Offshore Provisioning for Fully Crewed Race Boats

The primary goal when provisioning a fully crewed offshore race boat is to ensure that your crew, once underway, will receive maximum calories and adequate hydration to enable peak sailing performance for a minimum effort.

The keys to achieving that goal are all in the preparation. The food and beverage program must be well planned, highly organized, and with no detail left to chance or not thought out in advance. This includes keeping in mind the difficulties of simple tasks while a yacht is underway hooning towards the tropics at max speed, when the crew might be feeling under the weather, during inclement weather and / or when crew is injured and / or sleep deprived.

Each item must be clearly labeled, have a designated spot and a pre-departure plan in place to keep it in that spot. Use of strategically placed bungee, G-10 hard points, and / or industrial Velcro can be key in maintaining order when things below are tossed about by a rough sea state.

In addition, hygiene and safety are extremely important. Boiling water and heating food involves the very serious risk of burns which must be carefully avoided. In addition, because it is hard to maintain cleanliness without running hot water or a sink it is imperative that the crew maintain a disciplined cleaning regime in addition to respecting the numbered system for identifying which cups and plates belong to which sailor.

Because the prep, cooking and clean up must be handled with max efficiency it is imperative that someone who is actually participating in the race (ie. a crew member) participate in and be familiar with the provisioning of the yacht. A yacht provisioned by a third party will be less efficient simply because the crew won't know the plan, where things or stored, or what resources are available.

Evaluate what Cooking Facilities Available

The first step in provisioning a fully crewed offshore boat is making an investigation / decision of what cooking facilities will be available.

It is unlikely on a full racing program that one would have an oven so I have not discussed oven alternatives in this article. In addition for purposes of this article I assume no microwave, no refrigeration or freezer and no water maker. If you do in fact have any of those available the storage plan can be adjusted logically and accordingly to incorporate those facilities.

Generally a race boat will have one or two gimbaled burners available for food prep which leaves to primary forms of alimentation – rehydrating freeze dried food or re-heating frozen Boil in A Bag meals.

Basic equipment to take with:

- Lighter
- Pot for Boiling water (make sure it fits your burner and that you have tried it out)
- Pump Pot for Storing Hot Water for Night Shift Drinks
- Fuel for Stove / Burner
- GFS Fair Share Mugs (Numbered)
- Water Bottles (Numbered)
- Coffee Mugs (Numbered)
- Sporks
- Dish Soap/ Sponge
- Paper Towels / Bleach Spray
- Cooler / Ladle for Making Freeze Dried
- Garbage Bags
- X-tras –

- Hot Sauce
- Ramen noodle Soup
- Group Hygiene
 - Toilet Paper
 - Ibuprofen
 - Sunscreen
 - Toothpaste
 - Ear Plugs
 - Baby Wipes / Powder
 - Brown Bags
 - Note things like contacts / contact lens solution / glasses are all responsibility of individual)

Freeze Dried v. Boil a Bag

The best preparation method for freeze dried food offshore is in a clean cooler. To the cooler add Freeze Dried, the required amount of water (we usually add at least an additional 10% above what is called for) and let sit for *at least* the recommended amount of time plus 50%. GFS Fair share mugs double as eating bowls and measuring cups. If you eat freeze dried that has not been re-hydrated with enough water or allowed to sit for sufficient time, it will actually absorb water from the body following consumption which can lead to constipation and make people sick. Err on the side of extra water and extra time. Prepping in a cooler means it will stay hot for a long time and can be made in big batches. The cooler MUST be thoroughly cleaned out after each meal using seawater, dish soap, etc.

Boil a bags are prepped ahead of time and must be clearly labeled. When prepping boil a bags, use a commercial freezer to prep frozen food if possible – they will freeze to a lower temperature which is key - you want the food at the start as deeply frozen as possible. I have always used Tupperware "molds" to make the frozen food into block shapes which pack easier and more efficiently in the Styrofoam coolers – Omaha steak coolers and / or laboratory grade coolers are what you want – not the cheap flimsy Styrofoam cooler you get at rite-aid. The morning of the race you must purchase dry ice¹ which is then packed as tightly as possible with the frozen boil a bags of food – using newspapers to fill any gaps and sealing the coolers carefully and completely with duct tape. They must be stored somewhere they will not be crushed as dry ice dissipates when it contacts oxygen which will happen if the coolers are crushed. Depending on the size of the crew you should be able to get 2-3 days of boil a bag dinners per styofoam cooler. Pack in reverse order ie. with day 3 on bottom and day 2 on top. (Day one does not need to be stored in a cooler – simply take it aboard to thaw and heat and eat that night).

If you choose to go with a Boil A Bag we recommend thawing the meals in a bucket or elsewhere on board in advance of reheating to cut down on the time they will have to be boiled which will save propane and the amount of time there is boiling water down below. A pressure cooker can be used to shorten the re-heating time. Depending on sea conditions having a large pot of boiling water down below in which to re-heat boil a bags can be dangerous so extreme caution must be taken. I recommend prepping Boil a Bags in individual serving sizes so that each person simply takes their bag in their bowl and there is less time wasted in serving or questions about portion size.

Realistically without refrigeration it is hard to take more than 5-6 days of boil a bag at which time you must switch to freeze dried. The risk of having something go wrong and the food thawing and spoiling is simply too great. If you do have a built in refrigerator and / or freezer this risk can be greatly reduced. Then I recommend packing the early days in the fridge / freezer and leaving the Styrofoam coolers sealed and untouched as long as possible. Once you consume the boil a bags initially stored in the fridge / freezer transfer the complete contents of the Styrofoam cooler into the fridge / freezer and

¹Research where you are going to get this ahead of time and call ahead to make sure they have a sufficient quantity in stock. You don't want to be searching for it the day of. Many Safeways carry it (though not all!) as do some liquor stores.

repeat the process. MAKE SURE EVERY BAG IS CLEARLY LABELED WITH A NUMBER INDICATING WHAT DAY / MEAL IT IS. I have often taken ultra light mesh bags and put all the servings from one meal in each to keep them together which adds negligible weight.

SNACKS

Snacks are key to happy sailors. It is important to have a good variety and take into account that sometimes, due to rough weather or seas, snacking may be all you can do as meals may be postponed until sailors are feeling better or conditions improve. Key features for snacking therefore include minimal weight, no prep time, easy to eat, high calorie, good taste, minimal packaging.

For each day I pack a snack bag which is clearly labeled and goes into the cockpit in the morning. Often times snacks accumulate as they won't all be eaten so try to plan accordingly. Any uneaten snacks simply get rolled over into the next days snack bag. Also keep in mind, the first few days are cold (chocolate works) and the last few days are hot (chocolate becomes a mess) and try to plan your snacks accordingly.

Popular snacks on race boats include:

- Macadamian Nuts easy to digest and high calories good for first two days when eating can be hard
- Orgain Calorie Protein Drink good for first two days when eating can be hard
- Saltines – good for first two days when eating can be hard also make for a funny game (ask Trevor Baylis!)
- Ginger Candy has sugar and can help calm queasy stomachs.
- Chocolate covered Espresso Beans Night watches
- Fruit Leather
- Jerky
- Mini Candy Bars (Twix/Snickers / etc.)
- M&M's
- Cookies
- Cheese and Peanut Butter Crackers
- Ramen
- Salty Mixed Nuts
- Single Serve Mac and Cheese
- Gummy Bears
- Trader Joes Peanut Butter filled pretzels
- Etc.

Hydration and Drink Choices

Hydration is probably one of the least discussed most important weapons of a racing yacht. A crew that is well hydrated will have more energy, sleep better, feel better and perform better. Each crew member must have a designated water bottle and a designated coffee mug with their crew number clearly labeled on each. For health and hygiene these should not be shared. Each is the responsibility of the crew member it belongs to.

Water is required for three purposes on a race boat – drinking, rehydrating freeze dried and emergencies. Emergency water must be clearly labeled, kept separate and TAPED shut – read your racing rules regarding how much you need and other details regarding emergency water which I will not discuss / focus on here.

Carefully calculate how much water you need to take with you for drinking as well as rehydrating freeze dried – some, though not many boats may have a water maker on board. Plan accordingly.

Water can be brought and stored either in tanks or in gallon or larger jugs. If filling tanks on a boat make sure they are clean and clear in advance and be sure to use a white potable water drinking hose – not a regular green dock hose – to fill you tanks. Trust me, it makes a HUGE difference in the taste of the water.

Other possible beverages on a race boat -

- Powdered Coffee / Bag Tea (does anyone want powdered creamer/milk
- o Powdered Cocoa Mix Transpac Mocha!
- Powdered Gatorade can also take other powered drink but I recc a sports drink for sodium / sugar intake both are key

While some boats take other drinks I would discourage taking alcohol, soda, or energy drinks as they do not contribute beneficial calories or increase performance. In fact all can have the opposite effect and contribute to dehydration and poor performance. On a serious race boat this should be a non-issue. Simply put – wait till you get to Hawaii.

Planning and Organization

Well in advance of the race ask your crew for any special dietary needs / allergy considerations. If one person is allergic to peanuts – no peanuts on the boat! Using the information discussed above begin to draft a "provisioning plan" for your race. (See EXAMPLE on Page 7 below) Once the Provision plan is finalized it will be laminated and posted in the Galley along with the watch schedule. The provision plan will identify the "what" of what you are going to eat.

In the final week leading up to the race, working in conjunction with your navigator, tactician and router you will make a final determination on estimated number of race days based on forecast. To that number I always take two extra days of freeze dried provisions and some bonus emergency food. To determine how much you are taking you simply multiply that number by your known number of crew and provision accordingly. This will determine the "how much" you are going to take.

The Packing Process

In a large clean dry place - ie. your living room gather all of the provisions that have been purchased along with lots of gallon Ziploc bags and black sharpies. Plan on packing and re-packing everything at least twice to make sure it all fits as you have planned it. If it does not you either need to adjust the size of your day bags or shift your written plan.

While there are many ways to skin a cat this is my method:

For day bags I use waterproof Dry sacks in a high visibility color (ie. yellow so when you write on them with a sharpie you can easily read it). There are many other more expensive methods and other cheaper ones that are not discussed in this article. Key is to keep it light with packaging weight at a minimum. Once I have determined what days will go in which bags (depends on size and volume) I will clearly mark the day on the outside. They are usually hung below on hard points - Starboard aft is popular - and brought forward only as needed.

Tips:

- o Pack the bags in reverse order (ie. from bottom up) as you will want to avoid digging for things.
- o Incorporate Hygiene Products as you anticipate they will be needed
 - Include Trash Bags / Sponges / Soap / Paper towels, TP, etc. see example below.
- o Remove ALL unnecessary Packaging take NO PAPER as it absorbs moisture from the air and adds weight.

- le. if you are sending mini candy bars when you buy the bag at Costco take them out of the large bag they come in and pour the individually wrapped bars into a Ziploc – that way, it has a built in plan for leftover storage
- Note when underway all trash should be clean and dry before it goes in garbage bags as they fill
 they are tied off and usually stored in bow peak (less weight forward);

PACKING EXAMPLE² Based on Sample Provision Chart which is on Page 7 below:

Day 1

Packed on boat and available as per Provision Plan. Also packed and available are: olive oil / hot sauce / Ramen/ Powdered Drinks. Start also with a fresh trash bag / paper towels / dish soap (small size is PLENTY!) & Sponge / bleach spray. In head area you should also have TP (kept in Ziploc); Ibuprofen; Sunscreen; one tube toothpaste; jar of earplugs; Baby Wipes; Brown Paper Bags / Bleach Spray.

DAY BAG FOR DAY 2/3:

- Bottom: DAY 3 LUNCH;
- Salsa for Day 3 Clearly marked with Sharpie
- SNACK BAG DAY 3 Clearly marked with Sharpie
- NEW PAPER TOWEL;
- Tortillas and mini packets of mayo/mustard all together in a Ziploc clearly labeled DAY 2 LUNCH;
- Top: Snack Bag Day 2: all snacks with excess packaging removed in a Ziploc clearly labeled DAY 2 SNACKS

Day Bay for Day 4/5:

- Bottom: Tuna Packs and condiments with Flat Bread or Crackers taped together or in Ziploc and clearly labeled DAY
 5 LUNCH:
- Freeze Dried Granola Note: Always take out of serving packets and combine in one Ziploc and clearly label Day 5
 BREAKFAST;
- DAY 5 SNACK BAG;
- NEW TRASH BAG:
- NEW PAPER TOWEL;
- NEW TP
- Peanut Butter and Jelly and Flat Bread (whatever you decide) Clearly labeled Day 4 Lunch;
- Instant Oatmeal combine in one big Ziploc labeled BREAKFAST DAY 4;
- TOP: DAY 4 SNACK BAG & NEW BABY WIPES;

Day Bag for Day 6/7:

- Bottom: Freeze Dried Dinner Day 7 in Clearly marked Ziploc
- Freeze Dried Lunch Day 7 in Clearly marked Ziploc
- Freeze Dried Breakfast Day 7 in clearly marked Ziploc
- Day 7 SNACK BAG
- New TP

² This is to be used as an example not an exact how to – every plan must be adjusted for the specific vessel, crew, weather, conditions, experience, etc.!!!!!

- New Paper Towel
- Freeze Dried Dinner Day 6 in Clearly marked Ziploc
- Freeze Dried Lunch Day 6 in Clearly marked Ziploc
- Breakfast Oatmeal for Day 6 in clearly marked Ziploc
- Day 6 Snack Bag
- Top: NEW SPONGE / NEW TRASH BAG / NEW PAPER TOWEL

Day Bag for Day 8/9:

- Day 9 Freeze Dried Dinner
- Day 9 Freeze Dried Lunch
- Day 9 Oatmeal Breakfast
- Trash Bag
- Day 8 Freeze Dried Dinner
- Day 8 Freeze Dried Lunch
- Day 8 freeze Dried Breakfast

Emergency Food -

- Some MREs in Ditch Bag
- Extra Freeze Dried as necessary in a bag labeled as such

COOLER #1:

- DRY ICE ON BOTTOM
- Day 3 Dinner
- Day 3 Breakfast
- Dry Ice
- Day 3 Dinner
- Day 2 Breakfast
- NEWSPAPER IN ANY GAPS
- DUCT TAPE SHUT!!!

COOLER #2:

- DRY ICE ON BOTTOM
- Day 5 Dinner
- DRY ICE
- Day 4 Dinner
- Newspaper in any gaps
- DUCT TAPE SHUT!

SAMPLE PROVISIONING PLAN

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Breakfast	On shore	Boil a Bag	Boil a Bag	Instant	Freeze Dried	Instant	Freeze
		Breakfast	Omelets w/	Oatmeal w/	Granola	Oatmeal w/	Dried
		Burrito – rice	Tortillas and	Nuts & Fruit		Nuts & Fruit	Granola
		beans / eggs/	Salsa				
		cheese	(COOLER #1)				
		(COOLER #1)					
Lunch	On Shore	Sandwiches	Sandwiches	Sandwiches	Sandwiches	Freeze	Freeze
		_	_	_	_	Dried	Dried
		Turkey /	Salami /	PB&J	Tuna packs		
		Cheese	Cheese/		Flat Bread or		
		(COOLER #1)	Triscuits		Crackers		
		Mustard or					
		Mayo					
Dinner	Burritos -	Boil bag Beef	Boil Bag	Boil a Bag	Boil a Bag	Freeze	Freeze
	Fresh	Stew	Green Curry	Beef	Chicken and	Dried	Dried
		(COOLER #1)	Chicken	Stroganoff	Rice		
			(COOLER #1)	(COOLER #2)	(COOLER #2)		
Snack Bag	Macadamian	Apples /	Beef Jerky /	Oranges /	Granola Bars	Fruit Roll	Candy
	Nuts /	Fruit Roll Ups	Oranges /	Nuts / Dried	/ Nuts /	Ups /	/Granola
	Chocolate /	/	Candy /	Fruit / Candy	Chocolate /	Peanut	Bars / Beef
	Cookies /	Nuts /	Chocolate	/ Cheese and	Cookies /	Butter	Jerky / Nuts
	Saltines /	chocolate /	Covered	Peanut		Pretzels /	
	Ginger Candy	Saltines /	Espresso	Butter		Beef Jerky	
		Ginger Candy	Beans	Crackers			
Available	- Coffee	- Coffee	- Coffee	- Coffee	- Coffee	- Coffee	- Coffee
to Drink	-Powdered	-Powdered	-Powdered	-Powdered	-Powdered	-Powdered	-Powdered
	Gatorade	Gatorade	Gatorade	Gatorade	Gatorade	Gatorade	Gatorade
	-Tea	-Tea	-Tea				
	-Orgain	-Orgain					
	Day 8	Day 9					
Breakfast	F.D	Oatmeal		-			
Lunch	F.D	F.D.		-			
Dinner	F.D	F.D.		-			
Snack	Fruit Roll Ups	Candy					
Bag	/	/Granola					
	Nuts	Bars / Beef					
D : 1()	0 "	Jerky / Nuts		4			
Drink(s)	- Coffee	- Coffee					
	-Powdered	-Powdered					
	Gatorade	Gatorade					
]			

Also always available:

- Ramen
- Coffee/ Cocoa
- Gatorade