

OWNERS COMMENTS ON SOME PARTICULARS: ROUTE 66

Route 66 is a consummate blue water cruising yacht. Extremely comfortable at sea with smart seamanship, she is quite a unique combination of size, manageability and livability. This is due to her relatively light displacement, a center cockpit, the B&R rig, and the deck, interior and systems layouts. Her length provides both speed and easy control, while the absence of paid crew allows for complete privacy and freedom of action.

Many unique design features, not present or easily managed on other boats of similar size and performance, make life pleasant and comfortable aboard Route 66. My wife and I have owned her since she was launched in July 1993. We lived on board full time for the first 8 years and for extended summers and a modest amount of winter sailing each year subsequently. The longest we have gone without a haul-out is 3 years, and have averaged about every two. We have sailed her over 70,000 nautical miles as a couple, including two trans-Atlantic passages, winter in the Caribbean and more than a dozen offshore trips from Florida and Bahamas to New England and back. We have been as far north as the Bras D'Or Lakes and England and as far south as Gibraltar and Grenada. We have ridden out multiple hurricanes or severe storms in mangrove swamps, rivers, coves and bays, mostly on our own anchors while we were on board, but on a very heavy mooring in an exposed roadstead on two occasions. For us, the key to coastal safety and survival has always been to anchor well away from other boats that might be to windward in the strongest winds and the use of multiple anchors with adjustable rode. At sea, the worst we have experienced is 60+ knots in a frontal low pressure system lasting less than 12 hours which we rode out comfortably by going down wind with

a postage stamp of our working jib exposed. We have sailed upwind to Bermuda in a 35+ knot “noreaster” using only a triple reefed mainsail where the key to comfort was to purposely go slow to avoid going airborne.

Route 66 has a relatively large keel chord as well as a deep keel when it is down. This large keel area, while less than ideal for racing, allows us to go relatively slowly without “stalling”, and also adds to comfort at anchor by reducing and slowing any roll. The keel sits in a very robust housing and is held in place by a single large pin. It is raised and lowered by a second pin connected to two powerful hydraulic rams. Having a 6.0 ft (keel up) draft on this large of a monohull sailboat is extremely unusual and allows us to access and explore areas off limits to most yachts of similar size or performance. Overall, the keel arrangement is a very simple system that makes it very easy to remove the keel and gives the option of other shapes and drafts if desired. For example, it would be extremely easy to remove the existing keel and keel hydraulics and insert a fixed T or L shaped keel of any depth.

With light weight and fairly high bow, like most monohulls, Route 66 tends to “sail” side to side at anchor when there is strong wind and minimal current to affect the keel and rudder. In this situation, especially if we are somewhat exposed to waves, I always put out a second anchor off the bow at 90-120 degrees from the primary, on the side where I expect any changes in wind direction to come from. I use aluminum Fortress anchors and all rope rode for this purpose because the entire package is light weight and holds beautifully as long as you have a relatively constant direction of pull and adequate scope. Tensioning this rode as needed holds the bow steady, greatly reduces peak loads on the primary anchor and adds enormously to comfort aboard.

In view of its size and performance, Route 66 is very economical to sail and liveboard. This is possible because we carry liability insurance only, we are registered offshore, and Route 66's spaciousness combined with light displacement allow simplicity of and easy access to all systems (power, electrical, plumbing, instrumentation, sailing, etc.). One reasonably capable sailor, having all systems manuals handy, along with the right tools and spare parts, pretty much can fix anything on the move and maintain all systems to top standards. Personally, I have always focused on structural, mechanical and electrical perfection and dealt with cosmetics secondarily. Keeping all enclosed spaces clean and dry has contributed greatly to equipment longevity, the early recognition of any problem, and ease of maintenance. This has been made easier because all surfaces are "finished" and painted, even the bilges.

Construction is essentially all carbon fiber/epoxy composite (hull, interior furnishings, keel, rudder, mast boom and rigging), and in spite of being quite light for a cruising boat of her size, she is very conservatively overbuilt. The result is that, after 24 years of use, she is structurally rock solid and as good as new with zero stress cracks or core issues of any kind. With the essentially unlimited cyclical wear of carbon fiber construction, with reasonable care, she will outlive all her owners and their children's children! The hull was designed with a 45 degree "breakaway" bow bulkhead with a large sacrificial nose and waterline area to prevent a hull breach in the event of a major UFO collision at sea. This angled bulkhead further is backed up by a watertight bulkhead and hatch in the forepeak. There is also a major watertight bulkhead aft of the aft cabin area to thwart any possible water intrusion from the unlikely scenario of damage to the stern, dingy garage or lazarettes.

Route 66 has a very narrow waterline and virtually every section is an arc of a circle. The consequences of this are that she is very slippery, wants to go in a straight line even when heeled, has zero tendency to broach, and is easy to steer, but, has essentially no form stability. All stability is created by a low center of gravity from the keel and equipment installations, and a wonderful set of movable ballast systems that contribute immensely to comfort and performance. Extensive tanks in the flared hull sides allow 1500 lb transferable diesel fuel capacity and the ability to intake, discharge and transfer over 3500 lb of seawater that takes full advantage of her 19ft beam. The practical effect of this is that we can sail her essentially flat and add considerable mass/inertia for powering through waves when necessary or desirable. Also, since the hull form is so easily driven, we can sail at pretty high speeds using an “underpowered” amount of sail area. In bad weather, for example, we might decide to sail flat (0 to 10 degrees of heel) on the wind or close reaching at 8-10 knots with shortened sail area when we could be sailing at 12-15 knots or more if we powered up and heeled at 10-20 degrees. Off the wind we always sail flat at a broad wind angle and speed is directly proportional to sail power. Under engine we cruise at 9.5 to 10 knots burning less than 3 gallons/hr of diesel.

We designed the boat and systems for a live-aboard couple with the intent that we could go long periods (months) without coming to a dock. A very large fuel capacity, watermaker and very efficient 4.2kw, fresh water cooled, AC generator are essential components for this purpose. We have not added solar, wind or water power systems since we have never come close to running out of fuel. Fast charging Lithium ion batteries allow minimum generator run times unless we are using the air conditioning.

Lately we have been cruising New England every summer to be near the grandchildren. So, we have not been using the watermaker. We go to a water dock about every two weeks and also do a pump-out. But, it is not unusual for us do the entire summer without spending a single night at a dock or a mooring.

We have no concerns about our dingy being stolen or the painter getting caught in the prop, or bad weather swamping it, because, we keep it in the dingy garage every night and at all times when moving. This also keeps the dingy bottom pretty clean without need for bottom paint since it is above the waterline when inside. We have lines that pull it in and pull it out that are accessible from the fold down transom step. This is a low energy manual task that takes less than two minutes.

Some details that I insisted upon when doing the deck design was that there be no exposed wood (for ease of maintenance), and that there be no objects on deck that could come loose when sailing. So, the decks are maintenance free and practically every toy that you could want for cruising has a place below deck. The decks are slightly cambered or angled and the cockpit designed so there is no possibility of standing water regardless of weather or heel angle. The aft deck is a large area that is ideal for setting up water activities (diving, kiting, paddleboarding, etc.). The folding step provides perfect access to the water surface. It is flanked by very large port and starboard lazarettes with interior lighting and sufficient space to stand or sit. I can safely/easily work in them in bad weather and at sea if the need arises. We keep a spare, transom mounted, all carbon composite, modular rudder and independent steering system in the lazarette for the unlikely scenario of catastrophic loss of our entire primary steering system.

Route 66 is tiller steered. Tiller steering is permanently mounted in the cockpit and also available from the aft deck. The folding and extendable cockpit tiller allows the cockpit to be both cozy and more open for comfort. The transom hung rudder provides the maximum leverage for steering, and the hull shape is extremely directionally stable. We have never seen sea conditions that the autopilot couldn't handle with ease. We use the electric autopilots virtually all the time we are moving except when maneuvering in harbor/traffic and when steering for pleasure. One autopilot drives the tiller quadrant and there is a separate autopilot for the trim tab on the rudder. Either can be controlled from the cockpit or the nav station below. Both pilots are highly reliable, located in protected areas, very powerful and run on independent circuits. Another huge safety advantage of the transom hung rudder over a typical spade rudder configuration is that there is no chance that collision of the rudder with an underwater object could sink the boat.

One can raise, lower and reef the mainsail and furl/unfurl the working jib without leaving the cockpit. This is a major safety feature in adverse weather and these working sails also provide plenty of power in typical sailing conditions for cruising, making life very simple if desired.

In spite of having a very sturdy and powerful rig, Route 66 has no backstay or running backstays normally found on a boat and rig of this size. This is the huge advantage of the full B&R rig design for cruising. Thus, she is able to carry a very large roach on the mainsail while having zero risk of rig damage from an accidental jibe or missed timing with runners, has reduced manpower requirements and greatly reduced windage and cordage clutter in the cockpit area.

Many cruising boats of similar or smaller size have a master suite forward in order to have privacy and space for a large double bunk. In

my opinion, this is the worst possible place for a comfy stateroom. Water noise, wind noise and motion, not to mention nearby sail and chain lockers, and poor airflow because of need for watertightness forward all contribute to a difficult environment for comfort. On Route 66, the master double bed is centered very near the axes of pitch and roll and is a very peaceful and easily ventilated spot. The seas can be chaotic and the wind howling, and a peaceful night sleeping will be found there. When sailing in heeled or rough conditions, adjustable, paired, double lee cloths make this bed even more cozy.

I am terminally opposed to salt water heads. They foul quickly, smell bad all the time and are horribly unpleasant to maintain. Therefore, we have a freshwater system on Route 66. For flushing we have the option of using water directly from the potable water supply or using gray water from the shower sump. In practice, there is always enough gray water for our flushing requirements. The system is an electric LAVAC type with manual override available that is heavily modified with custom parts for ease of maintenance and reliability.

I have chosen to avoid the weight and maintenance of a bow thruster, although there are certainly times when one would be handy. We virtually never approach a dock without a serious plan, and fenders and dock lines in position. We have a complete understanding of how she is going to behave in the ambient wind and currents, especially as the keel and rudder stall with loss of headway. We have never had an accident by being highly judicious in choosing when and where to dock. In most circumstances we prefer to avoid shore side assistance.

Lightning frightens me to death, and having spent considerable time in the tropics, and in and around Florida and the coastal southeast US, we have seen a lot of it, often very nearby. Knock wood, we have never been affected, even as major bolts have hit the water within a boat

length! This leads me to believe that, unlike multihulls, Route 66 is not an attractor...

The interior is designed to avoid the cave-like atmosphere of most performance monohulls and to keep all things required for daily living within easy reach. It can be made bright with direct daylight in every area and allow living and sailing in cozy, dry and convenient spaces where you are fully spared from the elements outside. "Blackout" curtains readily slide in place to create darkness for sleeping or shield from the sun as needed. The Nav station is incorporated into the galley and seating areas so that there is no isolation while preparing meals, eating, navigating and sailing the boat. 270 plus degree views from wherever you are sitting or standing while in the main living area make these activities congenial and low anxiety and allow a pleasant routine on passages.

I could go on, describing the smaller details that enhance life aboard and the sailing experience, but would still forget to mention many that make this a special yacht. Seeing it firsthand is really the only way to get a grasp on this unique boat.

I could go on describing the smaller details that enhance life aboard, but would still forget to mention many that make this a special yacht. Seeing it firsthand is really the only way to get a grasp on this unique boat.

Bill

2018