

## S/V ENOΞI Σ Baja Odyssey Background & Lists



Below is some technical information pertinent to the 600 nm round trip voyage I took on my Rhodes 22 from Bahia de Los Angeles to Loreto, both in Baja California on the Sea of Cortez.

**The Vehicles:** We took my 1983, Rhodes 22 sailboat with IMF and a 6hp Yamaha 2 stroke electric start motor. This combo was transported on a 2003 Triad single axel trailer with electric breaks towed by a 1996 Ford F150 4.9 liter V-6 pickup. The total length of the trip from start to finish was about 2200 miles. There were no significant problems with the tow vehicle (which was adequate) or with the boat itself. There were some modifications done to the standard boat and certainly there were a lot of different supplies and unusual amounts of supplies that you wouldn't find on a regular Rhodes 22 that was daysailed or weekendend. The water line certainly reflected the extra stuff in the boat, but the boat handled this without any problems.

**Boat Modifications:** I increased access to more storage by cutting out access doors/hatches on the port settee aft about as far as the step-down and under the flip up seat just to port of where the head is located. I installed a 16 by 18 inch Taylor Made opening hatch reinforcing it with ½ inch Plexiglas. I also installed 2 padeyes on either side of the companionway to clip on safety harnesses for storms or night sailing. I also modified the poptop to accept locking fastpins to secure the poptop in the event of a rollover or heavy weather sailing and installed a fastpin to replace the bolt linking the poptop to the mast. See attached "to do list" to get a better idea of some things I did; many of the items were normal maintenance and upgrades I would have done regardless of this trip.

We did purchase extra containers so we could have the ability to carry 15 gallons of fuel in two 6-gallon and one 3-gallon fuel containers with snap on fittings. We also carried, in addition to the standard 12-gallon water tank up front under the forward berth, another 14 gallons in two separate containers, one under the port cockpit seat, the other in the lazarett. We also carried about 4 more gallons of

drinking water in ½ liter bottles stowed about the boat. This may seem excessive but the area had no natural sources of water that we could use and in 250 miles there were only 5 places to get water. We saved any melt water from the fridge and cooler and used it in the solar shower.

### **Equipment & supplies:**

**Emergency tiller/rudder:** I made a replacement tiller from a hardwood wheelbarrow handle. Using two special clamps I made and pre-drilling holes in both the handle & oar, I was able to securely splice a 6-foot, large bladed aluminum oar to the 4-foot e-tiller to create an 8-foot emergency rudder that went into a locking oar lock mounted just to starboard of tiller on the transom. Basically it was just a large sweep. I tested it out and it was adequate to control the boat when used with properly trimmed sails.



**Assembled center section**



**Parts for the emergency tiller**



**Close up of parts and holes**



**Emergency tiller to Starboard of regular tiller**

**Ground tackle:** I used an oversized 7 pound fortress (aluminum Danforth) anchor and 100 feet of 3/8 inch 3 strand line with 12 feet of 3/8 inch proof chain, a standard 15 pound Danforth with 100 feet of 3/8 inch three strand with 10 feet of 1/2 inch proof chain, and a 11 pound Horizon claw anchor (Bruce type, good for rock bottoms) with 150 feet of 1/2 three strand and 12 feet of 3/8 proof chain. I also had a small 3 pound Danforth with 75' of 1/4 " three strand for the dingy.

**PFD's:** We had 3 automatic inflating vests (SOSpenders) with built in harness and 6-8 foot tethers along with provisions to set up a jack line if necessary. We also had a couple of type III vests.

**Electrical system:** I installed a second heavy-duty battery (should have put it to port and not starboard as I did) and 55W GE solar panel and regulator so I could charge both batteries. I also had a small (50W) inverter that I used to charge camera batteries, rechargeable spotlights, and a cordless drill. It could also charge a laptop had we brought one. We never had electrical problems and used electricity quite liberally.

**VHF Radio:** We used a fixed mount Solara DSC radio with a 3dB 36-inch Shakespeare SS antenna mounted on the top of the mast. (I would have liked to have a small handheld for ship-to-exploring-party communications).

**Depth Sounder:** I installed a little Garmin 120 transom mounted fish finder that was ideal for our needs (though if I could have easily mounted it forward it might have been a bit more reliable when underway or at least more predictive).

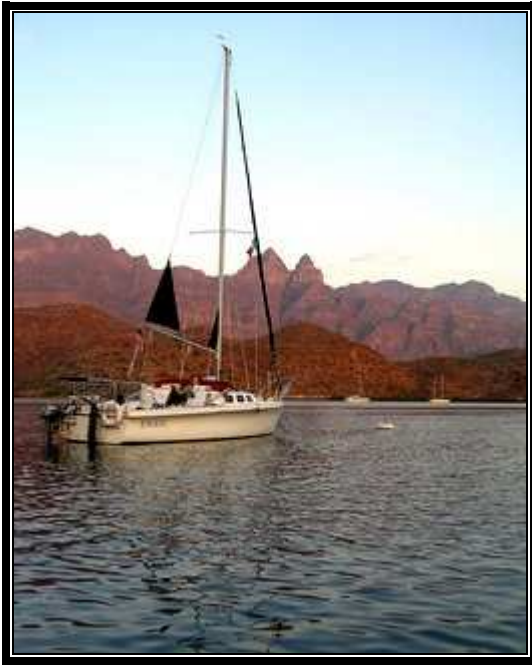
**GPS:** We used a Magnum NAV-40 by Horizon. It had lots of features, only a few of which we used but was simple and in most locations usually could get a good satellite fix quickly. My wife did most of the navigation with it.

**Compass:** This was a Saturn bulkhead mounted compass with a 3 3/4" dual reading lighted card. There was a 12-degree variation to account for in the area of Baja. I did not have time to properly swing and adjust the compass but did have notes on how much deviation in each of the cardinal points there was. Since almost all the sailing was line of sight this was not critical. I also had a Davis hand-bearing compass that I really used more than the main compass for triangulation and fixes on coastal points since the charts were sometimes not accurate regarding long & lat.

**Binoculars:** We used an inexpensive pair of 7X50 binoculars with zoom capabilities to 12 X 50, (that was nice on land).

**Facilities:** Since space was at such a premium in that remote and arid place we dispensed with the porta-potty and used a bucket that lived under the seat when it wasn't under ours.

**Riding Sail:** This was a very useful piece of equipment. It was a small triangular sail with a 52 inch foot and appropriate leech and luff that was secured at three points; one on the outhaul of the boom, the head was on a loop on the topping lift and the foot was attached to one of the cleats mid-boom. We did not swing and “hunt” as a Rhodes sometimes does in a windy anchorage. This small sail kept the boat very steady at anchor and when required, could be made to point the boat into the swells using a preventer.



**Riding sail in action.**



**Bimini and solar panel in “action”.**

**Bimini:** An absolute must in this kind of sailing environment! The sun is so intense it actually *hurts* when it shines directly on your skin. To be able to motor & sail on most points in the shade really made the trip enjoyable. When anchored we often used side panels. I won’t be leaving home without my Bimini!

**Fishing Gear:** This was used effectively to repel fish from near the boat. We had two trolling rods, lots of strange lures along with a gaff and dip net.

**Abandon Ship Bag:** Due to the remote location we decided to carry one of these. For details see the attached list. Water in separate containers was also located for quick access and retrieval in several locations.

**First Aid Kit:** Again, since we were going to be in some pretty remote places, I wanted an expanded kit but cost was a limiting factor. With some advice from some medical friends I put one together for not too much money. (See the attached list for our first aid kit).



**Our Indian Stove, and a Galley with  
with a magnificent view of a moonrise.**



**The covered propane tank is just  
to the right of Alice.**

**Stove:** Since it was so hot we did all of our cooking in the cockpit on a special board/table made of Starboard®. We used a two-burner stainless steel stove (made in India, that cost around \$60) and a small 11-pound (I think) propane tank mounted on a locking plate by the starboard stern rail just forward of the aft cleat. We would connect the stove when we used it, then disconnect and put everything away, leaving the tank covered and mounted near the rail. Set up & breakdown time was only a minute or two. The stove and board lived in the lazarett. We used less than ½ a tank for 4 weeks.

**Food etc:** Since there were not many places where we could eat out (6 days out of 33) and because my fishing record speaks for itself, we felt we had to carry almost a month's worth of food and consumables. These were stored in several places about the boat based on their weight and bulk. As it turned out there were two places where we could easily buy supplies at Mexican supermarkets. In retrospect, probably 2 weeks of selected supplies would have sufficed. We carried a lot of canned goods, packaged meals, pasta & rice, canned & dried meats, and juices. Laughing Cow cheese didn't need refrigeration and with lots of crackers made a number of tasty lunches. We were able to keep water and beverages cold with the use of a large square cooler with all our spare clothes and pillows stuffed around it. The cooler occupied the space where the absent porta-potty would go. When possible, we used 4 blocks of ice; other times 6 bags of cubes were used. This would keep cold for about 3-4 days before the ice melted. We would periodically transfer ice to the upright "fridge" about once a day or so.



**BBQ & Table:** Didn't use the BBQ as much as we hoped since we are lousy fishermen and only caught 2 yellow fin tuna the whole time. The BBQ used a separate small disposable tank. In order to avoid carrying extra tanks I bought an adapter that allowed me to refill the disposable tank from the 11-pound tank. However, a little utility table I made from Starboard proved very versatile and was used often. We used it in a number of ways: as a BBQ prep table on the starboard side, underneath the stove, as an "end table" for the cockpit, and as a fish cleaning table on the port side. It clipped onto the leading edge of stern rail and the aft edge of the winch with a removable (1 wing nut) support leg that rested on the genoa track and could be removed for storage or placed in reciprocal location for the port side.



**Mmmm Yellow fin Tuna for dinner.**



**Small divots hold stove legs securely.**



**Note the table leg in its stowed position location in the lower right of the table**



**Underside of table, note leg for starboard setup .**

**Sleeping arrangements:** We generally always slept in the cockpit because the temperature was perfect. We usually had a nice breeze and didn't need much as far as clothes went. We had those lightweight fleece sleeping bags, which we occasionally used. One of the nicest features of the cockpit was the ability to convert it into a huge bed with filler cushions. There was one potential problem; we were storing a lot of fuel (Two 6-gallon & one 3-gallon containers) under the cockpit benches. When sealed with all the cushions closed, an environment where fumes could build up was created. In addition, there were sources of ignition from the battery under the starboard seat and the 2<sup>nd</sup> battery in the lazarett, not mention the various wires also in this enclosed area. We finally settled on a couple of compromises. One solution was to put in only 2 of the 3 filler cushions leaving the aft area open and turning off both batteries using the master switch. The second solution was to tie the fuel containers in the dingy for the evening. When we carry only the small container (which is what we do when not on lengthy trips) we just bungee it between the transom and the outboard in the down position with the handle of the motor braced against the transom. In any case, I turn off the batteries from the master switch located in the lazarett.



**Filler cushions installed looking Forward.**



**Filler cushions installed looking aft, Note location of fuel container.**

**Tools & spare parts:** Could have gone forever but finally limited it to a good set of mechanics and wood tools, 12v cordless drill & 12V charger, 2 divided boxes for all the nuts, bolts, screws and parts etc. I used and one plastic shoe box for electrical, voltmeters spare wire etc. (maybe 20 pounds total for tools and spare parts.

**Dingy:** We used a veteran of the 1994 Bahamas trip, an elderly, well patched, slat floored, 2-3 person rowing inflatable. I either towed it when we went short distances or lashed it transversely on the foredeck in light to moderate winds. A few times in anticipation of heavy winds or night sailing, I deflated it and rolled it up which made a compact bundle that fit between the forward lower shrouds.



Trusty old dingy with portable garbage disposer.



Great for exploring if there is not much wind, wish I had a mini-motor.

Attached are several “Lists” I used, one is the “to do list” this took about 6 weeks to get through; even then I didn’t do all of them. It is probably unique to my boat but I’m sure there may be some overlap for someone planning a similar trip. Also included are the “Abandon Ship Bag” and “First Aid” lists.



**TO DO LIST FOR BAJA TRIP**  
(These are in no particular order)

DESCRIPTION	TIME	COST	DONE
Make up 1 <sup>st</sup> aid kit		30	X
Modify and install hatch	18hr	50	X
Make riding sail	6hr	60	X
Replace cleats	8hr	15	X
Install & Test radio and antenna	6hr	20	X
Fix masthead light	1hr	na	X
Fix stern Light	1hr	na	
Buy & install another battery	4hr	65	X
Install lock on lazarett	1hr	8	X
Install fast pins for sliding hatch	2hr	40	X
Buy more fuel & water containers		40	X
Get (from Greta?) Solar panel & regulator/diode		275	X
Make bracket for and install solar panel	4hr	20	X
Get rock anchor & line		150	X
Buy 3million CP re-chargeable spotlight		15	X
Make up menu and food lists	4hr		X
Solve cooking problem (convert to Propane?)	4hr	50	X
Get lots of butane as backup		na	na
Buy BBQ grill holder		50	X
Compound and polish boat	8hr	30	
Install tie down cleats on trailer	2hr	na	X
Strengthen rudder head & make spare tiller	6hr	80	X
Make new sunshade for cockpit & for foredeck	8hr	75	X
Buy & install compass	2hr	90	X
Install a new jib sail	1hr	na	X
Service IMF system, replace furling line	6hr	20	X
Buy & install bigger chocks W/chafe guards	4hr	20	X
Make bookcase	3hr	15	X
Make bulkhead storage behind head	2hr	na	X
Buy & install depth sounder	4hr	120	X
Join Vagabundos (Baja travel club)		35	X
Get Mexican insurance for the truck (via VAG.)		216	X
Get fishing licenses for Alice, Me, Nick “		114	X
Get Mexican Boat permit “		33	X
Get FMT card for Me (1/6) Alice (1/7) & Nick (14/7) “		5	X
Fix access for port settee	1hr	na	X
Put on new registration stickers	na	na	X
Change name on boat to ENOSIS need Rum and or Tequila to do so, actually Ouzo too.	2hr	30	X
Install Bimini	4hr	5	X
Inspect, test & service motor	4hr	20	

**TO DO LIST FOR BAJA TRIP (cont'd)**  
**(These are in no particular order)**

DESCRIPTIONS	TIME	CO\$T	DONE
Water proof electrical panel and install buss bar	3hr	5	X
Fix valuables hiding areas	2hr	5	X
Make storage are in water Tank compartment	2hr	na	X
Clean & oil all teak	3hr	10	X
Make no-see-ums screens for all openings	3hr	30	
Oil Tiller	2hr	na	X
Buy Closed foam and make filler cushions	6hr	160	X
Fix fill in cushions ledges & boards	4hr	20	X
Replace screws in companion way hatch	1hr	05	X
Install safety clip on u-bolts by companion way hatch	2hr	20	X
Inspect and recharge all SOSpenders	2hr	20	X
Make up abandon ship bag with supplies for 3 for 3 days	2hr	30	X
Buy hand bearing compass	2hr	45	X
Mount throw ring with bag for poly line	1hr	na	X
Inspect, pump up, and fix dingy	2hr	75	X
Inspect and buy all necessary Fishing gear		65	X
Buy a spear gun		20	
Install bow pulpit anchor hanger	1hr	na	X
Install Footpads on boarding ladder & reinforce back	3hr	na	
Replace/repair plastic goose neck fitting	4hr	na	X
Fix outhaul pulley	1hr	15	X
Buy 2 spare spark plugs		10	X
Make & install under seat braces	3hr	10	
Install slider plastic and plug & seal teak sliders	2hr	na	
Trim out interior of new hatch	2hr	10	X
Make & install Teak guards around new hatch	4hr	20	X
Install auto pilot	3hr	10	
Trailer: tire psi, lug nuts, lights, bearing buddies, breaks	2hr	20	X
Truck: oil change, New Tires, check all belts & hoses	2hr	320	X
Install bracket in truck for boat's CD player	2hr	15	X
Make cover for speaker & compass in bulkheads	1hr	na	
Design and make stove & BBQ table	4hr	na	X

## FIRST AID & HEALTH

<b>FIRST AID KIT:</b>	<b>Unit</b>	<b>Notes</b>
<b>Adhesive tape</b>	1 roll	5 yards
Ace Bandage	1 ea	2 inch, 5 yard
Band-Aids	35 ea	Large & Medium
Cold Pack	1 pk	
CPR Face shield	1 pk	
Gauze Roll, Sterile	1 each	2" & 4" by 2 feet
Gauze Pad, sterile	1 ea	5" X 9"
Gauze Pad, sterile	1 ea	4" X 4"
Gauze Pads, sterile	20 ea	2" X 2"
Gloves, Rubber	1 pair	
Q-tips	15 ea	
Scissors	1 pr	
Sling, Triangular	1 ea	
<b>MEDICATIONS:</b>		
Acetaminophen	50 tablet	500 mg
Alcohol wipes	12 pk	
Antibiotic cream	3 pk	
Antiseptic wipes	15 pk	
Aura Dry ear water remover	1 bottle	1 oz
Aspirin	60 tablet	81 mg
Burn cream	4 pk	
Caffeine tablets	90 tablet	200 mg
Dramine	20 tablet	Non-drowsy
Eye Wash	1 bottle	½ oz
Hydro Cortisone cream	1 tube	1 oz
Ibuprofen	50 tablet	200 mg
Iodine wipes	3 pk	
Itch Eraser anti-itch pen	1 tube	0.5 oz
Oral pain relief	1 tube	0.4 oz
Sting Relief wipes	3 pk	
Insect Repellent, Cutters	1 can	6 oz spray
Insect Repellent, Skintastic	2 bottles	6 oz pump
Sunscreen SPF 30 & 50	4 tubes	
Tooth Paste	1 tube	
Tooth Brushes	2 ea	
Vitamins, daily	90 tablets	Multivitamins & iron

## ABANDON SHIP BAG

\*@, #, \$, %, ^, Indicates items are packaged together in the same small baggie in the dry bag

DESCRIPTION	QUANTITY	LOCATION
<b>FOOD</b> Energy Bars 220 cal each	24	Purple Dry Bag
11 oz Can Mandarin Oranges	3	Abandon Ship Bag
<b>SIGNALING</b> Distress Flag	1	Grey box in Dry Bag
Sky Blazers & Smoke Flare	3	Grey box in Dry Bag
Signal Mirror	1	Dry Bag*
Whistles	2	Dry Bag*
Flashlight, small waterproof	2	Dry Bag*
Spare AA batteries	2	Dry Bag*
<b>FISHING:</b> Pack of bait	1	Dry Bag@
Needles, scalpel & blades		Dry Bag@
Hooks, small	5	Dry Bag@
10 ft 4 lb test line & split shot		Dry Bag@
Hooks, large med & small	5 each	Dry Bag@
Spool of 100# test 30 ft	2	Dry Bag@
½ oz lead weights	6	Dry Bag@
<b>MIC.</b> Light plastic poncho	1	Dry Bag#
Mg Firestarter, waterproof Matches	1	Dry Bag#
Space Blankets	2	Dry Bag#
Small Candles	2	Dry Bag#
Wire Saw	1	Dry Bag#
Can Openers	2	Dry Bag#
Caps, baseball	2	Dry Bag
Cutting Board, small	1	Dry Bag
Line, Nylon 3/16 braided 30'	1	Dry Bag
Reading & Sunglasses (Chris)	1 each	Dry Bag\$
Reading Glasses (Alice)	1	Dry Bag\$
Multitool (leatherman) & Knife	1	Dry Bag\$
Old Compass from Lightning 1969	1	Dry Bag%
Bic Lighter	1	Dry Bag%
OFF bug repellent small spray can	1	Dry Bag%
4 oz SPF 30 Sun Screen	2	Dry Bag%
<b>FIRST AID Note: Complete 1<sup>st</sup> Aid Kit adjacent to above bag</b>	<b>See 1<sup>st</sup> aid list</b>	<b>Separate box from Abandon Ship Bag</b>
4 X 4 gauze & 1 roll tape	10 gauze	Dry Bag^
Band-Aids & Dramine pills	5 each	Dry Bag^

Water is stowed separately and will be 1<sup>st</sup> priority as much as can be taken, will be.