

SV Lazy Bones

Improvements/Additions to Lazy Bones

What we did to improve upon our Irwin 54. The list below focuses on improvements and does not include all aspects of Lazy Bones, only the improvements or changes.

Custom deck lockers:

We began by having custom-built deck lockers added to the aft deck. The lockers were designed to be used both as storage and as seating. The starboard locker holds two 5 gallon gas jerry cans for the dinghy, one 5 gallon diesel spare jerry can, one 20 lb propane tank for the BBQ and as a spare, one scuba tank, one BBQ, one fish fillet table, and additional room for miscellaneous equipment.

The port locker holds two 5 gallon gas jerry cans for the dinghy, one scuba tank, a 12V hookah and additional space for miscellaneous items. This locker is also wired for 220V where we had a scuba compressor, which is no longer there. We use the hookah instead.

We replaced the lifelines in the stern area with stainless steel rails for added support and stability.

Dinghy davits:

We added 4" diameter stainless steel davits and triple blocks that support the dinghy and are also wired with GPS, Iridium, and VHF/AIS backup antennas.

Lazarette Locker:

The large stern lazarette locker was organized and divided to support the stern anchor chain and rode with access through a deck anchor access port, (the stern anchor itself is mounted on the rail). We also added a fresh water stern hot and cold shower and a cold water deck foot rinse. Also contained in the locker is a 110V fresh water power washer. The stern locker also contains a massive amount of spare lines, dinghy chocks for storing the dinghy on the bow if desired, a hoisting system for the dinghy for the forward deck, and dinghy wheels.

Custom hardtop and solar panels:

We had a custom hardtop made when we were in New Zealand in 2008. This hardtop

was made from a custom mold and designed specifically to the specs of Lazy Bones. The hardtop interior can support a very tall person. The hardtop sides curve and have a slot to store the Strataglass when rolled up so line of sight is not obstructed. Sun shades also roll up into the same slot. The hardtop has six solar panels on its top producing an average of 40 amps/hour on a sunny day. The hardtop interior is wired for 12V with lights throughout, a VHF speaker, bilge pump indicator lights, and a wifi camera.

Strataglass windows:

The Strataglass windows were custom-designed to provide maximum protection and visibility but also allow for easy opening to let air in. There are three separate sections on each side to maximize usage and ease of use and a major section on the stern side of the cockpit. The forward window also unzips from the bottom up to allow control of how much wind to let in. The hardtop extends out to allow the forward window to remain open in most conditions.

Cockpit:

The cockpit is designed so the entire boat can be operated from the cockpit without having to go on deck.

We added removable King Starboard panels to the entry ways to allow for closing off the entry way without impacting running rigging that enters the cockpit and keeping the cockpit dry from any possible side wave entry.

We replaced the original wooden cockpit table with a very functional fiberglass table that expands, is easy to manage, and also contains storage and cup holders.

We modified the port side insulated cooler and added refrigeration so we have a place with easy access for cold drinks and food, with a place to hold ice. This helps us avoid the need to use the galley refrigerator throughout the day.

We installed stainless steel handholds throughout the cockpit and on the ceiling to provide extra safety in any weather conditions.

Furling boom and mast:

We installed a full-batten Schaefer furling boom. In order to make sure the mast would support such a boom, we had a sleeve insert made for the mast going from the base of the mast to just above where the boom attaches to the mast, in essence doubling the thickness for that bottom section of the mast.

We doubled the size of the furling boom mast connectors and added a Garhauer spring vang to allow for any potential pressure from excess movement. The main can be raised and lowered from the cockpit to any height and easily managed at up to 140 degrees or more off the wind.

Spare lines:

On the deck in front of the cockpit we added two 200 ft reels of $\frac{3}{4}$ " line. The port side has $\frac{3}{4}$ " Dacron which was intended for the sea anchor if ever needed or as spare line. The starboard side has 200 feet of polypropylene which is used to run lines from the stern to land, trees or rocks.

Cutter stay deck to mast:

We modified the cutter stay to go from the deck to the top of the mast and added a Profurl furling system. This allows us to avoid running backs. This also enabled us to put on a similar size genoa on the cutter stay to that of the genoa on the head stay. This gives us the ability to sail downwind with two full headsails having a slot in the middle and more flexibility to spill wind when necessary, and to sail higher and lower without the concerns when using a spinnaker. We also have a spinnaker in a sock which we rarely use since implementing the double headsail downwind technique.

Windlass:

We added a Lighthouse 1500 dual gypsy windlass. We modified the chain locker which contains 400' of $\frac{3}{8}$ G4 chain and 150' of rode on the port side with an oversized 55KG (121lb) Rocna as the primary anchor, and a spare CQR 68lb anchor with 50' of chain and 150' of rode on the starboard side. We doubled the thickness of the bow roller and added a salt water wash down hose for the chain. Our Rocna sets quickly and never drags, and we sleep well at night because of this.

We also added a special anchor bridal that uses a very large block and snubber connected to both cleats along with a backup snubber used on deck which gives real

peace of mind when sleeping at night. This bridle divides the load by 50% to each side.

Chain plates:

During our refit, we decided to move all the chain plates outboard so they could easily be examined and maintained. We built new chain plates, and reconnected new grounding wire along with the new standing rigging.

Re-stepped mast:

We re-stepped the mast, re-did all the wire, installed new antennas (VHF and AIS), new LED blue and white dimmable spreader lights, cleaned and painted the mast step, and resealed the mast partner with a Spartite system.

Helm station:

We added a custom captain's chair to make hand steering easier. We added stainless steel bars around the helm station to support additional electronics and to provide hand-holds in rough weather. The helm station consists of Raymarine ES127 chart plotter/Quantum radar display, including wind, depth, speed instruments, two independent quadrant attached auto pilots, Interphase forward-looking sonar, Furuno GPS, two VHF radio mikes (separate radios), compass, and holders for two tablets as additional navigation devices and USB connections. We added a larger Sidepower 130 bow thruster. Standing at the helm station you have complete visibility in all directions and access to the bow thruster joy stick. There is also a second Furuno plotter/radar on the port side cabin top that is used as redundancy. We usually have two or three redundant plotters running with different map systems when going into tricky areas.

Down below:

Main cabin:

We made significant improvements down below as well. We added three bookcases.

We modified the wall that separates the galley from the main saloon and added a Spectra Newport 700 watermaker (29 gallons/hour) which includes a ZBrain, UV and Autoflush panel, fully self-contained and serviceable from the cabin. On top of the watermaker, we built a pass-through set of shelves and compartments that hold

plates, cups, bowls, silverware etc. making it easy to get dishes to and from the galley and saloon dining table.

We added a swivel captain's chair to the nav table to make it easier to work on the table underway, and added two pullout lap top shelves for additional computing, and a printer situated below the nav table.

We added 5 bilge switch controls, alarms and lights under the generator panel. On the opposite side which houses the water maker panel, we added separate engine, generator flow, and temperature alarms, plus refrigeration and freezing bypass switches, and a water full-tank alarm, when filling the water tank.

Electrical:

We added a switchable isolation transformer that allows us to use most any dock power around the world, and to distribute the loads evenly to the main panel from shore power or generator power.

We added a second switchable and completely independent inverter/battery charger (Victron) with remote display. Both inverter/battery chargers can be run at the same time, and the inverters are selectable by a BlueSea switch.

We added a 220amp Balmar alternator with two separate regulators and a shutdown switch for extended recharging runs.

We added a Fireboy automatic engine fire system with manual override.

We upgraded the generator to an Onan Cummings 9KW.

We added a long-range mast mounted wifi antenna system with a hot spot for the boat.

We added an AIS transponder

We added a Brookhouse wifi repeater to provide navigation and AIS data remotely to laptops.

Fuel:

Since we have a high-capacity watermaker, we converted one of the two 230 gallon water tanks to diesel, giving us three tanks and an approximate capacity of 550

gallons, about a 1500 mile range which is great to have to motor through no wind on long passages and no worries.

We added a fuel transfer pump to move fuel from the converted tank to the starboard tank.

We added dual Racor systems and a vacuum gauge to allow for monitoring of the Racor filters and a quick, easy manual switchover to an alternate filter system if needed when underway.

Galley:

Redundancy is a big part of Lazy Bones. We began by adding an extra freezer holding plate to the existing AC freezer (now two total). Then we added separate 12v DC refrigeration and freezing as well. Having both AC and DC working gave us a comfortable backup and a more efficient use of our systems and power savings. We also added 12V programmable timers to cycle the freezer and refrigerators on and off so they did not have to rely on thermostats which often fail.

We added four internal plexiglass doors to reduce loss of cold air when the fridge is opened, pull-out baskets, and a fan to help circulate air. We double-insulated the top-loading freezer and added an internal fan to circulate air.

We added dual freezer and refrigerator thermostats to measure temperature on the holding plates and at the top of each box to better manage temperature control.

We added a separate water filtration for the cold water at the galley sink, as well as a valve to have water flow directly overboard from the sink, or to use the sink pump to expel water. We use the pump when we are at sea and the valve when we are at the dock.

We replaced the existing 110V washer and dryer with a Bosch 220V stackable washer and dryer, which are much more efficient.

We added extra switchable LED lighting throughout the galley for brightness.

Aft Stateroom:

We removed the rarely-used settee and built a large teak cabinet with four deep shelves for clothing storage and a large chart storage area on the top.

We added a 12V flatscreen TV, a 12V digital clock, extra lighting, USB ports throughout, and five Caframo fans.

In the head we added a plexiglass and teak shower door, and a separate switch to use fresh or salt water when flushing the head. We added a Y valve for direct overboard flushing and/or use of a macerator pump when using the holding tank. We also added a Caframo fan and extra lighting.

V-berth Stateroom:

The v-berth stateroom remains unchanged other than the addition of a 12V flatscreen TV, two fans, USB ports, and two fishing rod holders.

We changed the forward electric head to a very durable Skipper II manual head to be prepared in the event there was ever a power problem. The head also has a button for putting in fresh water or salt water to fill the head. The head also has a Y valve for direct overboard flushing and/or a macerator when using the holding tank. We also added a plexiglass and teak shower door to the forward head as well as a fan and extra lighting.

Lighting:

We changed all boat lighting to new LED fixtures and added red courtesy lights throughout for night time use.

Storage and tools:

We have a huge inventory of spare parts for Lazy Bones (see separate inventory list). We also have every manual and electric tool you would ever really need to make a repair and to maintain Lazy Bones.