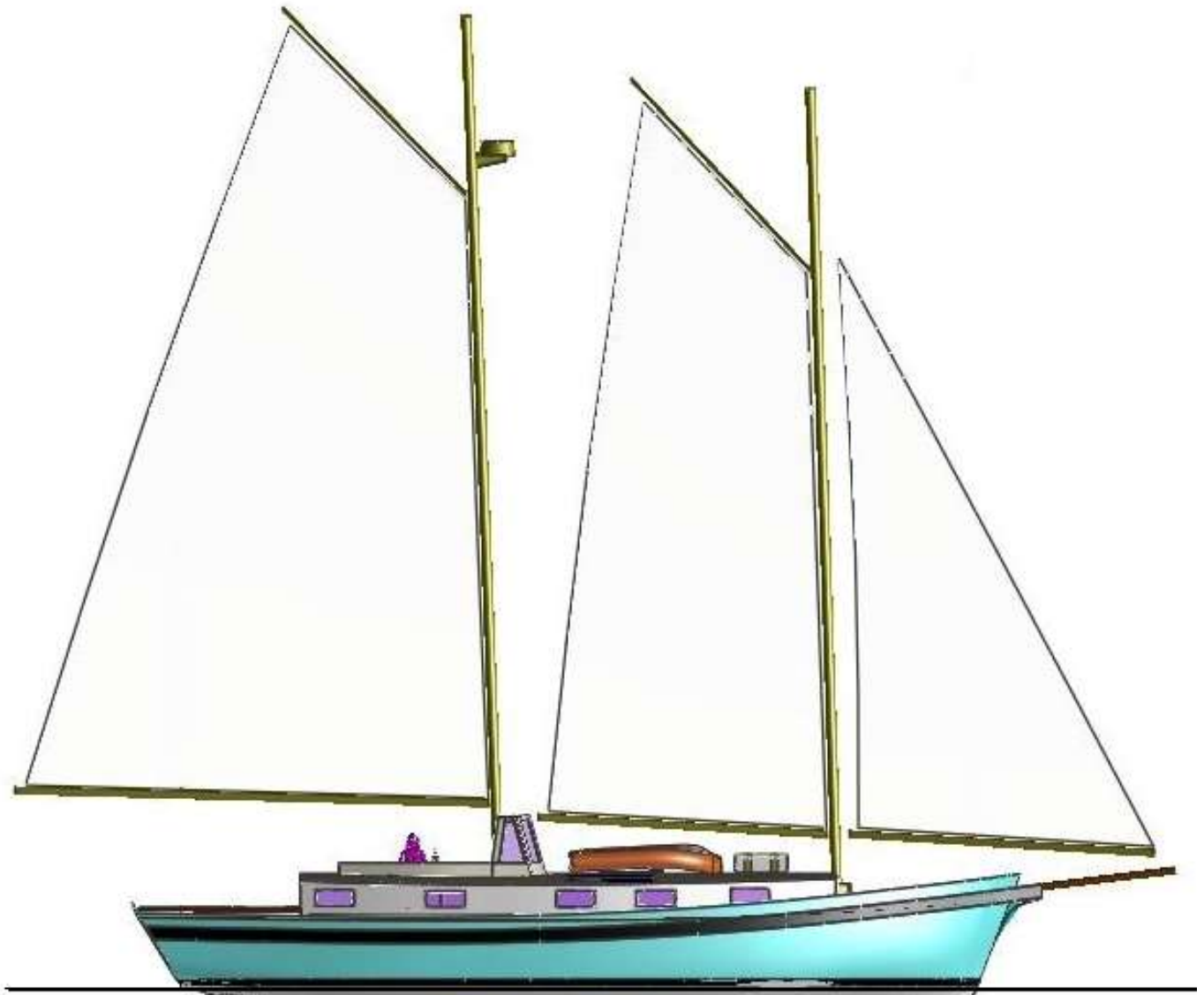


BARBAROY BOATS ENGINEERING & ALL

SCHOONER 19

Copywrite ©2023 by BoatPlansByJohn.



B B E & A

BARBAROY BOATS ENGINEERING & ALL

SCHOONER 19

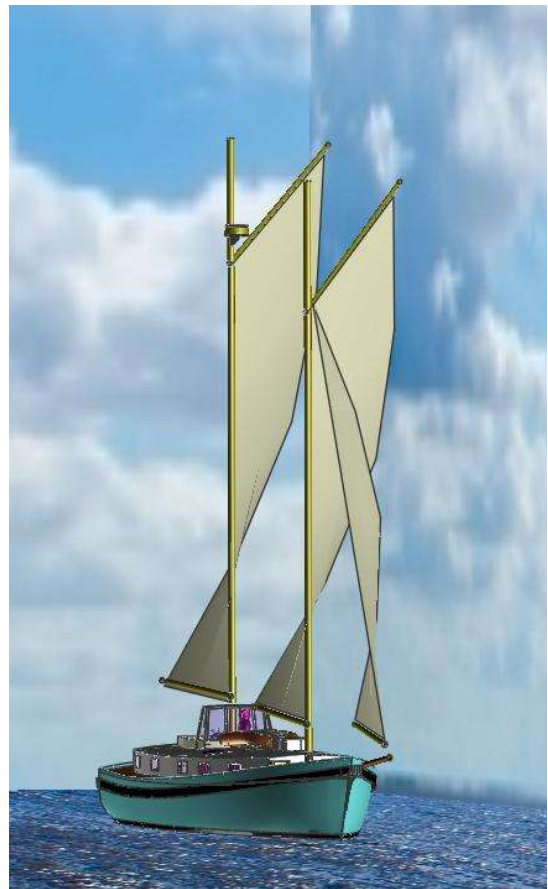
Background

This is the result of an evolving dream of mine that dates back to the 1970s: a cruising schooner rigged yacht to carry 2 couples on extended voyages of exploration, snorkelling in tropical waters, and adventure afar from home. About the same time and after reading the RINA paper by Lord Riverdale (*Twin Keel Yachts - Development Over 45 Years* (1967)) I developed a liking for twin keels, both to reduce the draught and to enable the yacht to take bottom and remain upright (a liking mightily reinforced by seeing a twin keeler perched far above the strand at Nelson, New Zealand, in 2022 ~ one could walk under it without scratching one's head on the barnacles!). Also Roger Johns (name changed etc. etc.), (my boss of the 1975-76) and I speculated on evicting the engines from the prime real estate (just abaft amidships) to the forepeak in some Patrol Vessel studies we were involved with in the mid 70s. Nothing came of these thoughts, but the idea remained: get the noisy, oily smelly bits outta the best part of the ship.

The dream changed with the years and experience ~ snorkelling was replaced by SCUBA, 2 couples became 1 family, the family grew up and left home, then 2 couples moved back aboard (one couple geriatric (Margurita (name changed etc. etc.) and I, the other a Sprog and mate) ~ but the core remained: schooner rig / centre cockpit / two cabins / usable saloon with separate eating and loafing areas / workable galley / ONE (!) comfortable head / shower AND the engine room located forward away from the living spaces. The design became suited to what happens when you indulge in "doing what come naterly" [Annie Get Yore Gun] while the years roll on.

Principal Particulars

| | |
|--------------------------|---|
| LOA | 13.4 m |
| LWL | 12. m |
| Beam | 3.92 m |
| Draught | 1.36 m |
| Displacement | 16.5 tonnes |
| Installed Power | 37 kW (50 hp) |
| Speed | 8.5 knots max |
| | 8.0 knots cruise at 30 kW (80%) |
| | 7.0 knots economical at 12 kW (30%) |
| Range @ economical speed | 1700 nautical miles (using extended range tanks). |
| Rig | gaff schooner, with 115 m ² working sail area, giving a SAD of 18 (ie., towards the upper recommended limit for cruising yachts). |
| Accommodation | * Six in two 2 berth cabins (fwd and aft), with an additional berth in the forward cabin and a settee berth in the saloon. * Separate dining, loafing and office areas with (almost) room to swing a cat in in the Saloon. |
| | * Sensible Head with wet locker, and a practical Galley clear of the Saloon. |



BARBAROY BOATS ENGINEERING & ALL

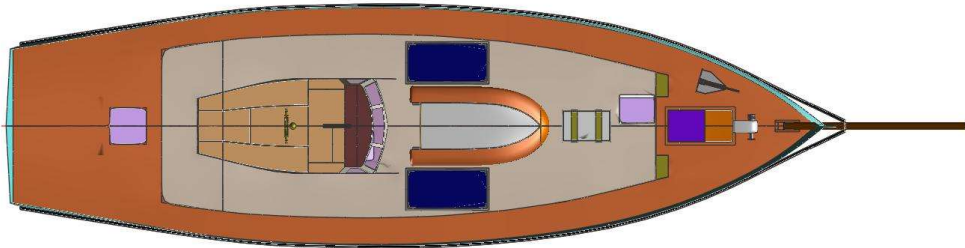
Arrangement

The arrangement is a fairly typical of centre cockpit yachts, but with an unusual machinery propulsion train: the engine is located forward, abaft the f'c'stle discussed below.

Main Deck

The Quarterdeck abaft the Cockpit is sized to provide the outdoor entertaining area and while the Cockpit itself is small but adequate for the four persons and is set high to maximise seaworthiness. It is protected by a shallow dodger.

Forward of the dodger on the coach house are the dinghy and life raft. This area also supports

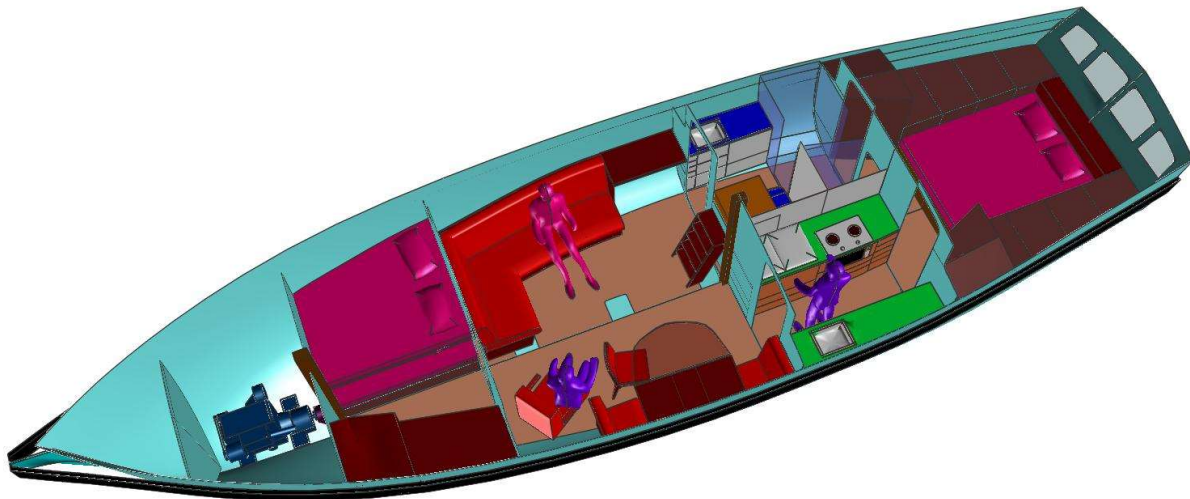


the solar array ~ 2 cells each 150 kW are shown though more could (and should) be fitted. Anchor(s) and windlass are forward. All halyards and sheets (etc.) are led to the cockpit.

Lower Deck

Aft on the Lower Deck is a generous Owner's Cabin. This is dominated by the 2.0 m x 1.6 m double berth (enough for any sport), has extensive lockers and two wardrobes (or one wardrobe and a dressing table @ the Owner's whim). Access to the cabin is through the Galley, located to Port.

The Galley has chest fridges/freezers, a preparation area and a stove/oven arranged in the desirable "work triangle" for kitchens, under bench & above bench lockers/racks for crockery/cutlery/dry provisions etc. and (of course (!)) a sink. Additional storage is available in the bilge, accessed through the Owner's Cabin.



The

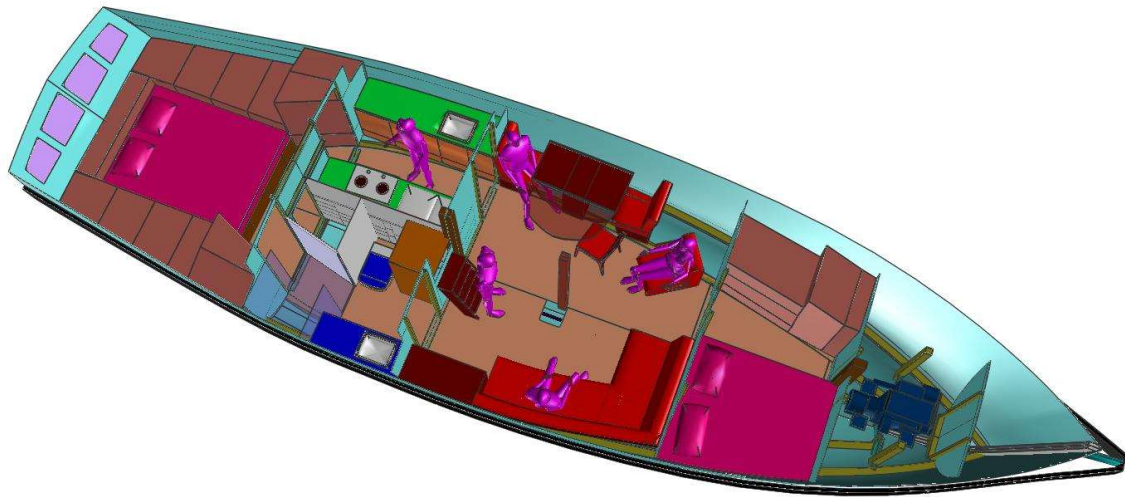
Head etc. is located opposite the Galley to Starboard and may be accessed from the Saloon or the Owner's Cabin, although the latter is via the shower stall. A vanity unit and basin are located outboard, this having stowage for head essentials (paper mostly), and a small wet locker for oilskins (etc.) is located inboard at the forward bulkhead, easily accessible from the companionway ladder via the Saloon.

Forward of the Head/Galley is the Saloon. This is laid out with a dining area to Port, comprising a drop leaf table (vaguely patterned after a table of my maternal Grandfather's) to seat 4 and squeeze 6 for dinner. Also

BARBAROY BOATS ENGINEERING & ALL

to Port is a rocker/recliner for no reason other I like R/R chairs. A comfortable arm chair could be substituted.

To starboard is an office / chart table / navigation space and an “L” shaped settee which may serve as a berth when necessary. The settee addresses a point above the dining area: mayhap the location for a broad screen TV? (in which case should the R/R and the chart table be swapped? Have to think about that).



The

Forward Cabin is accessed from the Saloon and is (now) intended for short term occupation by visitors (dream Adult Child + Partner). The double berth is located high and will require some scrambling to access (for which I make no apology: a little bit of athletics never hurt sex) (at least when you are young). A single berth is shown below, a legacy from past iterations of the concept, but probably this will have to go so the double berth can be lowered to provide ... ah ... usable head room above. Wardrobe and lockers provide storage for guests effects (so long as they do not stay too long).

Engine Room

The Engine Room is located forward of the Forward Cabin. The bulkheads between it and the Engine Room are fully water tight and air tight to minimize the noise and smell nuisance from the engine. Access, air supply and exhaust ventilation is from the main deck.

Fore Peak

The Fore Peak, between the stem and the Engine Room, contains the chain locker and b'osun's store.

Structure

The structure is composite: fiberglass over strip planked hull and marine ply bulkheads, well within the abilities of anyone comfortable with working timber.

Propulsion Train

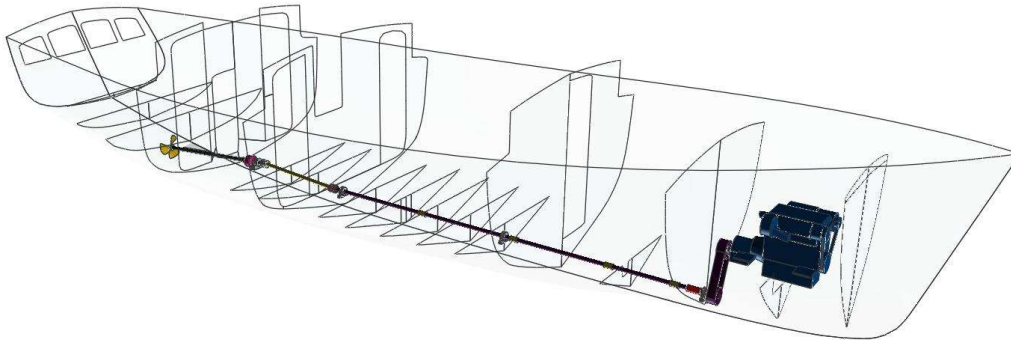
The unique feature of Schooner 19 is the propulsion train from the engine to the propeller. Something similar was designed by Mr Richard Hartley in his REALITY 37 ft yacht in the (?) 1960s and in one of

BARBAROY BOATS ENGINEERING & ALL

which I had a really fun sail in 1974. Four Johns and a Ralph => MAX confusion on board when things got exciting!! (The beers in the RPYC afterwards were pretty good too. Swan Lager).

It (the propulsion train) comprises an engine with a R/R gearbox connected via a belt drive to an offset transfer shaft. This runs aft to join an intermediate shaft to return the propulsion train to the centre line where it links with the propeller shaft.

The transfer shaft is made in segments that can be worked into the space between the Lower Deck and the bilge, these segments being joined by muff couplings and supported by bearings as necessary. There is a



WT/OT gland at the Forward Cabin bulkhead to fully isolate the Engine Room from the accommodation and bilge.

The intermediate shaft is joined to the transfer and

propeller shafts via CV joints (preferred) or universal joints, with the propeller shaft, its bearings, glands and etc. following normal practice.

Electrics and Electronics

The electrical installation is 12 VDC or 24 VDC with a supplementary 240 VAC (or 110 VAC) system. The prime generating plant is solar, the panels being on the house deckhead, supported by an alternator mounted on the engine ~ squeezing a small DG set into the constrained Engine Room seemed ... unlikely to work. The battery bank is located on the lower deck in the Forward Cabin with inverters to provide 240 VAC (or 110 VAC) Power located on the cabin's forward bulkhead.

Electronics are at the owners whim. Shewn on the drawings is a radar antenna, but radios, SATNAV, chart plotters, TV etc. equipment, fish finders, etc. etc. etc. may be added. It is anticipated that a multi-function display for navigation and the radios would be fitted in the Dodger.

BUT, BUT, BUT,As they stand, the **Hull Form and Structure are not suited to the twin keel configuration** that was intended, a big and unforgivable **OOPS** on my part. Needless to say, construction drawings have **not** been prepared. Worse,

I know not when ~~ or if ~~ I will be able to revisit Schooner 19.

Copywrite ©2023 by BoatPlansByJohn.

B B E&A