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Phil Bolger & Friends On Design

CHEBACCO Sedan

Power Cruiser

Versions 2 through 4

Design #540: 19'8x7'5"x

1'1'6"/1'7"x10/25/60HP

Yes a "Three-Fer!" Three variations on the theme I raised in the last issue, a power boat variant of the unballasted trailer sailer Cat-Yawl. And again, the assumption here is the 20' double chine plywood of CHEBACCO with the Raised Deck layout. Last issue a wheelhouse was added with 6'4" headroom and a 10hp swapped for the original 4hp outboard to arrive at what we would now call Version #1.

As already touched upon last month, here in Version #2 it seemed appropriate to explore raising the foredeck height to get more comfortable quarters below yet and perhaps arrive at a more balanced proportion for such a small raised deck power cruiser. What is shown here is a solid 6" higher foredeck on the same wheelhouse and aft cockpit levels. And this really has resulted in a different flavor of her.

No doubt a lot of this is in the eyes of the beholder. But gaining almost 5" of bunk height for easier peeling yourself out of your comforter along with another 1" of sitting headroom and, of course, another half a foot at her stem height for a 4' vertical edge to part head-seas at full power sounds attractive enough.

Part of this exercise was also to add to her keel depth to offer the 10-25hp outboard lower unit solid protection with that 18" draft which, of course, will return some of the more deliberate tracking the sailing version has between centerboard, shallow keel and rudder. On the latter, we might still want to consider hanging a 1' long blade off that keel's trailing edge, permanently linked to the outboard's motion since in following seasons that would reduce the dramatics at the helm to keep her on her course under just a modest outboard's lower-unit.

Version #3 is yet another obvious flavor once you move down this thinking. Here a small British Sillette-Sonic Saildrive Mk 2 will accept modest input power via a 2:1 reduction turning up to 16" props. So one of those Mouse engines, as Phil called them, a tiny Yanmar/Kubota/etc with between 10hp and 25hp will be an intriguing option to explore, swinging a good sized alternator to boot for cruising correct amenities such as a microwave, hot plate, etc, via a good house bank perfectly fed every day.

How to get the power down to the prop? To not ruin the cockpit we'd pick the C configuration on that saildrive which allows power input from behind. Then we'd place that Mouse engine alongside the saildrive with the gear box aiming aft. And then it's time for a toothed belt and pulley to get that power across from the engine to the sail drive's input shaft. We will have to consider whether we'd want the second pulley on a stub shaft to take the belt's radial pull via a dedicated set of bearings to then connect to the saildrive with a simple coupling.

If we looked at the somewhat larger Saildrive Mk 1 we'd get a F-N-R gear-box integrated into the head of the drive unit. Again picking the C configuration of the sail drive, input would come from behind. Behind it, connected to the saildrive with a simple coupling, sits a PITTS electric clutch on its own stub shaft to take the drive belt's radial pull via a dedicated set of bearings. Picking a side along the sail drive, the belt won't care, we'd now be in position to look at one of the many lovely horizontal shaft 15-25hp air cooled Kohler/Honda/Briggs & Stratton industrial V-2 gasoline engines to push her along. Since you'd mount this engine higher in its own slop well, it will drain its gas fumes aft and out.

Yes, we may need another stub shaft since yanking on the engine's output shaft from a 3 o'clock or 9 o'clock position may risk ruining the crankshaft bearing. So it's two more bearings, another coupling and a stub shaft. This is almost as parts heavy as your car's drive train. But these are little pieces straight out of the industrial supply catalogues usually competitively priced. And you get to cultivate a constructive relationship with your friendly machine shop for cutting a keyway into those shaft pieces and whatever else you'll find good reasons for visiting those places. Ahh, what component-geometries to perfect, the budget variations to run and to then discover whatever you've overlooked, to end up with the drive train you deem fit.

With either inboard option we'd add another inch to her keel depth to clear that 15"-16" prop and support that underslung rudder. Not shown here is the option to do an outboard hung rudder which can look quite appealing as well, perhaps with integrated steps as a get back aboard ladder. And then you'd inevitably picture yourself standing facing forward and tiller under your arm, peering over the wheelhouse. That may be good for a few and tempts with assuming the proper posture, pea coat, cap, pipe and all. The stuffed parrot, however, stays bolted to her stem in lieu of carved pretties to greet the world with. But why a pipe??

Some would object, of course, that you'd obstruct the transom which, if kept clear, would actually allow a 5'6" Shoebox transversely off a davit for the times when conditions have you rather not be concerned with what that dink is doing hunting around on a longer leash.

And then there is Version #4, the Go Fast flavor sporting a 60hp large prop 4-cylinder turning a 13"-14" prop, here probably good to hit 20 knots and happily purr along at 12 knots for best compromise between fuel burn, progress and noise. Twelve affordable knots with the option of attempting to maintain 20 is a plausible way to evade weather you've been careless about tracking, allows decent progress up river and suggests faster crossing of exposed waters on your itinerary. All that, as long you'll keep an eye on the inherently limited fuel load one can carry on a modest hull such as this, such as perhaps 30gals below her cockpit sole plus perhaps another 20gals in two wing tanks under the benches.

We get this higher speed capability by running her mid section straight aft while thus also gaining displacement aft to carry the much bigger engine and its fuel. Then we trim off that keel down to a modest keel plank on which she'd sit on her trailer rollers. Some might even dream of a juiced up 50hp turbo-Diesel turning a small I/O drive.

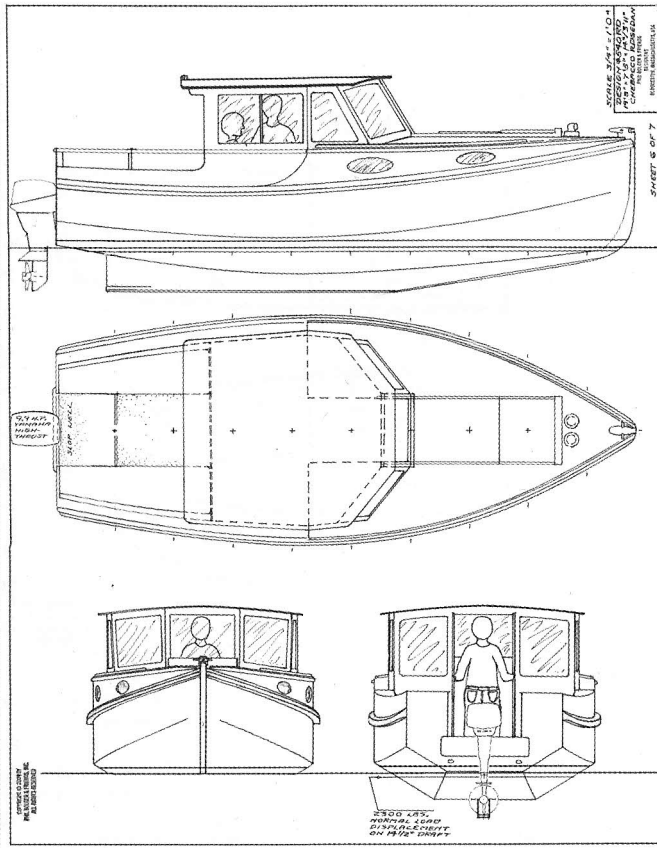
Whether gasoline or Diesel, three to four folks might enjoy going a fair distance offshore for some fine day fishing, with two fishing left and right in her cockpit, one driving and perhaps the fourth standing in the hatch forward with yet another rod. Or just two roaming to find those holes if not canyons for one or several overnights next to that cooler and its crushed ice to keep the precious catch looking good.

No doubt a Version #5 would see the outboard set in for a flush transom again should a marina deal reduce the cost per foot that much. And it may just be that the driveway or the larger garage suggests keeping her at just under 20' to make things fit best. That would work on the 6knot and the 20knot outboard option.

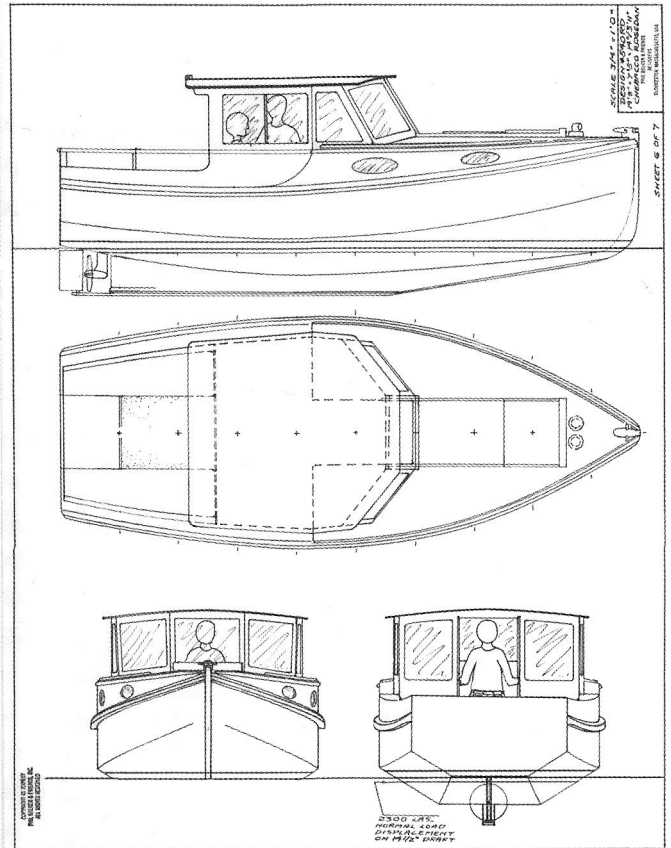
Clearly there is a close resemblance to the 15', 18' and 23' Diablo open double chine skiffs that have proved good rough water boats. In fact, going way back in time, Phil played that theme with several Texas Dorries up to the low 30's. And, of course, more recently there is 31' Samuel Clyde with that Diablo hull shape and a conventional I/O drive. Whether with go fast or go slow shape on this 20' raised deck cruiser geometry, the section should give a decent account of herself in choppy conditions.

I have these versions hanging on the cork walls in the office to take time out between less delightful work for a bit of dream rusing with her for a few minutes. Phil sure never broke that habit with whatever concepts hanging in plain sight. Not sure though whether he stood at the tiller of his 48' liveaboard Resolution smoking a pipe.

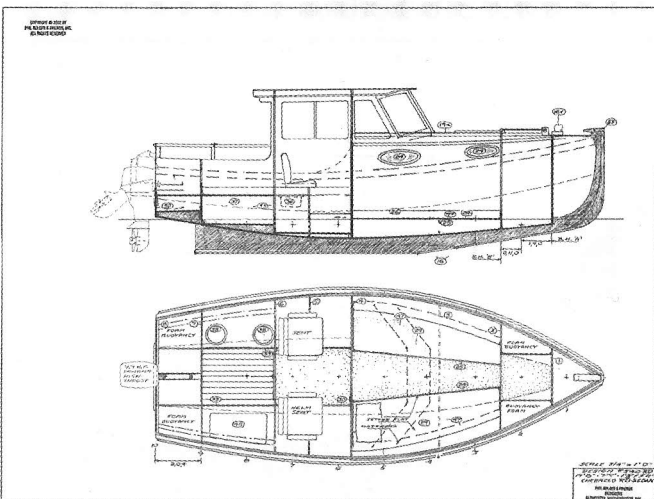
I am not sure either yet about the next issue, but we may see another somewhat counter intuitive interpretation of the Chebacco 20 theme. Just don't hold me to it though!



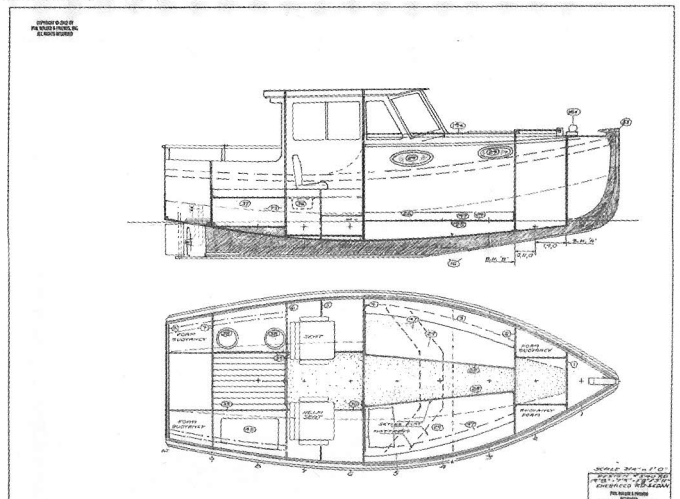
Version 2 Outboard



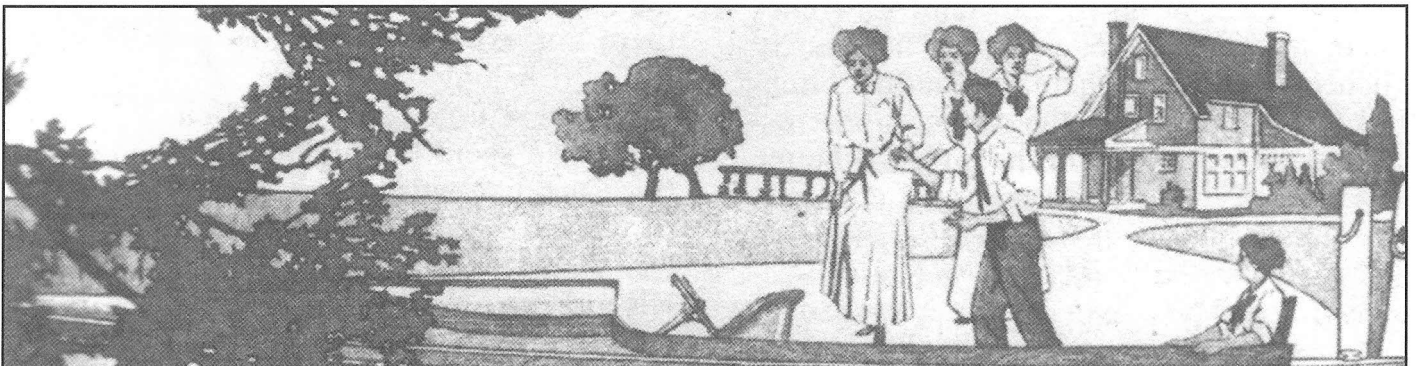
Version 3 Outboard

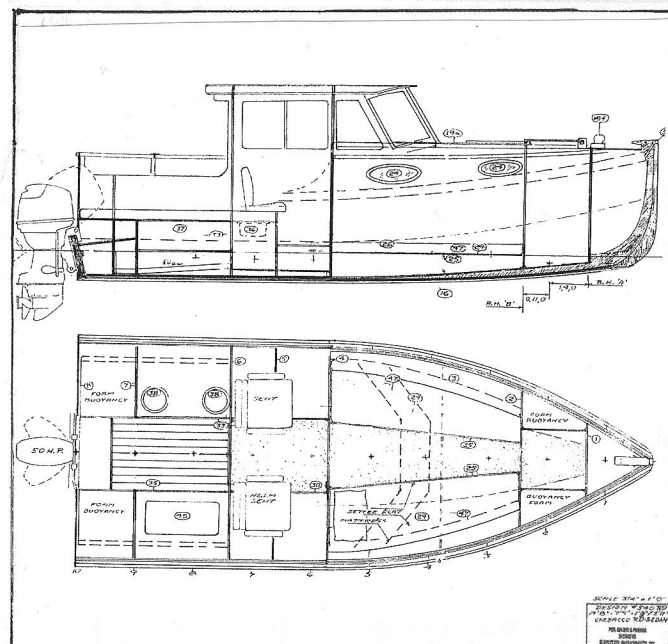
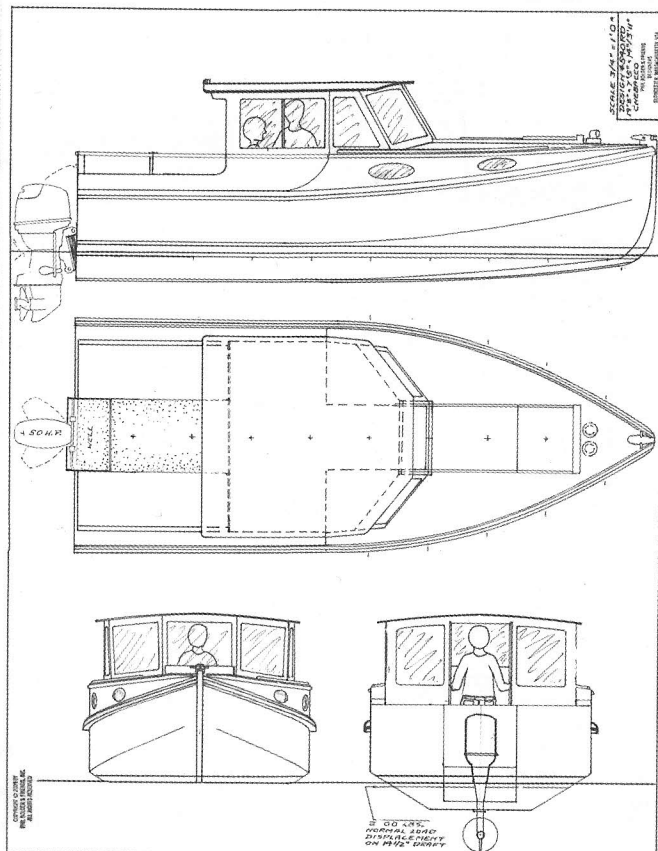


Version 2 Inboard



Version 3 Inboard





Version 4 Inboard

Version 4 Outboard

A Sedan Cruiser from the Golden Years

