those of you familiar with older English automobiles.

All battery cables and connections need to be near new or perfect. Period. Near new or perfect and of the correct gauge. If you feel heat on a cable it's too small or it's got a problem.

If your previous boating has been the dock at the yacht club and two weeks in Catalina, you are probably not ready for extended cruising from an electrical standpoint. Or maybe you are.

This last caveat is because I met a California electrical contractor in Mexico who did not have an inverter or large house battery bank on his boat. He was either plugged in to dock power or running his generator 24/7 while underway. Thousands of thousands of dollars later, I don't think I want to even argue the point.

If you are set up with a small or no inverter, a small house bank and a generator, then your deal might be to just run the generator, and/or operate the boat on 12v during daylight hours when loads are small, until you get to Paradise Village or one of the other wonderful Mexican marinas and just plug those big yellow cords into the dock power

pedestal. I really think it's an ok way to go. You will need good alternators and a good smart charger, but you could do it without special alternators, or a larger house bank.

However, regardless of which way you go, your dock cables, the big yellow ones and all the splitters should be brand new. Take your old corroded ones as spares, but basically start with new ones. You can buy a "Y" splitter in Manzanillo to split a 50 amp dock set up to two 30 amp supplies for your boat. Price \$750.00. Ouch. Take brand new. It's warm down there, many of you have air conditioning; you'll be drawing maximum amp loads through those yellow cords. Brand new is the answer. You don't even want to try to find or buy a 25 foot 50 amp yellow cord, you might need a line of credit.

I've seen cords salvaged by cutting off the old ends and putting on new ends. It is beyond my skill set. If you can do it. Great. Bring the tools and the special ends; otherwise, go new.

### **SMART CHARGERS**

These things are cool, especially combined with AGM batteries and something like a Link 1000 to watch the power going out and coming in and controlling the smart inverter/charger. This stuff is not cheap. It can be seamless when properly installed. It will take time to get it done correctly. If you are planning on leaving with the FUBAR II in November 2009, you should be getting this stuff handled during the winter of 2009. You will have a terrible time finding qualified installation help once spring 2009 arrives and others are getting their boats ready for summer. This holds true for everything else too, from water makers to radars.

Dos IV is set up as the perennial "Catalina Barge". We are transitioning into grandparent, "leave the grandchildren with us in Catalina," status. A lot of what we have done to Dos IV is great for Mexico; but, also allows us to stay on a mooring indefinitely in Catalina, running all of the electrical stuff, making water and only running the generator a few hours a day.

All of this presumes a boat of 60 feet or under; over that, many have some crew and run a generator all the time. Avalon actually has a 10 PM generator shut down rule so my electrical contractor friend would be on 12 volt and early to bed rules in that situation.

We have an extra large house bank made up of 8 AGM L16's equaling about 1600 amp hours of storage capacity. We have two Xantrex 3000 watt inverter/smart chargers with two Link 1000 controllers. We finally went to AGM "All Glass Mat" batteries as they are truly maintenance free. We had flooded cell conventional batteries in the house bank on the last two trips to Mexico and with heavy use it became a pretty much weekly necessity to water the 8 house batteries which was just a completely huge pain. Eight L16 AGM batteries cost a bunch, but if properly set up, will last a very long time.

Ok, so if the smart charger was smart, why were we "overcooking" over charging and using water? The most probable answer is that one or more of the old style flooded cell batteries had a bad cell. Or maybe one of the batteries was failing. That cell or battery would not take a full charge. Therefore, the "smart" charger kept trying to charge that cell or battery which was linked to the other batteries in the bank resulting in all the batteries getting too much charge and therefore using water.

This can be avoided by generally replacing all batteries at once and never just replacing a bad one in a bank of other batteries. We are hoping our eight AGM's stay happy and live and die together at a very old age. We got into batteries of different age before the AGM's when we expanded the bank from 6 to 8 batteries and then went from splitting the 8 into two banks of four back to treating the 8 as one bank with two chargers running into them.

How we did all this is really beyond the scope of this article. You need someone like Alan Katz, aka Dr. Electron (858-752-3198) or Pat Fuge (619-992-5932) Ray (619-223-3069) to help with all this. Keep in mind, the closer you get to spring the more impossible it will be to schedule time with guys who really know what they are doing.

We will replace our two conventional flooded 8D engine starting batteries with AGM next time around.

Why two inverter/chargers? Each one puts out 100 plus amps in bulk charge. This means we can put over 200 amps per hour, 8 hrs = 1600 amp hours, back into the 1600 amp house bank every morning while we are simultaneously making water and heating up the hot water tank. They are also wired so one can take over for both should one fail. We tried splitting the banks and running the each charger separately into a bank of four but found that just keeping the 8 together and running two chargers into the 8 batteries worked fine and made it possible for the alternators to eventually look at all 8 at once when underway.

Our daily amp budget is about 600 amps so we can charge up in a few hours in the morning and top up with an hour or so at night. This means the generator is on 3 to 4 hours per day instead of 7 to 9 hours which is more common. This is while not underway.

Why do we need a 1600 amp bank when we use only 600 amps per day? The basic rule is not to use more than half; so that would be 800. After using half, unless you are plugged in at the dock or willing to run the generator for a very long time, you don't put more than 80% back on recharging. 80% of 800 are about 640 amps so we are just right. If you consistently take more than 50% out of a bank you drastically reduce the life of the batteries. After you've put 80% back in to the amps you used, the battery voltage goes way up and the amps your charger can put back in, goes way down. Not as much bang for the buck; the last 20% could take several hours of generator run time and 3-5 gallons of costly diesel.

You know where you are on all of this with a device like the Link 1000 which will provide all of the above information. Failing that, with a digital volt meter:

|                    |      |
|--------------------|------|
| 11.7 volts or less | 0%   |
| 12.0 volts         | 25%  |
| 12.2 volts         | 50%  |
| 12.4 volts         | 75%  |
| 12.6 volts or more | 100% |

So if you see 12.2 volts in the morning it's time to turn the generator on and start charging. A reviewer of this article makes the point that this voltage measurement is generally taken after taking all loads off the battery bank and waiting 15 minutes.

As a practical matter, when I look at the Link 1000 built in digital volt meter, there is always a load on the batteries and I charge when I see 12.2 volts. My friend is right, but if I see 12.2 volts under load, then my practice is the more conservative, and avoids excessive discharge.

At 12.2 volts, a "smart" charger, one that works at three levels: bulk, acceptance and float, will be putting out maximum amps, or bulk charge. It will automatically back down amps of charge as battery voltage increases. Most chargers will take the voltage up to just past 14 volts; at about 13.8 volts while charging, you are probably at the point of diminishing returns. Time to stop charging.

You really need a charger that automatically backs down the amps of charge based on battery voltage; otherwise you run the risk of cooking your batteries. You should carry lots of distilled water if your house bank consists of flooded cells as you will be charging those batteries a lot and they will drink a lot of water especially in the warmer climate of Mexico. I think this is so regardless of whether or not you have a battery in the bank which is not as strong as the others. In a pinch you can buy water labeled "la plancha" in the appliances section of the large super markets. This is the water they use for steam irons, but it's the same stuff. We also use distilled water to top up the coolant level on the diesels.

### **COOLANT LEVEL**

More straight coolant is not necessarily better. More than a 50% concentration actually has an adverse effect on cooling and engine temperature. When we need a little we put in distilled water. When we need a lot, we try to figure out why. Something is going wrong somewhere. Keep an eye on the cold level in your overflow coolant tank "puke bottles". They should be on the cold fill line after the engines are completely cold. Knowing where they are when you start will help you the next time when you check them cold.

I have read that the coolant level actually should be checked by removing the thing that looks like a radiator cap on the top of the expansion tank and not relying on the sight level in the overflow tanks. Please be sure the engines are dead cold if you do this. I do check it this way, but have never found a variance between the fill line on the overflow tank and a direct check of the expansion tank.

Actually, keeping an eye on the cold and hot levels on the overflow tanks is a really good idea. If they overflow, or fail to drain back as the engine cools, you may be looking at incipient or actual head gasket problems among other lousy things that happen to marine engines.

### **ENGINE ROOM CHECKS**

Prior to departure: oil, coolant levels, look under the engines for leaks, look at the belts for tightness; Check transmission levels, usually with the engines running, and the dip sticks may be very difficult to reach; but check them. Underway, the rule is every hour. Be sure you have ear protection and that you have an infrared temperature gun. You can use

the gun on alternators, heat exchangers, coolant expansion tank, shafts, any thing that moves and could overheat.

While you are at it, every time you fire the engines up, or your generator, if you have exposed exhausts, have a look and make sure cooling water is coming out of the exhausts. I don't think you can do this with underwater exhausts. If you can see the exhaust outflow and you make it a habit to look, you can also spot a problem beginning---- like a water pump impeller going bad if you note a diminished flow.

## **ALTERNATORS**

We have recently changed out the alternators on the boat. Basically, we probably will not have to ever run the generator while underway unless we are using heavy loads like air conditioning or the water maker. We used two Balmar 100 amp alternators that have the same foot print as the original alternators with less than half of that capacity. We also installed a "center field" controller which means both alternators can put out max charge without throttling back when they see the other alternator charging; also special external regulators and a battery combiner that directs the charge to the engine start batteries first and then to the house bank when charging via dock power, generator or alternators. Underway the alternators can now keep up with the full size ice in door side by side refrigerator and all other alternating current electrical loads as supplied by the inverters while also keeping the battery banks up without the generator being on. This may seem like overkill, but if we lost the generator 200 miles up in the Sea of Cortez from La Paz, we'd have a fighting chance of saving the trip. Not to forget we are saving generator run time. We have over 4000 hours on our generator and it should last a long time, but that's still a lot of hours. Not having to run the genset is a good thing, saving fuel and oil changes.

## **WATER MAKERS**

Mexico means you must have a water maker. I don't think you can do Mexico very easily without a water maker. Water makers are not cheap and require learning how to run and maintain same. It's not hard, it isn't what you probably did for a living, so it becomes kind of fun. Just like all the other stuff. The learning how; the installing; the doing. This is the hobby my children told me I would need when I got old.

Water makers are powered by AC or DC; I recommend AC. I am told the big pumps that water makers require are more robust in AC. Also AC water makers make more water, and more water faster. It's not that you need 600 gallons a day; it's that you need the capacity to make 20 to 30 gallons per hour so that you are not running the water maker and your genset all day and all night.

Fresh water in Mexico can be like currency. Several times we traded fresh water for fish with local panga fishermen.

A basic water maker is hard to find these days. Ours is old school and I have to go into the engine room to turn it on and off, change the filters and turn on the manual flush. New water makers are mostly automatic but still require filter changing and an understanding of how they work.

For example, the water maker supply of salt water comes from a thru-hull. If the thru-hull is plugged, you have to be able to find out why. This might mean diving under the boat to run a screw driver up through the fitting or pulling out a plastic bag or sea weed.

Generally, there will be a 5 micron filter and a 2 micron filter. They are usually in pairs; they have to be replaced or changed out often. It's best to make water in deep blue water. You can rely on potable water at Costa Baja and Marina de la Paz, as both have desalinization plants. [Confirm los Cabos](#)

The dock water at Paradise Village is made by reverse osmosis and is potable. Barra de Navidad is OK with one of the ultraviolet blue light bug zapper filters, which I am going to buy before our next trip; usually someone on the dock has one you can borrow. They may be hard to find, the water maker stores usually make them up specially; the in line ones that come with a new water maker installation have been known to not work very well. The ultraviolet kind I am talking about are portable and are generally made up with a couple of filters and an ultraviolet tube that the pre-filtered water passes through. They cost around \$500.00. Very handy. Just for use with marina water.

If your water tank is clean, then the water going in there from your water maker is perfect water. If you are putting marina dock water in there too, you should be using an ultraviolet filter unless you are at Paradise Village. I'm not sure where the water is coming from in Los Cabos or La Cruz. You just have to be careful and ask other boaters.

We have kept our 250 gallon water tank pure. We drink out of it. We make coffee out of it. When our water maker was updated we added a fresh water flush and an extra carbon filter that takes the chlorine out of the SDYC dock water supply for water maker flushing and also that extra filtered water comes out of the ice water deal on refrigerator and is the water we drink, although all the taps on the boat are potable.

Never ever flush your water maker with any water that is chlorinated without an activated charcoal filter in between. United States water supplies are chlorinated. Chlorine will absolutely destroy the water maker membrane. Water makers make water by pushing salt water through that membrane at extremely high pressure.

The water maker membrane should be flushed after each use for several minutes. This gets the brine out of the water maker membrane. The filters need to be changed frequently as well. We have learned that it's ok to have three pairs of filters working. One pair in the water maker; a second pair soaking in a five gallon bucket with about 3 cups of chlorine bleach; and, the third pair that has come out of the chlorine soak and has been thoroughly rinsed in fresh water and then strung up to dry with exposure to sunlight and air for at least a couple of days to allow the filters to "off gas" the chlorine.

Used this way, three pairs of filters will last a very long time. You can smell the rinsed and air dried pair of filters to determine whether or not there is still chlorine residue. We've done this for years without a problem.

Get a water tester wand from one of the water maker stores so you can check your parts per million. PPM. On a manual type of water maker such as ours, I have a valve that I set to have the water coming off of the water maker go into a bucket. I interrupt that stream and test it with the water tester. If it's where I want it, under 300 PPM, then I switch the valve and that stream of made water goes into the boat's tank.

Your nose is a big help too. I sniff the water I initially divert for testing. If it's funky, it's time to change the filters, even if the PPM are OK. If you've got a fully automatic water maker then your nose may still tell you that the filters need attention. Don't forget to flush the whole system. If it's a manual system then be sure you flush the water maker after each use. Run about 5 gallons through it. If you have an automatic system perhaps you can force it to flush more frequently.

Filters can look and smell clean and still not work. Filters can become plugged. At that point you simply switch in a brand new pair for the pair that is no longer useable. Evidence of a plugged filter can be observed in several ways. First, the PPM will be too high. Second, the water may smell funky even if the PPM test out ok. Third, the high pressure switch may shut the system down, that is the water maker can't process the supply water as the plugged filter won't let the supply water enter the system resulting in "over pressure" ---the high pressure shut down saves the pumps and system. There is a low pressure switch too; one or the other will cut in if there is a problem. Don't forget to check to see that the supply water through hull is not clogged, as well.

There are workers who can fix water makers in Mexico. At Marina de la Paz "Water Maker Bill" lives on his own boat at the end of one of the docks; just ask for him; he has parts and he knows his stuff. Everyone knows him. Similar guys can be found in Vallarta, and Mazatlán.

### **ABILITY TO DIVE UNDER THE BOAT**

I am certified and carry a tank, BC, weight belt, and regulator on board. We have never had to use them. However, I make it a practice to dive under the boat with a face mask when I can. I would not do it in any marina for health reasons. I look at the props, making sure both nuts are on; I look at the thru-hulls; and, for good luck, I wiggle the rudders.

If you were unlucky enough to tangle up with a fishing line or string of fish nets, then that tank and ability to be under the boat for more than a minute or two could make a huge difference. Between Barra and Vallarta we encountered pangas which had deployed a long string of nets. The nets were marked by nearly invisible soda bottles and a small flag at each end. You just have to keep a sharp lookout.

The local dive shops can also put together a rig that consists of a regulator and a hose that would go to a standard scuba tank on your deck. If I didn't already own the dive gear, I'd go that route.

### **DIVING IN MEXICO**

Other than going under the boat for maintenance, I am not a big fan of diving in most places in Mexico. I have a great deal of respect for the sport. There aren't many places to dive on the west coast of Mexico. I do think there are a few spots around Cabo. There is also a big dive area between Los Cabos and Muertos, just above Frailes called Cabo Pulmo.

Generally, I would not recommend it. If you get into trouble, help will be a long ways from you. I did dive with my son at the islands just off La Paz. We where anchored out there and made arrangements for a local tourist dive boat to come by our boat, pick us up with all

of their equipment, and have nice safe dive with sea lions off the north end of Isolotes. We were then returned to our boat. It was a few bucks, but it was an easy way to do it.

If you are a totally experienced and dedicated diver, then I would still warn you that the new dive computers are designed to maximize your "bottom time". I think it is far safer to use a no "D" dive plan and allow double the amount of recommended time between your last dive and any airplane travel, that is 48 hours and not 24 hours. Nearly every week in the summer at the dive park at Avalon on Catalina, they pull one or two divers out who don't make it. I still do it, my children do it; knowing what I know now, I'd never even take the sport up. I also ride a motorcycle. Yeah I know. Just be careful out there.

### **OUTBOARD MOTOR CONSIDERATIONS**

Outboards, especially the new 4 stroke motors really love and need clean and fresh fuel. You know already that you don't put an oil and gas combination in your 4 cycle outboard. I mention this because some places, like Avalon do have a pump that dispense gas pre-mixed with oil for two strokes. No bueno for 4 strokes.

I recommend adding a fuel filter/water separator canister between the outboard fuel tank and the engine. You should also make it a habit to screw down the vent cap on the fuel tank before making beach landings in case you ship water over the transom of your dinghy and have the possibility of salt water getting into the fuel tank via the vent.

I also think it's a good idea to get a long transmission style funnel at an auto parts store and use that to dump the fuel in your outboard tank into the tank of your truck or car, refilling the outboard tank with fresh fuel, if the fuel in the outboard tank is more than a month old. Your car can drink that old stuff when diluted into the 15-25 gallons in your vehicle's tank; your outboard motor might crap out completely.

I am told the "shelf life" of pump gas is 30 days before it begins to deteriorate into stuff you don't want to run through that expensive outboard.

You should also use a fuel stabilizer every time you add fresh fuel to the outboard tank. One with a good reputation is Sea Foam, purchased at any auto supply store.

Finally, you should get those rabbit ear deals and fresh water flush your outboard as often as you can. That is, a lot more often than I do.

The newer four strokes are fuel injected and the fuel injector passages are very tiny and old fuel can gum the passages up in a hurry.

### **ELECTRICAL CONNECTORS AND CIRCUIT BREAKERS**

Take circuit breakers in every size, at least two of each; take those colored connectors and the crimping tool; along with lots of electrical and duct tape. You have to have an inexpensive digital volt meter. You need one to check for polarity, positive or negative on DC and whether or not you've got juice coming out of a cigarette lighter plug receptacle, lamp socket, or check for a burned out bulb. It would be a good idea to have two and the batteries on which they run unless yours turns off automatically. Mine turn off automatically when the internal battery dies.

## DAVIT WINCH MOTOR, SOLENOIDS, PLUG INS

What could be a bigger bummer than not being able to lift your dinghy in or out of the water? Huge pain. Call your davit manufacturer and order an extra control thing; and the thing it plugs into and the thing that plugs into the thing you plug the controller into and the solenoids that make all that stuff work. If you are serious about this and your davit motor is over 5 to 10 years old, maybe you should have a spare motor, and have the one on the boat now rebuilt in your home port. Use the rebuilt one as a spare and put the new one on; ouch, these are expensive parts, as are the controllers and solenoids. Better maybe to use the secret budget.

## THE SECRET BUDGET

Do you know what your wife spends on clothes, jewelry and other things? Ok, you know, maybe, but, your boat needs a CIA Black Secret Budget. Figure it out. Keep everybody happy. No one will understand but you, as to what you are spending, to get really ready for this adventure. If you actually added it all up, and please don't, you'd find that you will ruin the trip and that you could have traveled first cabin around the world on the best cruise line out there. It will never be the same thing. Don't even go there.

## DIESEL ENGINE SPARES, FILTERS AND OIL

Take a complete assembled raw water pump for your main propulsion engine; you only need one as it will be basically the same for the other main if you have two main propulsion engines; take one for your genset too. Note: these are probably secret budget items. Very damn expensive and you won't have "cores" to exchange. Just bite the bullet and buy the parts and hide them where you know where they are on the boat. They will cost about the same as your significant other's ball gown for the charity event. This is just a different charity.

Lots of cruisers just carry rebuild kits with spare impellers. OK you can change out an impeller (the rubber paddle wheel that makes the pump work) but I think it's a lot better to have an entire assembled pump ready to swap out; you can have the pump repaired with your spare parts when you hit someplace like Vallarta or La Paz. **Mechanics are everywhere. Just ask. For example, one of the best works at Marina de La Paz. His name is Joel. You get him through the Marina. I used him for most engine work and oil changes, pumps and filters. Tea Pot Tony is the man in Nuevo Vallarta.** If you've got the parts and the tools; they have the skills to keep you going.

Actually, Tony and Joel can get most parts and have tools. You still need your own parts and spares.

Filters of the type you need are generally available in Mexico in the standard Racor sizes and types; I think it's better to just bring your own and enough oil for about 3 oil changes: One after you get down there; one in the middle of your cruising around, and one just before the trip home. This buys you about 100 to 150 hours between changes, or as much as 4500 miles of cruising which is about right for the usual 6-7 month excursion.

The whole Racor assembly should be cleaned every few years or so; actually, taken apart and cleaned. If they look really dirty you may need to super cleaning.

Don't forget you need the same filters and parts for the genset. You can always run the same oil in the mains as the genset so you only need to carry one brand and grade of oil.

Formed hoses. A formed hose is the type that is shaped/curved and made just for your engine. It's usually about 2 inches or so in diameter and will serve to join one engine part with another, usually with double clamps on both ends. They look like the hose that goes from the water pump on your car to the car radiator. Something like that; you need a set for one engine, it will usually be ok for the second engine if you have twins. The idea here is that it's a specialized part and you won't be able to get it in Mexico. You need to have it with you. You need similar spares for other specialized parts unique to your make and model of engines. We also carry a spare starter solenoid, just because.

You can find parts of every kind and nature in Mexico. You just have to ask around. You need "SPANISH FOR CRUISERS": The Boater's Complete Language Guide for Spanish-Speaking Destinations (Spiral Bound) by Kathy Parsons. [/exec/obidos/search-handle-url/ref=ntt\\_athr\\_dp\\_sr\\_1?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Kathy%20Parsons](http://exec/obidos/search-handle-url/ref=ntt_athr_dp_sr_1?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Kathy%20Parsons) ISBN 9780967590523. I've seen it at Downwinds, Westmarine, Sea Breeze and other places. With this little guide, you can point to your engine part and get it done. Did you know that a grease gun is a "Pistola de Grasa" it's in the book. You can also use the language tools in Google to roughly translate instructions for workers but it really doesn't work as well unless you keep it very simple.

## COOLING SYSTEMS

Regardless of what your engine manufacturer may recommend, I recommend going through the entire cooling system on each engine even if you are not near a major service point unless the engines are brand new or you really are sure of where you stand.

Diesels engines need air and fuel to run; they also want to be cool. Mexico is hostile in terms of cooling; water temperatures are a lot higher and the distances traveled are much further. The bonus thing is that once you are set up and running correctly, you are also doing the other thing your diesel likes—you are using it. Get it going correctly and it will be trouble free as it never was making short cruises around the bay and an annual trip to Catalina.

Diesel engines have heat exchangers that work by circulating sea water around tubes filled with your engine coolant. The tubes get restricted and plugged and the exchangers need to be rodded out or boiled out. This is also true for transmission coolers and some boats have heat exchangers or coolers on the stabilizers and power steering; regardless, all heat exchanger/coolers have to be serviced. These units typically have sacrificial zinc pencils which need replacing at between 50 and 100 hours of use. Start with them replaced, note the hours and bring spares of every type of zinc on the boat. You should also have spare zincs for the hull, shafts and trim tabs.

The cooling systems should have fresh coolant. The belts should be in good shape. You need spare belts too. Turbo chargers have "intercoolers" these need to be freshly serviced too.

In Mexico you will be running longer distances than your boat has, more likely than not, ever previously run; also, the water is a lot warmer. All of the main engine hoses should be perfect as well. Engine coolant hose needs to be wire reinforced so that it does not collapse as the engine raw water pump sucks the raw water in from the big raw water strainers.

If you don't actually have the raw water pumps rebuilt, at the very least, start with brand new impellers, taking spare impellers for each of your main engines and also for the generator. Rebuilding the pump includes replacing the shaft bearing and shaft seal which typically requires a mechanical press. If the shaft seal fails, sea water may enter the engine polluting the engine oil or at least shutting down the engine.

The big raw water strainers are made of bronze and you may need a special tool to get the tops off and clean out the strainer. You need the tool. It's available at West Marine and the Marine Exchange as well as Downwind.

Hourly engine checks are the rule. You should go down there with ear protection and a non-contact infrared heat gauge available in auto part stores and at Sears and at NAPA and other part stores. The infrared heat measuring device is a super tool and you can check a lot of areas in the engine room to see if a problem is or may be developing. Keep a log of temperatures from several identical sites on each engine.

## **SHAFTS AND PACKING GLANDS**

A professional skipper once told me the only thing you want to see in your engine room is dust. Conventional packing glands use flax or teflon materials and require a small amount of sea water to drip from the gland as the gland is cooled.

The better technology is the dripless system made by PGY. This system has to be properly installed. Once installed, it's pretty much a done deal. If you get this done make sure you have it installed long before you leave to make sure that it is a successful installation. The problem is that if it goes bad, it really goes bad and you need a haul out to repair and it may be tough to get it fixed in Mexico.

We've had ours in for about four years. It has been trouble free. We are having them checked as this is written. We are told they need a small adjustment. After that they should be good for a total of 6 years from installation at which point the black bellows part needs to be replaced. Morton Marine at Shelter Island Boat Yard can deal with this @ 619-222-8435.

The dripless system has a major advantage. If any amount of water is in the bilge from the old style glands, that water vaporizes into a fine salt water spray that covers every part of your engine and all moving parts and gets "inhaled" by your engines. Dripless gets you past all of those issues and gives you a dry environment.

While you are at it, your engines should be detailed and painted. Painting stops rust. An extremely clean bilge allows you to see where leaks might be coming from; in Mexico,

it's very easy to get workers to really get down in there and clean your engine room so that it looks like new. This is well worth doing. The current rate of exchange is about 14 to one; 6-7 dollars will get you about 100 pesos per hour of work. 500 pesos used to be 50 dollars; it's a lot less now.

Take bilge coat paint with you as well as the right paint for your engines; and tin foil to cover engine parts you don't want painted. Do the same for the genset. Better yet, do it before you leave.

## HEADS AND SHOWERS

Part of the deal is staying clean and keeping things sanitary. There are many different types and styles of marine heads. You should know how yours works and have the right spare parts; you'll be able to find someone to do the repair in Mexico if you have the spare parts.

The hoses that run from the heads to the holding tank to the discharge are sources of smell. The vents can have activated charcoal filters installed. The hoses should be new or near new and double clamped. The area of the holding tank and similar areas like the shower sump can also be detailed by the available workers in Mexico.

We never run our heads directly over the side; we always run to the holding tank. The holding tank can then be pumped or discharged via a macerator pump over the side when at sea. I have been down the west coast of Mexico on a friend's Mikelson; by the time we reached Mag Bay, we had the heads sealed off with plastic bags and then used the heads by putting a fresh plastic bag in for each use and tying it off and storing same in the forward anchor locker until we could dispose of the bags via a panga guy for a price. All of this was because there was no way to dump the holding tank due to a failed pump, and no way to run the heads over the side due to a previous owner's custom modification.

There is a type of discharge or macerator pump that can be run dry, it is a bellows type as opposed to the usual pump that has an impeller which can only run dry for about one minute before it burns up. You should have two of those on board, one installed and one for a spare. Sealand makes ours: "T" series part number 301200.

Good head practice, unless you have something better than what Dos IV has, means never putting anything down the head that didn't go through your own body. It's not a big deal; put the used paper in a waste basket lined with a fresh small size plastic garbage bag. Every day the bag gets changed out; there is never any smell; it's really the only way to go. You also can avoid using "special" toilet paper which was never anything more than single ply available for a lot less at Von's than West Marine.

The big advantage is that the holding tank does not get plugged up with a layer of partially dissolved toilet tissue that becomes a sedimentary layer of cement in the bottom of the holding tank. This also saves the impeller in the pump at the base of the toilet if you have that system. I can't see how a Vacuflush system would work better with paper in it.

Everyone has a "green" opinion on these issues; when we can, we dump our tank, then fill it with fresh water and a gallon of bleach; our tank is 65 gallons; we let that sit for

a day or so; it's best if it can be in there while we are cruising so that the bleach and fresh water can slosh around in the tank; once that's pumped over the side, the tank is sanitary and odor free for quite a while. This would, of course, kill one of the more modern systems; but for our old school salt water flush set up; this works.

The bottom line is to know how the your particular heads work and have the parts to fix them.

Shower sumps and shower sump points are another area of concern. Have a spare sump pump and a spare sump pump switch; your shower sump is a mess and no one wants to go clean it out; even if it's working well, have a worker down in Mexico take the top off and clean it out and clean the switch and pump. Use Simple Green. Take lots of simple green, take it in concentrate, and take lots of yellow micro fiber towels from Costco and a big package of those nice blue towels on rolls.

Take a medium size shop vac. You can use it for everything. You can reverse it, for example, to blow out a clogged head vent line. Lots of uses. Take extra stainless clamps for all hose sizes. There is an ultra-small ship vac that takes up little space, yet is a great vacuum: <http://www.shopvacstore.com/product/all-around-ez-25-gallon-25-peak-hp>.

## **CLEANING AND WAXING**

Mexico is the place to get the boat looking like new. That said, you must have product. I like Great White Sealant Conditioner applied by hand, topped off by high temperature aircraft paste wax, they have it at the Marine Exchange, Collinite 885 Paste Fleet Wax. You need more of those yellow micro fiber towels. Take a lot more of the conditioner and wax than you think you will need; have the boat waxed as soon as you get to a marina; then once in the middle and once before you head the boat north to home; for the isinglass on the fly bridge enclosures we use a spray product called Plexus; great stuff usually stocked at West Marine; take lots of Simple Green; at least two five gallon buckets.

A long wash pole with the brush, chamois, and squeegee attachments, also pink boat soap. Take lots of pink boat soap.

You need a box of disposable gloves, and distilled water if you still have flooded cell batteries. Big battery banks under heavy charge use can drink a gallon or more of water every ten days or so especially if they are half way down their life path. See above battery discussion.

## **PARTS FROM HOME**

Take your wax with you, because your friends can't bring it in due to the chemical content, at least in carry on; and, probably not checked.

Everybody has visitors while they are in Paradise. Make them do what everyone else makes them do. Guests are good for hauling parts. Failed air conditioning compressors, dinghy wheels, repaired radios. Don't hesitate to ask. They'll do it. But you have to provide them with knowledge of how to get through Mexican Customs and the red light green light deal.

They should have minimized receipts and if it's something you really need, like a radio, it's got to be in carry on luggage. Used stuff should come in without duty; read the materials in the chart books. If they get red lighted then they get red lighted and have to hand over their declaration form. If they don't get the red light they and their luggage just move on through. Tell them not to "high five" each other if they get through on a green light; they can and will call you back for a second look.

I think good practice is to declare everything on the form. Just don't state a value. That way, if red lighted, you aren't smuggling, you have declared, you can then argue about value. Show no value.

For everything else, here's the man: Jim Dixon Jim Dixon Marine Services 2907 Shelter Island Drive Suite 105-265 San Diego, California. 92106 +1-619-851-8260 Skype: dixonjim88.

When we needed an inverter in La Paz, we called Jimmy on the sat phone from way up in the Sea of Cortez; when we were pulling into Marina de la Paz a couple of weeks later, a man was pushing a dock cart up to our boat with our inverter—before we got the engines off and the dock lines on. Is he that good? Yes, he's that good. You need it, he'll get it there.

## **ANCHOR AND RODE**

All chain is the way to go; about 200 to 300 feet. We use a 65 lb real Bruce; just about any anchor will work; the current Bruce is one up from the one that new 50' Mikelsons shipped with; go as big as you think you can; our increase was limited by the length of the anchor shaft, too long and it came in contact with the windlass. The standard phrase is to keep going size bigger until your dock neighbors laugh at you for such a big anchor. Keep that one.

The windlass should work first time every time; make sure the cables that connect it to the battery bank are tight and of sufficient gauge for the job. Same with the wiring to the dinghy motor for the davit. These windlass loads can be large; I think it's best to have the generator running and the batteries under charge or the mains running and the alternators going to make sure there's plenty of juice; actually from a safety standpoint you would not want to be pulling the anchor without your mains running.

How much rode. A sail boat guy told me—I just put out 150 feet. Every place, every time. There is a rule above this rule: use a minimum of 4-5 times anchor depth, and more if windy. Consider the distance from the bow roller to the water surface, then add the depth of the sounder transponder to the water surface. This may be 10' to 12'. [ I (Bill/Sue) mark my chain with those measurements. For example, my 25' marker is actually 35', so I never have to do any math while anchoring.] This makes a lot of sense; we've never had to anchor in over 50 feet of water, often less; and we now always lay out 150 feet, which is usually enough.

Another friend of mine completely disagrees with this approach. He feels 3 to 1 may well be enough on an all chain rode. He is concerned that laying out a lot more using 4-5 times depth could result in 200-250 feet being let out and as the boat circles through the night, you could swing in to every boat in the anchorage.

As a practical matter we generally anchored in 30 to 40 feet so the 150 foot general rule worked fine for us. Also, the spots we picked were large enough to allow the boat to swing through 360 degrees with plenty of room to spare.

In anchoring, it is also necessary to consult the tide tables. If they let the water out of the pond in the middle of the night, then that 30 feet under your boat may become 10 or less. It's difficult to find tables for the Sea of Cortez, but the San Diego tide tables are amazingly close. Just pick someplace as close as you can---most modern chart plotters have tide tables built in ---always over allow for every contingency.

Not everyone follows this rule. At Isla Isabella we chatted with a 60 plus foot Nordhavn owner who had about 50 feet out. We just see how deep we are, where we want to anchor, bring the boat up into the wind, stop the boat, let out chain to the depth we are at, then start going backwards; set it once at 50 to 75 feet, then let out the rest to 150 feet and set it a second time.

We have a bunch of zip ties on the chain every 50 feet. Three sets of zip ties and we're done. One of the truly knowledgeable Mexico hands, Mike Shannon, who was kind enough to read and suggest changes and additions incorporated in parts of this article, prefers 30 foot increments. If you ever see Mike and Arlene aboard El Jefe, their 64' Mikelson Nomad, give them a hello and if you get a chance to see this boat, you'll see what properly set up and maintained can really mean. El Jefe is always perfect.

We use a chain hook bridle; we had it made up at Downwind. The idea is after the anchor is set that we put the hook with bridle on the chain and tie off the rope ends to secure points, then let out a little more chain so that the strain is on the hook and the bridle and not on the windlass; this also effectively lowers the attachment point of the anchor rode chain to closer to the boat's water line which keeps the chain more flat to the bottom and less likely to pop out the anchor.

We were anchored in about 35' of water in Calle Ramada. After dinner, the wind commenced to blow 35 knots on the nose as night fell and all night until morning. The line on the chain bridle was like a banjo string, but the boat held perfectly and did not drift an inch. Believe me, I became a believer in the 150 foot rule that night.

OK, while on the subject, and I give attribution for this idea to Dick Markee the renowned dock master at Paradise Village; you should have what Dick calls a fungible link at the end of the chain—where it attaches in the anchor locker; I use a piece of one inch tie down strap. If you get stuck and you have to get out and you can't get the anchor up and it's falling apart around you, one could sever the web strap with a good knife after attaching the bitter end to a large float or fender and hit the trail; come back later and retrieve the anchor and chain. If the chain is through bolted in the anchor locker, you'll never get it severed even with bolt cutters.

Another professional skipper told me to set the anchor in whatever cove I found, and then crack a cold one and sit there and figure out how I would get out of there if things turned bad. Every time. The "Coromuel" winds come up just when things seem to be settled and things can and do change pretty quickly. Pay attention to the discussions about these winds in the chart books. This wind and weather stuff gets to be pretty much second nature, but you have to pay attention to the wind. Mostly for us, it's a matter of being comfortable sleeping at night. If you are in a cove known to be protected from the north and it's a north

wind, then fine; however, not the place to be if the wind is going to be coming from the south; you'd want to be around the corner on the other side of that point forming the cove.

I generally set a waypoint where I dropped the hook and then zoom in the scale. This gives me an "anchor watch" that I can check as the boat will trace a regular pattern around the anchor that will tell you if you are dragging. I also set an anchor alarm on the chart plotter.

Anchor courtesy will require just one hook if that's how the other boats are situated. Two hooks, if that's what everyone else is doing. As a practical matter, it's usually not that crowded. But... Don't anchor next to another boat. We've (Bill & Sue) have been in large anchorage all alone and another boat comes in and anchors 25 or 30 yards away. Not good. We have gently suggested a little more distance, and have rarely been refused.

Use your anchor light. Every night, every time. Be aware that when CUBAR pulls in to Turtle Bay that everyone will turn on their anchor light and go ashore in daylight for the big party. Try to remember exactly where your boat is anchored. After dark, 60 or more anchor lights will all look the same. More than a few people took more than a little while to find their boats. Now with plenty of LED lights, you can leave LED lights on while you're away and easily find home in the dark. Or try a string of Christmas lights to make your boat stand out.

This is fun. Here's a picture of the FURUNO radar screen after the party at Turtle Bay.



### STERN ANCHORS

Not my favorite thing, but a necessity. You don't need anywhere near as much for a stern anchor; we use about an 11 lb Bruce style and some chain and that's it. Generally,

this one comes up by hand and the more you have down the harder it is to retrieve. Lightweight and stowable Fortress anchors make excellent stern anchors.

Why do you need it? Most of the time when you anchor, the tide will refract around the point that created your little protected anchorage. This means your boat will not head up and face the action of the water; it will want to be side ways to the action and you will roll. All night. With a stern hook, the bow can be kept facing in the proper direction and you get to sleep with a lot less rock and roll.

### **REEFS/SHOALS/ROCKS/SHALLOW WATER**

This is a good place to reiterate the importance of local knowledge. Sit down with someone who has been where you are going and go over the charts. Mark them up. Then study them when you are about to go to that area so it's all fresh in your mind.

It's a good idea to have someone on the bow with hand signals as to where you want to point the boat when getting into a new anchorage. If the bow of the boat is pointed into the sun, the water will be difficult if not impossible for the bow spotter to "read" as to coral heads, reefs, and rocks.

Very clear water can make rocks appear to be a lot closer to the surface; clouds can reflect and appear to be shallows or a reef.

Isla Isabella is known to be an "anchor eater". We anchored in rocks and we had a tough time pulling the anchor. We couldn't find a sandy "sweet spot" to drop the hook. I just remembered that it was going to be a problem and then moved the boat so that the bow was facing 6:00 having dropped and set the hook with the bow facing 12:00. I had the chain hook on so that I wasn't putting the strain on the windless and then I backed down until the hook popped loose. Ugly, but we got the hook out. As noted in a previous section, I did this in the dark. Not the best plan.

You could also rig a line through the eye at the end where the shank meets the anchor blades and pull from there having affixed a line to a buoy through that eye.

### **DINGHY SECURING/LAUNCHING**

The dinghy you have may well be too large. In the marinas, you basically won't need it; when out in the anchorages, you will probably want something small with a light outboard. Before they became illegal in California, the ideal set up seems to have been a 15 HP two stroke and a narrow, light 10 to 11 foot dinghy. Lots of people with that type of set up also put detachable dinghy wheels on the stern of the dinghy.

Even with the above set up, I think you are pretty heavy for dinghy landing on the beach; and, the problem is exacerbated by the fact that 15 horse now legal four stroke engines weigh a lot more than the old two strokes. Other than weight, the new four strokes are light years better. They use about half the fuel, don't smell and start first time, pretty much every time. They are also a lot quieter; but, as mentioned previously, they really need clean fuel.

So maybe the way to go for a dinghy with wheels is 8 to 10 feet and the next outboard down in size like a 9.9 which will save a lot of weight, maybe with an inflatable

floor instead of hard hull RIB (Rigid Inflatable Bottom). This whole set up would be very light; put your big heavy dinghy on a trailer and take the little set up to Mexico. Spend the money on a Hypalon dinghy; not anything else. The others, including most from Westmarine and Zodiac are made out of PVC style plastic that gets a hole in it if you look at it too hard. Hypalon is used by Avon, Achilles and others. Since there has been some consolidation in that industry, just confirm the tube material. Also, some newer RIB's have aluminum hulls that are quite light and much faster and more stable under way.

On mainland Mexico, landing is usually in some surf, albeit often small. Nevertheless, dinghy wheels are nearly mandatory. Combined with a light weight dinghy will allow moving the dinghy well above the tide line and out of harms way. Rarely are wheels needed in the Sea.

Plan B— take your regular heavy dingy. You know, the usual 13 to 14 footer with a 40 to 50 horse four stroke, hard bottom RIB; but buy a fifty foot light weight dock line and attach that to about 6 feet of very light chain and a very light Bruce style anchor. I recommend Bruce style because there are no moving parts to bite you as with a Danforth or folding Fortress style.

This set up allows you to get in close to the beach; anchor and swim in; or beach it and run the anchor and line up on the sand and keep an eye on it while you lunch or whatever. If you are the swim in type, and the water is high 70's or low 80's, it's a good option, but find and buy a dinghy boarding ladder to haul your self back in with, trust me you need this.

It doesn't take much to anchor and hold a dinghy. Some people double the above set up and lay out a stern anchor to keep the beached dinghy from going sideways to the beach; some even use some variant of bungee for the same purpose: with a 50 foot bungee cord with one end attached to the dingy anchor and the bitter end attached to the stern of the dingy, deploy the anchor off the stern about 80 feet from the beach as the dingy heads to the beach. As soon as the bow of the dingy is on the beach, someone exits the dingy with another 40 to 50 foot line attached to the dingy bow and holds the dingy on the beach until all aboard exit. Then the dingy is let go backward away from the beach, pulled by the anchor bungee, while the bow line is tied ashore to keep the dingy from turning sideward to any surf and so later the dingy can be pulled back ashore with the bow line. The dingy should be outside any surf yet retrievable when needed to return to the yacht. Allowance for change in tide level is necessary.

When anchored, it's mandatory to pull the dinghy up out of the water every night. Some cruisers advocate a dinghy name that does not reveal the name of the big boat. T/T (tender to) "Big Boat" means that when the tender is seen at the dock that the big boat out in the anchorage is unattended. A little common sense is always in order.

Stowing the dinghy on deck or wherever on your boat: I've seen or heard of at least four instances of big damage caused by a dinghy that got loose. What suffices to hold 800 lbs of dinghy and out board on the way to Catalina may not work on the big ocean.

Our dinghy goes on the foredeck; we run a line through the bow and secure that to the two forward cleats to keep it from sliding back into the salon windows; we also use two big ratchet style webbing straps. We get it tight and we check it.

Make sure the dinghy works, that the steering is free all the way in both directions, and that it starts; have it serviced; put in a new battery; service the outboard. Lots of dinghies get stored very high up on a boat deck; Offshores and Navigators come to mind; some type of fixed turnbuckle arrangement to really lock them down would be a good idea; place at a minimum of three points.

### SINGLE SIDE BAND [SSB]

This is just about as important a piece of equipment as there is, when it works. There are cruiser nets morning, noon and night that do not require a Ham license. You need to do some studying. There are some great resources. Geary in Conception Bay is the latest best weatherman. He can be heard on the Ham radio net 'Sonrisa Net' each morning except Sundays. He will broadcast on Sundays when events dictate. A Ham license is needed to talk on this net (except in emergencies, when any frequency is available), but listening is okay. If you have questions, listen to the check-ins and find someone near you that you can call on VHF.

This is a free service and he's the best. When you can hear him. Otherwise, in every major marina, somebody has the weather duty on the VHF morning net usually between 8 and 9 am on VHF 22 but it varies.

In Mazatlan, you may be waiting on the weather to cross to La Paz via Frailes or Los Muertos; the only way you're going to get the weather info is on SSB. The cruiser nets will also have cruisers checking in on site and giving you the info right where you want to go. Weather, mainly wind and sea state; it's what you want to know.

The best SSB source is Club Cruceros de La Paz: [www.clubcruceros.org](http://www.clubcruceros.org) then click on the radio info tab. There you will find out when the nets are, learn that UTC is not the same as 24 hr time as UTC is 24 hour time but in Greenwich UK; so you have to convert your local time to 24 hour time, then convert that to UTC; the chart on the site makes that much easier. Some skippers set their boat digital time displays to UTC time while underway to avoid confusion. Another idea is to buy an inexpensive digital watch such as Casio. Set it to the 24 hour scale and then set it to UTC. Keep it at your chart table. The chart will give you the SSB frequency; but also cruisers refer to the Amigo Net frequency 8122 as B4, I've figured out those codes for the common frequencies and they follow. These designations came from ICOM radios pre-loaded with certain SSB frequencies; I have an older Kenwood which works great but needed a table to convert the frequencies. Here's a table I made up, to use it you will need to adjust the time zones:

|                              |        |      |     |                      |    |     |
|------------------------------|--------|------|-----|----------------------|----|-----|
| 1330                         | 7:30am | 6212 | USB | PICANTE              |    | SSB |
| 1330                         | 7:30am | 3968 | LSB | SONRISA              | B1 | HAM |
| 1400                         | 8:00am | 8122 | USB | AMIGO                | B4 | SSB |
| 1515                         | 9:15am | 7260 | LSB | BAJA Maritime Don Wx | B2 | HAM |
| weekdays only, SD to PV      |        |      |     |                      |    |     |
| 7233.5, 7238, 7266 incl Sea. |        |      |     |                      |    |     |
| 1530                         | 9:30am | 7294 | LSB | CHUBASCO, Wx 9:50    |    | HAM |

|      |         |       |     |                  |             |     |
|------|---------|-------|-----|------------------|-------------|-----|
| 1600 | 10:00am | 6224  | USB | MEX MARQUESAS    | 6A          | SSB |
| 1900 | 1:00pm  | 14340 | USB | MANANA           | B9          | HAM |
| 0045 | 6:45pm  | 6516  | USB | SOUTHBOUND       | 6D          | SSB |
| 0200 | 8:00pm  | 6209  | USB | BLUEWATER        |             | SSB |
| 0200 | 8:00pm  | 6224  | USB | MEX MARQUESAS    | 6A          | SSB |
|      | 9:00pm  | 14300 |     | PACIFIC SEAFARER | B9 Ok Emerg | HAM |

The "Guru" of all things SSB / HAM is Gordon West. He is the master of all things radio. You can obtain your HAM license through one of his classes if you have time: [www.gordonwestradioschool.com](http://www.gordonwestradioschool.com). In San Diego contact Shea Weston (619) 225-5690 or <http://www.offshoreoutfitters.com/>.

You won't need a HAM license for the SSB channels; but you will have to do some studying to make sense of SSB. Basically, it's just making sure you have a properly installed SSB radio and that you know the time and frequency when what you want to hear comes on.

"Gordo" is one of the truly nice guys; we met him in Vallarta when he was giving a seminar to sail boaters getting ready to make the jump to the South Pacific. He took our Kenwood home with him to Southern California as it had malfunctioned in Puerto Vallarta; had it taken to Kenwood, updated all the frequencies, gave me a table of 100 popular now programmed channels and had it available for our next guests to bring back to us. It is now a "boomer" and really works.

The problem with transmitting and receiving is one of propagation. Some frequencies work best at certain distances. For example, 8122 works best at a distance of about 800 to 1600 miles. Sunset and sunrise affect signal propagation. Real radio guys believe that there is a positive effect at sunrise and sunset. They term this "grey lining"---sorry to say, that was not my experience. As the sun went down I would generally lose the Southbound net.

Here are two great sites from Latitude 38, the first is a Gordon West article on SSB and the second is the site for a First Timer's Guide to Cruising in Mexico; both should be printed out and reviewed. They both need to go with you.

[www.latitude38.com/features/SSB.html](http://www.latitude38.com/features/SSB.html)

[www.baja\\_haha.com/Guide](http://www.baja_haha.com/Guide)

The really bad news is that SSB is basically worthless in a marina. Also on a powerboat you are going to have to shut down a bunch of stuff if you really want to listen or participate in a net. For example, on Dos IV the auto pilot wreaks havoc with the SSB; on other boats it can be the refrigerator or ice maker. Out on the hook with a full battery bank and nothing running including a generator, life can be good in SSB land. I think it would be a good idea to always shut down the auto pilot; actually power it off; when using SSB. I've heard of a lot of damage being caused to the point of ruining an autopilot when the SSB signal hits the auto pilot circuit.

I therefore recommend studying for both. Just go to [www.qrz.com/xtest2.html](http://www.qrz.com/xtest2.html) and take the practice tests for a couple of evenings and you'll be good to go. Since it's only \$14.00 to take both tests, assuming you pass the tech test; go and take both. I think you could do it without going to class and just find out where they are giving the tests and go in and take the tests. It would also be helpful if you want to do this with or without a class to review the following info provided to me by Capt Bob Vincent, who kindly taught the class and provided the following information:

From: San Diego Yacht Club/Amateur Radio Group - [N6EZV@arrl.net](mailto:N6EZV@arrl.net) – Bob Vincent  
– 619-987-7321

To: All SDYC/ARG/ARGJs, please note the following.

Subject: Useful web links:

1. If you wish to conduct business with the FCC, you must first register through the FCC's Commission Registration System (CORES). Upon registration, you will be assigned a FCC Registration Number (FRN). This number will be used to uniquely identify you in all transactions with the FCC.  
<https://fjallfoss.fcc.gov/coresWeb/publicHome.do>

VERY Important: Please obtain your FRN prior to class.

2. For your continued reference, make a color print of the U.S. Amateur Radio Bands:  
[www.arrl.org/FandES/field/regulations/Hambands\\_color.pdf](http://www.arrl.org/FandES/field/regulations/Hambands_color.pdf)

3. Go to: [www.qrz.com](http://www.qrz.com)  
On the left side, a ways down, click on "License Study" and "Practice Tests". That will take you to a PowerPoint presentation of how to prepare for the exam.

4. The best San Diego area ham radio store is:  
Ham Radio Outlet (HRO)  
5375 Kearny Villa Road  
San Diego, CA 92123  
858-560-4900  
[www.hamradio.com](http://www.hamradio.com)

5. The best two books that are available are listed below. You should have one for your reference:

a. American Radio Relay League Ham Radio License Manual, Level 1 Technician (\$25 at HRO) [www.arrl.org](http://www.arrl.org)

b. Technician Class – Amateur Radio Element 2 by Gordon West (\$20 at HRO)  
[www.gordonwestradioschool.com](http://www.gordonwestradioschool.com)

Please look over one of these books before class if you get a chance. Your pre-study will help you ask good questions.

6. Great web sites where study material can be found:

a. [teara.org](http://teara.org) go to Licensing, then Tech Study Guide then click on the "our download page" in the last sentence. Study (click) away...

b. [www.ac6v.com](http://www.ac6v.com) should be looked at and bookmarked. This is a great resource to be

reviewed.

7. My Favorite: Radio waves are a form of electromagnetic radiation. This radiation travels at the speed of light. To understand the physics behind it all, please take a look at this fantastic web site:

[www.colorado.edu/physics/2000/waves\\_particles/lightspeed-1.html](http://www.colorado.edu/physics/2000/waves_particles/lightspeed-1.html)

Browse the Table of Contents. You will learn more in one hour than your last year of college. Enjoy...EZV

[You will need the FRN number (see #1 above) to take the test, just visit the web site and it takes just a few minutes. You need exact cash for the test fee. Try it without the class if you are short on time.----Now that I've got the program, I'm going to go take the general and the extra test if I pass that. I mean, look, they give you the exact answers to the questions and its multiple choice. You can do this.]

### **RADAR: AIS/MARPA, OPEN ARRAY, DOME**

Radar is perhaps the key piece of equipment. You need a chart plotter, and you must have an accurate permanently mounted and calibrated conventional compass; but, radar is the key piece of equipment.

The charts in Mexico are based on surveys from the late 1800's; your eyes and your radar are a lot more accurate. You can never trust a chart or a chart plotter in Mexico, if it's visible on your radar and that conforms to what your eyes see and your chart then there is some congruence. Your GPS will get you close, your eyes and your radar will tell you where you are. There are some recent charts that are GPS accurate. Check with your local chart provider. They may only be available in Mexico.

For example, cruising south along the Puerto Vallarta malecon, you will see your boat indicated as being inland on the main town boulevard about 1.5 miles from your position. In other words, you will be on Banderas Bay and not on the Boulevard indicated by your chart plotter.

There are basically two types of radar—old school conventional green display cathode ray tube (CRT) and the new school digital displays. On Dos IV, we have both.

For me, the green display gives me the better definition and is a lot sharper picture inside of one to three miles. The digital display can be overlaid on the chart plotter and also offers MARPA and some integration on the latest radar units with AIS:

*MARPA* is an acronym for Mini Automatic Radar Plotting Aid. The primary purpose of *MARPA* is collision avoidance and target tracking.

Automatic Identification System (*AIS*) is a similar aid with a different technology.

*MARPA* and *AIS* can provide a displayed list of the targets on your radar screen or chart plotter with closest point of approach and proximity alarms. *AIS* will tell you the identity of the vessel if it is broadcasting its *AIS* information, speed, course, bearing and tonnage; it's more fun than useful for Mexico; same for Marpa. Marpa is radar based and requires a heading sensor; *AIS* is broadcast over one or two VHF channels but you would

probably be only buying the receiver. Only commercial vessels are required to actually broadcast their identifying information.

Mostly it's going to be you by your lonesome out there most of the time and collision avoidance with something big will boil down to land or rock or reef or some panga with no lights in the middle of the night. The panga scenario is why I like a CRT radar. You really don't need MARPA or AIS. Of course, being toy oriented, you know we have both.

It's good to travel with your radar on all the time; even in our local bay; your eyes and brain will eventually come to know what you are seeing on the screen. It becomes a lot more intuitive if you use it whenever you are underway.

As we left Mazatlan for La Paz in April 2007, our main digital radar failed; we did the rest of the trip and the bash back home on a 10" stand alone Furuno 1832 Mk II green CRT display 4KW dome radar. This is the best piece of equipment on the boat. A friend tells me it's nearly as good in a less expensive 7" display. Would I have a back up CRT radar in Mexico if I were you? Absolutely. Also because the Furuno CRT is stand alone, it's always there, always on and always working.

Stand alone is a big deal for me because too many electronic installations group everything on one display from chart plotter to sounder to radar. It's just too much and too many types of information for one display. Two displays can make it a lot better. Network them and reserve one for your digital radar; or use just one and have a stand alone Furuno.

This old school Furuno is "Da Kind"; next time you are at Fisherman's Wharf in San Francisco, look at what those guys have. Nearly every one of them has a small Furuno dome on top as their only radar. Period. These are the guys that fish outside the Golden Gate and go in and out in dense fog.

Dome vs. Open Array - a smaller, less expensive dome is fine; a six foot open array is great, but if you need to scale back, a small dome will get you there. I just don't like digital for in close, less than three miles. It's a personal thing. Your opinion can and will vary.



### **NAVIGATING WITH RADAR AND LOCAL KNOWLEDGE**

Local knowledge is key. When we got to Vallarta and got ready to go south to Barra and Las Hadas, we were fortunate enough to sit down with Gene Fletcher. Gene was just super nice. Told me to bring my Charlie's Charts book, and together we annotated that book. We drew all over it. Gene would often say: "put a 1.5 mile radar ring on that rock, or that point or that something" This meant staying at least 1.5 miles off of that land feature which might be surrounded by a reef or just be downright dangerous.

It is not possible to guess what 1.5 miles looks like. You need radar. You also need local knowledge.

We ran into Gene again in Barra and had the same drill for our upcoming time in the Sea of Cortez. When we got up into the Sea, everything laid out just as Gene said it would and we knew where we were and what to look for.

Before leaving for a new place, we would get out all of the chart materials, compare them and plan. We wrote all over our books and we talked to lots of people. No one will ever say no; just never hesitate to take advantage of local knowledge.

### **ENTERING A NEW BAY OR COVE**

OK so you just ran from Ensenada overnight for 30 hours and you are now getting ready to enter Turtle Bay. I think you should look at all the chart materials (Get out all the reference books and review each one. We (Bill & Sue) sometimes read the information out loud to each other to make sure we both understand the issues) and even Google Earth (Google Earth images can be saved to your computer as a .jpg). Figure out the angle that

you need to go into the Bay. Take your time. Maybe follow someone else into the Bay. This is a big opening and not a big deal, but it may be your first time into a bay in Mexico. Don't try to round it off and cut the North corner of that bay or any other. If a panga jockey comes wailing out and is waving at you, pay attention. He may be telling you that you have cut the entrance too fine and you need to adjust. Maybe he just wants to sell you fuel. Maybe not. Be careful.

In Mexico, on the Baja coast and on the West mainland coast, the north side of the bay you want to go into will most often be shoaled from that north boundary, or have reefs, or rocks. Do your due diligence. Take offs and landings are always the most dangerous and require your best effort and attention.

Very experienced power boater friends went aground in the Sea of Cortez, I think around Agua Verde when they went to explore the next bay south. They were just rounding around and not really breaking any rules, but they grounded anyway. It was a soft grounding but they then spent some serious money at the haul out place in La Paz straightening out some bent parts below the water line. You just have to be careful. Personally, I watch the sail boats. They have a lot more draft. If they can get through, I can get through. Use common sense and even an extra pair of eyes so you aren't doing all the thinking. Turns out Jan really has an eye for this sort of thing. "Hey Babe, how's that look over there.....? (Babe) Honey, maybe you want to rethink that....."

Also, **never** up anchor and leave in the dark. Or enter in the dark. Daylight is what you need. I violated this rule pulling up the anchor at Isla Isabella when anxious to get underway to Mazatlan. It turned out OK. It was not a pretty thing in the execution. I thought I'd just swing around 180 degrees to how I had set the anchor and pull it and head out; anchors can get really stuck at Isla Isabella (it's in the chart books) and ours was stuck; and it was dark and I had the Furuno radar on, and I just got all turned around and I was letting Jan sleep below, or she would have sorted me out; well you get the picture. No harm no foul, but it gives you a peek at something I call humility. I'm as prideful as the next guy, but I never hesitate to ask even dumb questions, and I confess my dumb moves in the sincere hope someone may benefit.

## RED LIGHTS AND BINOCULARS

You can replace your bridge lightening with red lights; we found some fixtures in 12 volt at West Marine with a two way switch for white or red lights; red lights, of course, don't blast out your night vision. Turning down your instrument lights and your chart plotter and radar displays helps night vision too.

Keep a set of binoculars next to the wheel. Stabilized binoculars give me a headache and make me sea sick. Try them out before you lay out a chunk of the secret budget. I have three pairs of Steiners. I bought them way before they got way expensive, maybe 20 plus years ago. They are at least double what I paid for them now. I have two pair of 7 x50's which are a little too big, but are really amazing. One of the two pairs has as a built in compass. Cool looking. You don't need it.

The third pair is the charm. Steiners at 6 x 30:  
[www.bhphotovideo.com/c/product/362793-USA/Steiner\\_461\\_6x30\\_Military\\_R\\_Binocular.html](http://www.bhphotovideo.com/c/product/362793-USA/Steiner_461_6x30_Military_R_Binocular.html)

These are light weight, and provide as much as the 7 x 50's in terms of what you can actually use. They have huge "exit" pupils which means they can really pull in the light at night and if you've ever had trouble looking through binoculars, you'll never have a problem with the 6 x 30's. I swear. I reach for them without even thinking about it. They are perfect. On a rolling bridge you want something that can acquire the image and not make you throw up.

They may be hard to find. They are denoted "Military R" not "Marine" but the marine ones aren't available in 6 x 30. Other brands may sell a binocular in 6 x 30. Trust me, go with the Steiners. It's like the best present you can ever give yourself. Use the secret budget.

Okay, you have to buy some other brand. At least look at the exit pupil diameter; that is the diameter of the lens you look through. The bigger the better. Small is no bueno.

### **SPANISH CLASSES**

The Admiral and I have started Spanish 101 at City College. Jan was once fluent in French and also took Latin, Italian and German. I have taken Latin, French and German. I also studied Russian on my own with a tutor after college. We both wish we had just taken a year of Latin and then all of the Spanish ever offered at our high schools and colleges.

We made certain our children did. Nonetheless, it's never too late. So we are taking basic Spanish and trying to add some verbs to our nouns. We are not taking the class for credit. We are getting a lot more of this than from the tapes, CD's and books we've carried for 9,000 miles. LIFE RAFT/406 EPIRB LOCATOR BEACONS/DITCH BAGS

406 EPIRBs have changed search and rescue world wide. When your beacon goes off, the cavalry is coming. EPIRBs work by sending an SOS on the 406 frequency. As soon as your EPIRB gets its bearings, it also sends your latitude and longitude via the information from the built in GPS. EPIRBs float and the best ones go off when they hit the water.

An 8 man valise or mounted canister style off shore raft will set you back some money. It does things your dinghy won't do; if you need it you will be glad you have the 8 man and not the 6 man. A raft may be an option; an EPIRB is not; and they have come down in price.

A boat yard guru once told me to treat the edge of your boat like the edge of a 5,000 foot cliff; if you go in the water or over the edge, it's a bad deal.

Going overboard is a bad deal as is getting someone back on, if you know they are missing. I sometimes wear and should wear all the time, an inflatable life vest that looks like a fanny pack with a personal EPIRB inside, a strobe flash, whistle, knife and a small VHF radio. If it's a nasty sea state, I'm more likely to be properly equipped; and, also at night on the overnight passages.

Safety is something that is too broad a subject to cover here. Suffice to say, have at least one big yellow EPIRB and think about a separate small personal one as well; on FUBAR I, EPIRBs were mandatory.

The ditch bag is another subject and you need one; be sure to have your extra eyeglasses in there and water and a GPS and a vhf radio and solas flares and more; there are many articles on what you need.

As stated, search and rescue has been changed forever by the EPIRBS, if you have one and it works properly you won't be in that raft for 31 days. The two main reasons for going into the raft are basically the only two reasons, water intrusion and fire. Otherwise if the boat is at all afloat, you are staying with the boat. Have charged extinguishers everywhere between you and how you are getting out of the boat. Know where they are in the middle of the night.

Watch out for the stupid things: an electric toaster by the galley curtains; cooking fires, just always be aware and trust your nose. If you smell something going on get busy. Get busy fast.

For Life Raft inspections, EPIRB batteries, etc. contact Oceans West in San Diego, (619) 544-1900 [www.oceanswestmarine.com](http://www.oceanswestmarine.com).

## **GOOGLE EARTH**

Launch Google Earth in your lap top; later on your boat, even without an internet connection, the images will still be in your computer's cache, including a reasonably accurate GPS location for any place you lay the cursor. In other words, if you see a small bay on Google, you can pick out the Lat Long and put it in the chart plotter and head for it.

We used Google Earth by printing out the view from space and spotting the bays on the way from Barra de Navidad to Las Hadas. Google Earth gets better every time we use it. Just remember you don't need to be on an internet connection if you've ever actually opened the area while on the internet, it will remain in your computer's cache memory. Potentially, you have a chart of the world in your lap top. Have the geographic area in the cache memory and enable Google Earth to display the latitude and longitude. Put your lap top cursor on your destination and crank the lat/long into the chart plotter and off you go.

## **LAPTOP COMPUTER/PRINTER**

You should also have an inexpensive printer/copier on board. It's just super convenient to be able to make a copy or print out something you've received as an email attachment. If you use a laptop for navigation, I think that laptop should be dedicated to just that single purpose. Use another laptop for internet and emails and back up.

Internet is everywhere. Most marinas provide it for free. Using your suggested Sat Phone for internet simply isn't there yet. The big domes the big guys have are out of any reasonable pay grade and aren't fast. You'll never be that far from a connection. There was excellent internet service at the trailer park up the road from Puerto Escondido. I find it better to hook up with my own lap top. Bring a cat 9 cable for Marina Mazatlan for their connection.

## SATELLITE PHONE

This is a good thing. There are two kinds. Global and Iridium; I think Iridium has the best coverage; it's going to work out to about \$1.50 per minute; buy the thing where you have some recourse; Westmarine would be good; make them price match an internet price for the same unit. Buy and load your minutes through their provider too; lots of guys buy internet minutes and they aren't there when they need them.

There are a couple of Sat Phone stores in San Diego; I have rented phones from [www.allroadsat.com](http://www.allroadsat.com) with good success. All three listed below are nearby the Marinas.

All Road Sat  
2222 4th Ave, San Diego, CA 92103  
[\(619\) 531-068](tel:619531068)

Satellite Phone Stor  
1748 San Diego Ave. #100  
San Diego, California 92110 USA 1-619-281-7500

Satmodo  
239 Laurel St., Suite 101  
San Diego CA 92101  
619-238-0205

A Ham license and short wave or Single Side Band (SSB) can get you help; but there's nothing like having the United States Coast Guard inside number to the guy with the headphones at Search and Rescue on speed dial. This is not a joke here are the inside numbers:

619-278-7033  
800-854-9834

I believe the above numbers are good. However the following number gets you to 11<sup>th</sup> Coast Guard District Search and Rescue---these are the guys that do the west coast of Mexico:

510-437-3701 [Use this number first.]

You don't want to be in trouble and try to reach the Coast Guard by dialing 911 because you don't know the number. Next time you are at a boat show where the Coast Guard has a booth, double check those numbers to make sure they have not changed.

Load the speed dial and learn how to use the phone; be especially sure the antenna is correctly attached. You can also use a sat phone for free short text messaging (SMS). It's important to load the emergency numbers into speed dial; that way it will be easy to show a crew person how to work it too. Also, you sometimes need to dial a country code or a plus sign (+) to have it dial properly. If it's set up correctly, it will be one less thing to worry about if you summoning aid for yourself or another boat.



For local communication buy a Mexican cell phone for cheap and buy a new SIM card for every major port, otherwise your Vallarta SIM card will make every local call in Mazatlan long distance. AT&T may work down there; Verizon will work for calls to the US and US to you; but, you may not be able to call a number in Mexico. It has to do with GSM and CDMA technologies; Carlos Slim put Mexico on GSM last year; changing from Qualcomm Verizon CDMA technology. Sucks but that's not going to change.

### **FLOAT PLAN**

When you are making the long jumps tell someone. Tell someone responsible back home. Give them the above Coast Guard numbers. Use your sat phone to tell them your lat/long of departure and the lat/long to where you are going. Tell them the times, the speeds, your fuel on board; number and identity of people on board. Your EPIRB registration number. Print it all out and give it to them before you leave. Tell them if the EPIRB is a 406 that transmits its lat/long. More detail is better.

They need to know what your boat looks like; make, model, engines; your experience; the nav equipment you have on board; whether or not you have radar.

Tell them when you expect to arrive at your next port; call them when you get there; tell them to call the Coast Guard if you are overdue and don't check in. If you've got a sat phone this is easy.

It's also a matter of common courtesy. You don't want your friends and family worrying about you and your boat.

### **Transportation**

Speaking of Carlos Slim, he has done something nice for us. Slim's company is one of the lead shareholders in VOLARIS. This airline presently flies only inside of Mexico but it is a real find.

Just go on line to Volaris.com; look for the little American flag icon in the upper right corner of the web site and click that; this will translate the site into English; then you just book the flight the same way you would do it on Southwest.

There are some differences from Southwest. First the planes are A319's, a shorter version of the A320 that floated in the Hudson; the pilots look like they came from the German Luftwaffe, big blonde Nordic types, the cabin personnel are young and cheerful. This is a great experience. Also, the seats have power outlets for your laptop and you can confirm your seat up to 72 hours in advance; and, for booking on line, Volaris sent me two ten dollar off coupons for the next flight.

They fly from TJ to Cabo, La Paz and Vallarta and lots of other places. This makes getting home a breeze and cheap. Please note, also non-stop---no more detour through Arizona. Thank you Carlos Slim.

No matter your plans for your boat in Mexico, you should get a **Trusted Traveler Pass**. Upon entering the USA via car or plane it allows you to bypass long inspection lines, and you have access to special US airport TSA lines. The last time we used our (Bill & Sue) cards upon returning from Mexico, we were the last ones off of the plane and the first out of the terminal – it's that easy. We were in the same inspection line with pilots and stewards. This one is a no-brainer. Look here for information: <http://www.cbp.gov/travel/trusted-traveler-programs>.

## INSURANCE/PASSPORTS/THE BASH

Just put a rider on your regular US policy for as far south as you intend to go; you will need to tell them Manzanillo or Zihuatanejo if you are going farther south than Banderas Bay Puerto Vallarta which is defined to the south by Cabo Corrientes. Generally that rider will go through June 30th; see if you can extend to the end of July and bring them boat back in July as the big crewed power boat skippers do. Staying through half of July may cost you a higher premium for the extra time, a defined hurricane plan, and a larger deductible.

The northbound Baja Bash is likely to be more benign in July than in May or June. Likely, but not a mortal lock. It's only going to be easier about every fourth time. Three out of four times it's going to suck.

We are looking into DOCKWISE and YACHTPATH to see if there's a way to ship the boat to Ensenada from La Paz instead of bashing it home.

Mexican boat liability insurance is a must. It is required for every marina you will visit. It is inexpensive. Our (Bill & Sue) carrier is Mariners General, and they issue Mexican boat insurance and, if you want Mexican car insurance and they are more than ½ less than AAA. You do need a passport good for at least another year, that is a year past when you will need it – or a year after the latest date you will be leaving Mexico. No passport, no Mexico. You'll get a visa good for 180 days when you clear in to Mexico. I'd staple it into your passport; too easy to lose if you aren't careful. I lost mine and it cost me \$50.00 to get

a new one to use to fly home. I got it with a bunch of other people who had similarly lost theirs. We were all standing in line together at the immigration office at the airport in Cabo. If you fly back and forth leaving the boat in Mexico, you'll get a fresh 180 day visa every time you come back to Mexico.

### **TEMPORARY IMPORT PERMIT**

CUBAR will arrange for TIP in November Keep it with your vessel documents.

### **Getting Stuff from the US shipped to you**

From a very reliable source, My (Bill) sister and brother in law who are long time cruisers, - the following woman can do the job for you.

Beryl Lenero Villegas Tijuana phone: 011 52 664 403 4281  
email: [beryl2910@hotmail.com](mailto:beryl2910@hotmail.com) She comes to SD and picks up the package. Drives across the border, goes through customs, and sends it by land or air from Tijuana.

This is primarily for items purchased or delivered to San Diego.

They have always had exceptional service at a reasonable price.

### **GUNS AND SAFETY**

No guns, no bullets. Period. The Mexican government is very serious about this and it will get you in jail faster than anything. If you lose a crew member to custody through inadvertence, intoxication or simply wrong place/wrong time, I'd hire a local lawyer who knew where and to whom the cash had to go to effectuate release and then load that individual on the first plane making smoke for the USA with instructions to never ever return to Mexico. Period. Doesn't matter what it might cost; don't leave anyone languishing in custody to teach them a lesson. Period. Get them out and get them gone.

We've had actually never even heard of anyone ever having a problem while boating in Mexico. Then, there was some report of some incident below Manzanillo, but I was never able to confirm it. There was also an incident where a San Diego sport fisher ran into the middle of a commercial tuna pen between San Diego and Ensenada. This is not enough of a problem to get all excited about.

There was a more troublesome incident involving a delivery crew and a very expensive big Viking powerboat. The Mexican delivery crew said they weren't reimbursed for a fuel bill in Turtle Bay and a Mexican crew member reported an injury and the boat was held up in Ensenada for a long time before some arrangement was made getting it out of Ensenada. These are kind of common sense issues. You didn't get a big power boat making bad decisions. The extreme probability is that you will continue to make good decisions that will keep you out of trouble.

When the piracy/boarding issue came up at a Dick Markee presentation, he suggested a flash camera at night to be the best weapon of all. I think I'd get on the radio a second after pouring on the power first. Contact US Coast Guard even if deep in Mexican waters, they'll know who their counter parts are in Mexico. Nice to have that sat phone.

It's also good to remember that there is no Uniform Building Code in Mexico. I personally forgot this rule and briefly lost consciousness exiting a restaurant when my forehead hit a door header about 5 feet off the ground hidden by palm fronds.

### **BOAT CARDS**

You really need a business card for your boat. Ours has a picture of our boat, the name of the boat, home port email addresses and all of our other contact information. In Mexico, couples are known by their boat name. We know the Vinmars and the Coastal Passages, The El Jefes and a bunch of others. It's nice to have a card to exchange with other boating couples. It's even nicer if your boat card replaces your real business card on a permanent basis.

We (Bill & Sue) keep our boat card collection in one of those narrow business card holders, one for each season – we now have three. It's surprising how often we refer to it.

### **YACHT CLUB DIRECTORY**

Nice to have your yacht club directory on board. The San Diego Yacht Club directory is loose leaf and I have taken the extra pages from each new edition and put them in the front of the directory. That's where I scotch tape all the boat cards from other boaters that we've met as we've cruised. It's also where important business cards are kept; this system has pretty much overgrown the blue binder. Next time, I think I'll use an extra blue binder just for the cards. Regardless, it's very handy to have all those numbers. Also, when you see a home burgee, you can do a quick check of the boat name and find out who you are about to visit on a first name basis, because you knew them all along.

### **MONEY/BOAT SHIRTS**

Bank ATM's are everywhere and have the best rates. Get out as much as you think you can use to avoid an individual transaction fee too many times. You get pesos and dollars are deducted from your linked account at the prevailing rate plus the service charge. We never had a problem. Let your bank and credit card companies know ahead of time that you will be in Mexico. Also obtain phone numbers that you can use in Mexico to contact them. 800 numbers rarely work, but most companies have international numbers.

I think cash works best in Turtle Bay for fuel although I think we've used Visa there; you have to figure the liters to gallons, and the exchange rate, on the fly while it's all happening, so have your brains on and your beer in the fridge. The best tip is a boat tee shirt. Have them made up here in the states with your boat name and some type of logo. Take smaller sizes; medium is popular as well as size small; the large and XL and XXL will be for your gringo guests.



You will need small peso notes for the Sea of Cortez; you will find ATM's in Loreto. Bank ATM's are the best.

### **BUGS AND DEET AND SCREENS**

#### **Dengue??**

The main problem for us has been flies that bite. Also mosquitoes at sundown. Barra de Navidad at sundown was miserable in November/December 2007 although we didn't recall the problem in a previous visit. Barra has a big lagoon in the back and that probably contributes to the problem. You still need to be prepared.

I would strongly suggest taking 3-6 cans of aerosol bug spray purchased in the USA at Rite Aid or CVS. Read the labels carefully. Buy the stuff with "DEET". I think the higher the number the better, 15 to 20% Deet is what I think I remember worked best. I even saw some near 100% Deet but that was overkill and a little too nasty.

You also need a supply of several types of anti itch crème. Benadryl cream and hydro cortisone cream is good. In addition, I recommend Actifed tablets and/or sudaphed (pseudophed) the little red ones. Buy the real pseudoephedrine---you will have to show the pharmacist an ID to buy it but it is far better than the substitute stuff they sell in very similar packaging out on the aisle. They changed over as bad people were making bad things out of it. You just want it to take the big itch out of bad bites.

Incidentally, we tried to buy some lobster from a diver in a panga while anchored at Honeymoon Cove on Isla Danzante in the Sea of Cortez. He said, or made it known, that he was through for the day and had a terrible ear problem as his ears had not cleared. I gave him some Sudafed and he came back a couple of hours later and gave us four huge scallops which we barbequed. The Sudafed had worked and we were both very happy.

Buy here or wherever you can find them, one or two of the paddles that look like mini-tennis racquets with a battery charge that zaps flying insects. Others have reported great success and great fun in the zapping. We found that when we finally got the zappers, all we had to do was reach for them and the bugs disappeared. Go figure. The only place we ever found them for sale was at the little store at Two Harbors on Catalina; although, everyone will swear you can find them anywhere, including Harbor Freight.

Screens are a very good thing. Our big sliding glass door that opens on to the cockpit is not screened and we never got around to it; more than a few times, well many times, we had to close the door and run the air conditioning because we did not have a screen for that door. We'll for sure have one before our next trip.

Another hint from Bill & Sue – buy a mosquito net for a king size bet. We have used one often when there are critters around. We tie it up in the cockpit and can still enjoy the days and evenings without the pests.

### **CEDAR PLUGS/ZIP TIES/DUCT TAPE**

Here's the deal; tie cedar plugs with a string in the appropriate size next to every hose that is below the waterline. If you blow a hose and the through hull won't shut it down you can jab the cedar plug into the hose. The Marine Exchange sells bags of cedar plugs in assorted sizes.

Take a bunch, bunches of Zip ties in all sizes. Duct tape. Tools. It's nice to have a small tool bag for the little stuff so you don't have to drag out the big tool container when you only need an end wrench or a screw driver.

### **MARINAS AND MARINA RESERVATIONS**

If you want Paradise Village in Nuevo Vallarta, you should start now; email them, call them, get on a list; this marina is always full because it's the best. Not to worry though, in Banderas Bay there is now La Cruz and another marina is being rebuilt next to Paradise Village and there is the downtown marina. CUBAR requires you to make reservations for your marina stays during the rally at Ensenada, Puerto Los Cabos, and Costa Baja.

Barra de Navidad—not to be missed; start early there too; very frustrating to get in touch with them. If you are at Paradise Village, they might be able to help you; otherwise be persistent and try to get a confirming email.

Mazatlan—El Cid (El Surge) marina we felt over rated; go further up the same channel and use Marina Mazatlan, more room and nicer. No surge. No potable water either but you can have it delivered in 5 gallon bottles for not much; also two for one pizza from Domino's on Tuesday. Swear.

We (Bill & Sue) loved El Cid. Yes there is a surge, especially on the outboard slips. The great staff, two pools, giant Jacuzzi with numerous happy hours make the place memorable.

Las Hadas—we just anchored out. We did take on fuel there too and it was a good experience. We think it would probably be better to take on fuel there than in Barra. If you've topped up in Cabo and made the run to Vallarta and then gone south to Barra, it's

probably time for fuel. If you are in Barra, don't hesitate, make the time to take the time to anchor off of Las Hadas. And the little bays just before; print your Google earth map.

There is fuel in La Cruz. I think we'll probably do the top off in Cabo and then hit La Cruz to top off again on the way to Paradise Village thereby avoiding taking on fuel later at Oppequemar in downtown Puerto Vallarta, Barra or Las Hadas. Then run all around Banderas Bay down to Barra and back; and top off again at La Cruz on the way north to the Sea of Cortez in the spring. Oppequemar is to be avoided. Just way too crowded.

### **LAS ANIMAS/YELAPA**

OK so now you are at Paradise Village all rested, with the boat waxed and the laundry done and the bedding changed----there are workers who will do all this while you are at the beach; now you have guests and you want to take a boat ride; and you don't want to fish.

Take them for a cruise south along downtown Puerto Vallarta, nose in to the downtown marina, continue along the southern beaches of Banderas Bay; anchor off of Las Animas or Yelapa; as you nose in at either you will be met by a panga operator, he will show you where to anchor, check your anchor and take you and your passengers in for lunch. After lunch head back to Paradise Village, or for the full tour, let your passengers nap while you mind the auto pilot to Punta Mita where you anchor for the night after cooking on board; fish on the way over or don't; fish on the way back from Punta Mita to Paradise Village or don't—time proven, crowd pleasing perfect two days. Every time.

### **FISHING, TWO WAYS TO GO ABOUT IT:**

The number one way to fish is to have at least four poles; two in the 30 lb range and two in the 50lb range. I am not a serious fisherman, but, look, you are going to be traveling through key fishing grounds, amazing fishing grounds. If you already are a big time fisherman, please ignore this section. Completely. You can already tell by my equipment advice that I'm a total novice.

That said, total novices can still fish. Fubar One had a deal working with a tackle store in Newport Beach. There will probably be a similar deal or two with Fubar Two. "Total novice" can go in, plunk down a credit card, and walk out with the four rods, four reels, the leaders, hooks, plugs, jigs, gaff, dip net for the bait tank, and some special filet knives. They will totally set you up.

You need a Mexican boat license and Mexican fishing licenses. They say that you have to have these items. They say that if you are found to have even one hook on board and no license that you are in big trouble. I buy the licenses, but you know what? I don't think anyone ever asks for them and I've never seen a problem. Which is to say on my next trip they'll probably take my boat apart. You can buy these items in San Diego at CONAPESCA the official office. It's on Laurel Street.  
[www.bajabound.com/before/permits/fishing.asp](http://www.bajabound.com/before/permits/fishing.asp)

As you are heading south at your 9 knots, you put your fishing stuff in the water and see what happens. Off Mag bay and from there south there are major fishing banks which are basically high spots. Fish like high spots. Fish tend to bite when the tide is changing. Fish like warm water. Talk to the guys at the tackle store. You'll immediately find out all you

need to know. I really just wanted to make mention of the topic so that I could get to the second way to fish.

OK, I kind of invented the second way to fish. It's the way I fish. I once went on a friend's big sport fisher to the Cortez Bank which is 100 miles out from San Diego. That's 100 miles out and 100 miles back, and stopping at every freaking kelp paddy and with a big tower and side ways to the sea state and rocking back and forth and smelling big diesel fumes----third ring of hell.

If I have someone on board who knows what they are doing, we'll pull the lures all the way to Cabo; but, that's still not how I fish.

How I fish is that we pull into Los Cabos, not Cabo San Lucas; Los Cabos, the new marina. We find "Rode" Jiminez, or he finds us; he sort of somehow materializes; but if he doesn't someone of his wonderful ilk will. If we've just pulled in, he does his materialization thing and washes the boat and looks at our fishing gear. In the morning he again shows up at an agreed time; we fire up and head for one of the two "Gordo" banks---as we leave the marina, we stop and a panga buddy of Rode pulls up and we get our live bait. We continue to drink coffee. Rode gets all the gear out, sets it up, deploys the outriggers, and gets it done. We drink coffee. We hookup; we hit the throttles a shot and set the hook; get off the wheel and Rode hands me the rod; I pull the fish in; Rode gaffs the fish and boards it; we take the picture; the fish gets released or if it's Dorado, he filets it and we have a restaurant prepare it that night. We do this until we get tired of taking pictures.



The Gordo banks are no more that 10 or 20 miles out from the marina, not 100 miles. It should be sunny. It should be nice and warm. It's easy. On the way back, someone can handle the wheel while I take short nap; Rode brings in the outriggers and cleans up the cockpit and the fishing gear; puts everything away. We get back to the marina, his buddy shows up and they wash the boat top to bottom. We go to dinner. That's how I fish. Oh yeah...

### **BLOWING OUT THE TURBOS**

There are a lot of opinions on this topic. Basically, many of the power boats on the CUBAR 2015 will have turbocharged diesels. Turbos are driven by the engine exhaust and spin up a fan to force air into the engine at several times atmospheric pressure. This is a way of obtaining a major increase in power. The problem is that cruising at 9-10 knots means the turbos never spin up. This is not good. If you don't address this issue it will very much be a pay now or pay later deal.

All that you need to do is run the turbos up by advancing the throttles to a couple of hundred RPM below high cruise and running the boat that way for 15 minutes on your way back to the marina, or anchorage. Our 3208 Cats should make 2800 RPM; high cruise is 2400 RPM, we run it at 2200 to 2300 to blow out the turbos by slowly advancing the throttles and then backing down the RPM's in a smooth slow manner. You can actually hear a whine as the turbos spool up. You want to back completely off the turbos and just be idling into the marina or anchorage for at least 10 minutes after running the engines up; simple concept you don't hot rod it and then just shut them down.

I don't think anything is gained by "fire walling" the throttles and running the engines wide open. Others will tell you that's the procedure. I think it's hard on the engines. The recommended procedure should be followed at the end of every extended run.

### **JOHN STEINBECK AND THE WESTERN FLYER/ ZEN AND THE ART OF POWERBOATING**

You just have to do this. It's what your powerboat is made for and what you deserve. Do this thing and you will never ever regret it. Take Steinbeck's Log of the Sea of Cortez with you and go to the same places in the same week as he did on board the Western Flyer. It's all still there.

Learn to play Baja Rummy with your significant other. Have an XM satellite radio with a marine 360 degree antenna on the roof so you can listen anything you want. A multitude of stations, including the radio 'oldies', and you can listen to your favorite football team with you home announcers. Nice touch.

CUBAR Odyssey '15 will end in La Paz in November. There will be a great program in La Paz between arrival and a magnificent Thanksgiving dinner. Invite your family down to enjoy warm Mexico and stay for Thanksgiving. Take time to enjoy the Sea. The air and water are still warm and will be good until late December.

By January or February, I would suggest being in Puerto Vallarta for 6-8 weeks, flying home in between time or staying if you can; do the trip as far south as Las Hadas, just above Manzanillo; hit all the bays between Vallarta and Barra on the Mexican Riviera.

Banderas Bay is bounded to the north by Punta Mita, and to the south by Cabo Corrientes. For us, the ideal powerboat place is to stay in Paradise Village, Nuevo Vallarta. Then what the above contemplates is leaving Nuevo Vallarta, going around Cabo Corrientes and heading south to Tenacatita, then to Barra de Navidad staying at the Grand Bay Hotel Marina for at least a week. See the chart guides like Charlie's and Rains; then go about 25 miles further south and anchor off of the Las Hadas Hotel where the movie "10" was filmed. There are several small, beautiful bays between Barra and Las Hadas that would be worth exploring as well.

Then head back to Vallarta and work your way up to Mazatlan via Isla Isabella and thence across to La Paz via Muertos or north of Isla Cerralvo arriving in La Paz in mid-April using the *Sea of Cortez - A Cruiser's Guidebook* by [Shawn Breeding and Heather Bansmer](#)

Plan "B" might be to take a straight long shot on an angle from just above Barra directly to Muertos above Los Cabos. I haven't charted this myself, but I recall that there is a favorable direct route for taking this angle. You miss seeing Vallarta again and you miss Isla Isabella, on the way to Mazatlan which you will also miss, although you might have seen both of these places if you took a route from La Paz to Mazatlan and thence to Isla Isabela on the way down to Puerto Vallarta after the December holidays in the USA.

One way or the other you need to be back in La Paz by mid to late April. The plan "B" straight shot idea is what we plan to do in the winter of 2010; although, we are cheating a bit and expect to hire someone to deliver the boat from Barra to La Paz. We will probably top up the tanks at the small marina at Las Hadas. We've taken on fuel there and it was clean and the same price as everywhere else. Our delivery guy will probably fly into Manzanillo and we'll do the change of command in Barra, a forty dollar cab ride from the airport in Manzanillo. The fuel is cheaper in Las Hadas and easier to take on than in Barra.

Home base in La Paz from mid-April to late May/June, going up into the Sea of Cortez at least as far north as San Juanico. The later you stay the better. It really isn't until May that the Sea turns turquoise and the water really warms up. When it gets too hot in the Sea, head for the Cabos; plan on spending some time in Los Muertos. Find out where the "Train" place is. This is a fabulous development with all of Frank the Trainman's collection running overhead with a white table cloth restaurant below.

Don't get tied to the dock in La Paz. The Sea of Cortez is the boating of which you always dreamed. Fuel up, check your systems and get going. Start with a shake down in the nearby islands. If all is well, go further. Start with the nearby islands to La Paz: Isla Espiritu and Isla Partida.

Generally, the next stop would be Isla San Francisco, then Punta Evaristo, Puerto Los Gatos, Bahia Agua Verde, Isla Danzante, Puerto Escondido (rent a car or take a cab to Loreto), Caleta De San Juanico, Isla Carmen, and Bahia Salinas. Use that new Sea of Cortez chart book. Know that these destinations will make you a real cruiser. Know also that very damn few people have ever done this on their own in their own powerboat. Lots of sail boaters have done it, but you can do it in your powerboat and I will tell you it's the only way to go. By the time sail boaters get this far up into the Sea, they are starting to secretly dream of owning their own powerboat replete with ice, full provisions, and all the things that powerboats have in spades.

You will have friends who will want to visit you in Mexico. You don't want them for more than a week. Even the biggest powerboats are small with company aboard. Friends can visit while you are in Vallarta, take them on that day trip to Las Animas. They can visit you in Barra, flying in and out of Manzanillo----they could fly into Manzanillo, join you in Barra; then you take them on a great cruise down to Las Hadas; then they leave you there and fly home from Manzanillo and you have shown them a great time.

Friends would also be welcome on the shake down to the islands outside of La Paz. They could also fly in and out of Loreto, but I'd be without company up in the Sea as you don't want to be tied to a schedule. You want plenty of time to relax and have lay days waiting for wind or weather to be right for your next island.

Cabo is a good place for friends to join on for a few days. You get the idea. Have clear boundaries. Have set rules. You are extending yourself, your boat, your resources---be firm and tell them to pack lightly.

We (Bill & Sue) met some folks in La Cruz on a wonderful lobster boat. It was their first visit to Mexico. Some months later we met them again in Turtle Bay. They said that they didn't have a good time because they had so many guests, and every day it was "well, what should we do today?" After family, have few guests for short periods.

Here then is the point of everything I have written: Please don't get trapped at a nice dock in a nice marina once you get to the West Coast of Mexico---cruise the "Mexican Riviera" from Puerto Vallarta south, perhaps as far as Zihuatanejo, but at least as far as Barra de Navidad and Las Hadas. Similarly, don't get trapped in La Paz once you get to the Sea of Cortez---don't settle for the nearby islands of Isla Espiritu Santo and Isla Partida; these beautiful islands are just a taste of what you will find further up into the Sea.

Once you get to La Paz, you could make a trip home wait for the good weather; or, start exploring the near islands, going further as suggested. Then toward the end of June be back in Los Cabos via Muertos and Frailes.

Extend your insurance, take the boat back in July. The "Baja Bash" is at its worst in May and June. OK so that means you left San Diego in early November 2009 and I'm suggesting bringing the boat back in July 2010. This is ok. Simply break the trip up by flying home from Vallarta or from Manzanillo while down in Barra. You can leave the boat in perfect safety in Paradise Village, Nuevo Vallarta and at the marina in Barra. In fact, you can have the boat buffed up and super cleaned while you are gone. You can also fly home from La Paz. Yes, the boat will be out of the country for about 7 months, but it's entirely "doable". You can even attend to your business from Mexico via internet and phone with spaced visits back to the USA.

Don't forget to take Steinbeck. Do your best to emulate the wisdom of Elmore Leonard.



Happy Trails!

JWH  
Thanksgiving Weekend 2008  
to March 5, 2009  
San Diego, California  
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