

FULL VESSEL SPECIFICATIONS: 53' BENETEAU OCEANIS 2005, SUNFLOWER

Hull

The hull below the waterline has been custom faired and sprayed with an exceptionally hard ablative bottom paint for speed yet also ideal for cruising to forego the need to scrub the bottom.

- Includes complete spare rudder & hardware. This is the only existing spare Oceanis 523 rudder in North America (verified by Beneteau).

Standing and Running Rigging

Nothing is left of the original Beneteau rig. The spars, standing and running rigging, and all blocks/winch/hardware are top quality and sized for ocean sailing.

- Mast and boom were custom-built for Sunflower by Forespar and installed in Spring 2011 by New England Yacht Rigging, Inc. The standing rigging, replaced in 2021, is discontinuous and strongly built with robust spreader tip, end fitting and turnbuckle hardware. You can see the heavy-duty welded plates of the Passage Maker tangs for the standing rigging with an extra-sturdy Leisure Furl gooseneck. The hardware and materials are representative of the quality and strength of these top brands and major improvements to the strength of the vessel.
- The aluminum mast is anodized and painted with Awlgrip. Several cosmetic repairs to the paint have been made as it has worn during the course of normal cruising and ocean racing. The Leisure Furl Boom is anodized aluminum.
- All standing rigging replaced in 2021/2022.
- The halyards are constructed of high-tech line and built to withstand offshore conditions. Note additional dyneema chafe sleeves on the shackle ends. The shackles are over-engineered for the typical loads. All the halyards have been replaced in 2018 and 2019.
- The genoa, spinnaker and both the inside shroud & outside shroud staysail sheets are hung in the forward lazarette compartment. You will see that they are all high-tech lines, custom spliced with either strong soft shackles or oversized trigger shackles. They all are just a couple years old and have only been used racing to Bermuda 3 times. There is also a complete set of cruising sheets.
- The original furling systems have been replaced. The headstay furler is a [Schaefer 4100](#) and the Staysail furler is a [Schaefer 2100](#).
- The cars for the headsails have been replaced with ball bearing towable cars. Two small winches were added to adjust the cars.
- Note the quality of the Schaefer roller bearing blocks on the mainsheet system. Other high-load blocks are also Torlon roller bearing high strength blocks.
- Numerous additional items of running rigging have been modified or added. The spinnaker tackline that doubles as a whisker pole downhaul is new as are the twings and Genoa furling line and blocking. Two Lewmar 62 manual two speed winches and custom fittings have been added to better handle sails and also run two headsails simultaneously. These winches also handle the jibe preventers and spinnaker sheets, and make the boat easy to handle and fast.

- The headsail sheet lead systems on the side decks have been re-engineered, upgraded to towable cars for precise trimming and a winch has been added next to each steering station for easy adjustment. Custom pad eyes have been welded to the arch to rig the storm trysail and to attach the spinnaker turning blocks. Looking at the decks you will see many custom layouts that make management of the sails from the cockpit easy and convenient.
- A carbon fiber Forespar whisker pole and mast storage hardware have been added to make pole handling a breeze.
- The original mainsheet traveler has been completely replaced with a Harken heavy duty traveler system. The Traveler car can now be handled by one person from one side of the cockpit under the dodger.
- Spinlock rope clutches have been added and rearranged. The cams have been swapped out as needed to best fit the line size. The lines all run straight forward and do not cross or chafe.
- The genoa, staysail, and mainsail can be handled by one person from the cockpit. Leaving the cockpit is only required to set the spinnaker, the whisker pole, or the storm sails.
- The boom is rigged with a jibe preventer on each side. When rigged, a line is run from the outboard winches to a block forward and back to connect to the jibe preventers on the boom. The jibe preventer can be set while the boom is fully out to either side.
- The mast and boom running rigging have a good deal of redundancy. There are two spinnaker halyards that can also serve as halyards for other sails as needed. They are also used to hoist the genoa and staysail socks when racing sails are furled. The boom topping lift is engineered to serve as a mainsail halyard should need be. The boom is supported by a rigid vang when the mainsail is furled.
- Winches are cleaned and lubricated annually at a minimum.

Sails

All sails are made by Thurston Quantum Sails in Bristol, RI, and are also maintained annually by the same loft.

Cruising Sails:

- Mainsail, boom furling, full batten, cruising composite ~ 2011
- Genoa, 135% cruising composite ~ 2011
- Staysail, Hydranet ~ 2006
- Spinnaker, Quantum V5 asymmetrical ~ 2006

Racing Sails:

- Genoa, 135% ~ 2019
- Staysail, large ~ 2019
- Spinnaker, Quantum A5 asymmetrical ~ 2019

Storm Sails with Sheets Rigged

- Jib, roller furling storm ~ 2016
- Storm trysail ~ 2016

Electrical System

The electrical system has been extensively updated, expanded, and modified. Key features include:

- Mastervolt Lithium Ion house batteries.
- 3 large battery chargers for the house bank, a charger for the bow bank, and a charger for the genset start battery.
- Mastervolt high-capacity alternator with 10 rib belt.
- Shore power transformer for isolation from shore power. Transformer is selectable for dual input - 120V 30A or 240V 50A shore power.
- Second shore power connection is added in the bow to give the option to connect shore power in the bow or stern.
- All four AC busses are ground fault protected and outlets in heads and galley have GFCI.
- 200KW inverter for AC power.
- Solar panels on dodger roof for trickle charge.
- Major components are monitored by a Mastervolt MasterBus system. All software and firmware of components are up to date and verified by regional MasterVolt technician.
- 11.5 KW Onan generator set (2,150 hrs).
- Custom electrical distribution panel, backplane, and instrumentation panel at the Nav station.
- Electrical system is thoroughly documented. (see attached schematic).

Electronics

Navigation

- The electronic navigation suite is the latest version from Raymarine. Major components are: (3) chart plotters (at the helm, in the dodger and at the navigation station), wind sensor on the masthead with displays at each helm, heading sensor & autopilot, Class B AIS, redundant GPS sources, integrated SiriusXM satellite weather, digital depth profiler, second depth transducer, digital radar, and engine monitoring system.
- Navionics charts for the eastern US, Canada, and the Great Lakes have the latest updates.
- Electronic Bermuda charts.
- 5" Ritchie Globemaster steering compasses at each of the two helms.
- Handheld GPS in ditch bag.
- System is extensively documented (see book on salon table)

Communication

- Two DSC equipped VHF radios with separate antennas on the masthead and arch. Both integrated with the navigation system.
- Sirius XM radio and marine weather (requires a subscription to the service)

- System is well documented. (see book on salon table)
- Handheld VHF radio and DSC in the ditch bag.

Deck and Deck Hardware

Ground Tackle and Handling Equipment

- The original single vertical windlass was replaced with a dual capstan Ideal windlass. The anchor locker was divided. This allows the carrying of two rodes and anchors topside. Currently, the boat is rigged with a single Rocna anchor and 300 feet of 3/8" chain rode. A collapsible, appropriately sized Fortress anchor is also onboard.
- Stainless steel plates are added to protect the hatches of the anchor locker from the anchor chains.
- There is a custom-made anchor snubbing bridle stored in the port anchor chain locker.
- The two forwardmost cleats have custom-made stainless steel chafe guards.
- An additional cleat was added on each toe rail near the stern for spring lines. All four aft cleats have custom stainless steel chafe guards.
- Two through bolted U bolts are added to each side on the toe rail forward of the mast to allow for better attachment points of mooring lines in port while block mounts for the jibe preventer underway.
- An anchor wash-down pump is mounted in the forward lazarette with a hose and nozzle. The pump can also pump fresh water for topside freshwater washdown and can also take suction on the bilge in the forward lazarette for in the event of emergency dewatering needs.

Hard Dodger

- The boat has a custom-built hard dodger. The dodger is 3/4" closed cell foam with several layers of epoxy fiberglass on each side. The entire dodger weighs only 45 lb without the safety glass, with wipers and red/white lighting built in. It has a 120V power outlet.
- There are several through bolted handrails in appropriate locations.
- Canvas curtains close the back of the dodger in foul weather with screens to close the dodger while in warm weather at anchor.
- The dodger easily supports the weight of two men standing on it.

Lifelines

- An additional wire has been added to the bottom of the forward portion of the lifelines. Webbing is strung on this forward section for crew safety.
- The stainless steel rails of the bow pulpit have been modified to remove the connection between them and reduce how far forward they protrude. This allows for better handling of the spinnaker.
- The deck fittings for all the lifeline stanchions have been replaced with much superior through bolted Schaefer deck fittings.

Arch

- The boat is fitted with a custom stainless steel arch aft and is extremely sturdy.
- The top of the arch support various communication equipment and the stern light, and also has davits to hoist the dinghy.

Canvas

- The boat has a bimini and canvas that connects the bimini to the dodger.
- The entire cockpit can be closed in with canvas & windows except for the stern.

Miscellaneous

- The mast pulpits have been modified with mahogany deck grates.
- There is a gas grill that mounts on the aft railing and connects to the propane tank.
- The boat has two 10 lb aluminum propane tanks.

Forward Lazarette

- The ladder is modified to give a more user-friendly angle and a handrail has been added at the top of the ladder.
- Storage compartment hatches and deck plates are modified to bolt down for offshore safety.
- Various mounts and rails have been added for storage of lines and equipment.
- Washer unit and separate dryer unit.
- Note the emergency rudder equipment. The rudder spade is stored on the port side and the emergency rudder stock & support tube are stored in the starboard side. Braces and a tool kit are stored on the shelf on the starboard side.

Aft Lazarettes

- The aft port lazarette is modified with a deck halfway down for better storage.
- The rudder stock tube was strengthened per a design by Beneteau and warranted by Beneteau. This design installs reinforcement to give the rudder tube more strength in the event of the large spade rudder hitting something.
- Both lazarettes contain permanent equipment that has been added to the boat.

Cockpit

- The cockpit has cushions for the seats.
- The cockpit is fitted with multiple D-rings for dual jack lines to allow a person to clip their tether before leaving the salon.
- The salon washboard hatch is modified with a window so the crew below can observe the crew above decks. The washboard also has a retaining line to prevent the washboard from being lost overboard.
- Each helm is fitted with a custom stainless steel hand grip for the helmsman.

Interior

Salon

- There are custom cabinet mounted against the bulkhead, centerline, forward. It has an upper section for glasses, a liquor cabinet with adjustable fiddle in the middle, and an ice maker in the bottom
- All overhead lights have been changed to LED
- Two red or white adjustable reading lamps are mounted on the port side outboard the table.
- Salon table has been modified to lower and form a large bed. There is a cushion that goes over the table in this configuration.
- The port salon bench has been modified to provide an access hatch for easy access to the discharge hull valve for the forward head. A ventilation grill with a temperature switch-controlled cooling fan has been added to cool electrical system components under the bench.
- The centerline bench locker has been modified internally for better stowage at sea.
- A “Hurricane II” hydronic heating system has been installed. The diesel-fired boiler is in the aft starboard lazarette. Each stateroom and the salon has its own fan and temperature control. The heating unit in the salon is twice the size of the staterooms and can also heat the dodger when enclosed.
- The salon has a satellite and over-the-air TV system. The TV can also display the main chart plotter or a DVD player.
- The water system includes a Seagull filter for a spigot at the basin in the galley.
- A coffee pot with an internal carafe (so no pot will go adrift at sea) is permanently mounted on the starboard side.
- The stove has been upgraded to a gimballed three-burner Force 10 stove and oven. A stainless steel sheet is installed for safety in the overhead above the range.
- The silverware drawer in the center island has a custom divider.
- The air conditioning units in the salon and staterooms have been modified to replace the carbon steel drip pans with stainless steel drip pans to prevent corrosion.
- The original two refrigerator/freezer units were removed. A custom refrigerator and freezer were built. All sides of these units except the front doors have 4 inches of rigid insulation. The doors are custom-made vacuum insulated panels. The refrigerator and freezer each have their own Frigiboat cooling systems with external “keel” cooling plates. These units are computer controlled by control panels on the main instrument panel
- The main instrument panel at the Nav station (forward of the two panels) and the main electrical distribution panel at the nave station are part of the extensive electrical system upgrade. See the electrical section.
- Various instruments and controls have been relocated from their original positions throughout the boat to the main instrument panel for ease of operation and better monitoring.
- The Nav station is fitted with a red/white articulated reading light.
- A bilge alarm system and bilge pump counter have been added and read out at the Nav station.

- All deck plates in the salon have been modified to bolt down. The two aft centerline ones over the batteries and hull valves; and the one centerline forward over the bilge are equipped with quick-release anchors and recessed handles for rapid access.
- The openings in the overhead for the dorades have been modified so they can be shut or throttled.
- There are screens for the salon side window hatches.
- The overhead hatches are fitted with OceanAir screen/shades.
- The stand-up locker in the aft port corner has been heavily modified internally to house the phone system, the satellite TV, and the DVD player on a rack that can slide out for maintenance.
- All original Beneteau dishes and silverware.

Owners Stateroom (Forward)

- The owner's head – and both aft stateroom heads - has been rebuilt with a “SailVac” vacuum flush system. This has the additional advantage of closing up two unneeded hull openings for each head.
- There is a custom locker built along the port side outboard the bed.
- All overhead lights and the two reading lights have been replaced with LED lights.
- The owner's bed is fitted with lee cloths on both sides and down the middle (see eye loops in the overhead).
- The owner's bed has a custom mattress that is raised to prevent condensation.
- The large storage lockers under the owner's bed are modified so their covers are bolted down for safety at sea.
- There is a custom shelf added to the starboard side outboard the bed.
- The stand-up locker in the aft starboard corner is modified to provide access outboard of the locker for additional storage.
- Hooks are installed to hang up safety gear and clothing.
- All deck plates are modified to bolt down for safety at sea. The centerline deck plate is fitted with quick-release anchors and recessed handle for rapid access to hull valves under it.

Aft Staterooms

- Both staterooms are modified with SailVac vacuum flush heads like the owner's stateroom.
- Overhead hatches have OceanAir screen/shades.
- Bunks are fitted with articulated reading lights.
- The bunks are raised to provide ventilation and prevent condensation.
- Hooks are installed on the bulkheads for safety gear and clothing.
- All side hatches have screens.
- There is a variable-speed fan installed at the aft end of each bed for improved ventilation.
- Each bed is fitted with a lee cloth down the middle.
- The starboard stateroom has an extra fuel tank added under the bed.
- The port stateroom has a 600 GPD Village Marine water maker installed under the bed with a remote control at the Nav station instrument panel. It can fill either water tank.

Engine Compartment

- A Maritron Engine Monitoring System has been added to the engine and integrated with the navigation system.
- A high-capacity alternator has been added to support the Lithium Ion house batteries. Note the custom reverse mount for the alternator and the 10 rib belt for power transmission.
- The engine's cooling system is integrated with the hydronic heating system through a heat exchanger so that the engine can heat the boat and hot water when running.
- The fuel filters have been upgraded to Racor filters.
- The area over the forward end shows some of the extensive upgrade to the boat's electrical system.
- The hot water heater has been replaced with a more efficient Isotherm unit.
- The shaft seal has been replaced with a PYI mechanical seal.
- The original fixed propeller has been replaced by a feathering MaxProp.
- A "Shark" rope cutter has been installed.

Tankage

Fuel

- 170 gallon

Fresh Water

- 250 gallon

Holding Tanks

- 3 x 35 gallon tanks

Safety Systems

- Boat has been inspected for the 2022 Newport to Bermuda race and meets all safety requirements for that race.
- All equipment that needs to be inspected or certified (e.g., life raft, flares, fire extinguishers, EPIRB, propane tanks, MOM 8A, etc.) is in date.
- Jack lines – for the port and starboard side on deck and one on each side of the cockpit sole.
- 8 person life raft stored on deck with a hydrostatic release.
- MOM 8A on stern rail
- LifeSlingFloating line in a throw bag.
- Port cockpit locker: Added hand bilge pump in salon to supplement hand bilge pump in cockpit.
 - Manually activated "gulper" bilge pump.
 - Ditch bag (including EPIRB and handheld VHF)

- SOLAS flare set meeting USCG requirements
- DC kit (for flooding)
- Collision matt (fothering) and lines
- Bosun's chair
- Dry chemical fire extinguisher
- Automatic 1100 GPH bilge pump.
- Automatic high capacity 4000 GPH 2" discharge bilge pump.
- Masthead tri-color light with backup power supply.
- Digital recording barometer.
- One dry chemical and two halotron fire extinguishers below decks.
- Air horns for alerting crew (salon, dodger, and helms).
- LED searchlight.
- Gale Rider drogue.
- 5 Life jackets.
- Emergency rudder – custom-made emergency rudder similar to a windvane steering system except without the wind vane.
- EPIRB: in the ditch bag.
- Dock lines and fenders.

Maintenance

Maintenance requirements are tracked, performed, and recorded. As an example of how maintenance is tracked and performed, spring startup checklist is on the salon table for your review.

- Sails are taken annually to Thurston Quantum Sails in Bristol for inspection and repairs
- [Great Island Boatyard](#) (GIBY) performs maintenance appropriate for a boatyard.
- GIBY also performs maintenance on critical systems like the engine.
- Owner and crew perform routine regular maintenance within their capability.
- Appropriate spares are carried.
- Set of tools are included (hand tools - screwdrivers, pliers, wrenches, metric & English socket sets, multimeter, wire stripper/crimper, and heat gun).