



## CHESAPEAKE DEADRISE BOAT

# POINT COMFORT 18

## STUDY PLANS

Here is another little skiff inspired by a Chesapeake Bay working craft. In order to combine chine construction with the kind of bow that can punch into (instead of being punched around by) the Bay's notorious chop, builders there have long used cross planked "deadrise" construction in which the bottom planking twists markedly as it approaches the stem. While this method produces a fine and soft riding bow, it requires great skill as each bottom plank must have just the right amount of twist manually carved into it.

Plywood has a lot of advantages for small hull construction, but one disadvantage is that it cannot be made to form into this kind of bow, at least not in large pieces. This new design is drawn to use plywood – in large pieces where possible (roughly three quarters of the boats hull), and in small pieces where necessary to get the Chesapeake deadrise bow form. Construction has proven to be quick and easy.

This boat is designed to make good use of low horsepower – in fact, big motors are not recommended. Our boatyard 9.9 horsepower outboard gave 12 kts with four adults aboard. Twenty five horsepower should be viewed as the upper limit.

The plans consist of eight sheets: Lines, Outboard Profile, two interior layout options, Building Jig, and three sheets of full sized patterns. Also included is a Compact Disc with construction and finished photos of the prototype boat, and other various and possibly helpful information.

### PARTICULARS

LOA – 18' 3"

LWL – 17' 4"

BEAM – 5' 5"

DRAFT – 6" motor up

Weight – Approximately 350 lb. less motor

HULL TYPE – Chesapeake deadrise skiff

CONSTRUCTION – Plywood

SUITABLE FOR – Somewhat protected waters

TRAILERABLE – Yes

PROPULSION – outboard motor, 10 to 25 hp.

SPEED – Up to 12 to 20 knots, depending on motor.

SKILL REQUIRED – Beginner

LOFTING REQUIRED – No, full size patterns included

PLANS SHEETS – 8 sheets plus Compact Disc with photos and other info.

PLANS PACKAGE DETAIL – Above average

PLANS COST – Including building rights for one boat – \$200.00 plus S&H (check for current rates).





## POWERING THE POINT COMFORT SKIFF

The POINT COMFORT skiff designs gives one of the best combinations of quick and easy building, soft riding, and fuel efficiency I have ever encountered. It will give a smooth ride in the kind of small chop that would knock your fillings loose in a flat bottomed skiff, and get the whole family there in good time with a tiny fuel bill.

We experimented with three different tiller steered motors on the prototype POINT COMFORT 18. Our yard skiff's Yamaha two stroke 9.9, equipped with Doel Fins, gave 15 knots with one person aboard, and 12 knots with four adults. An older Johnson 15 hp two stroke gave 18 kts with one person, and a new Yamaha 20 hp four stroke gave 21 knots. This is about as fast as is appropriate for this kind of boat. A 25 hp remote steered motor with a center console will allow you to take any safe load on a quick trip.

Because of the somewhat unusual hull shape of this type of boat, extra care is required to make certain that your boat trims properly when at speed. This is done by adjusting weights and motor trim angle, or by adding a small “wedge” at the transom. When running along, the forefoot (bottom of the stem) should just be touching the water's surface, which gives the best combination of speed, soft riding and good handling. When the bow is running too high, the boat will pound in a chop, and the bow will blow off in a side wind. If the bow is too low, boat speed will suffer, and you will take more spray over the bow.

When the trim is correct, the bow will rise very little as you come up to speed, and may fall very slightly at wide open throttle with bigger motors. The ride will be soft in a chop, and speed will be good with very low fuel consumption. Of course, when you are aboard, it is hard to see if the trim angle is correct – it will be very helpful to have someone observe from a dock or another boat until the boat is properly set up and you have learned to recognize the signs of improper trim.

The most challenging situation arises if you are planning to use the boat alone with a tiller steered motor. In this case both the motor and operator weight are aft (perhaps a fuel tank and battery as well). In this case, the motor will probably want to be tilted all the way down, and any movable weights stowed forward.

If this arrangement does not produce satisfactory trim, there are two options. We have had very good result from installing Doel Fins on the anti-cavitation plates of the motor. These are inexpensive, easy to install, and do a good job of lifting the stern (and bringing the bow down). Once they are installed, the motor trim adjustment will likely want to be decreased by one or two steps to arrive at the correct running angle, which gives you the ability to adjust tilt for unusual loads.

Another option is to install bottom wedges, a time honored method of correcting a high trim angle. Nowadays, the easiest way to do this is to use an epoxy/microballoon putty to build a slight wedge on the bottom planking where it meets the transom. The wedge is quite small, probably no more than 3/8" thick at the transom, feathering to nothing about 10" forward of the transom. However, I prefer the Doel Fins, as they are quicker to install, adjustable and may improve motor performance as well.

If you will be using a motor with remote steering and power tilt, your job will be simpler. The weight of the console and helmsman will be more forward, and the ability to trim the motor while underway will allow you to adjust for varying crew/cargo weight. Your battery will best be installed aft, to shorten the wire run, but if large fuel tanks are installed, they may need to be more forward. If the typical 6 gallon portable tanks are used, the tank in current use can be under the aft deck, with spares up forward.

