

Photo Essay of How to Build a **Mini Miss** Ultralight Boat



Plans for this boat are available online at:

<http://www.spirainternational.com>

The Construction of a Mini Miss In Mississippi

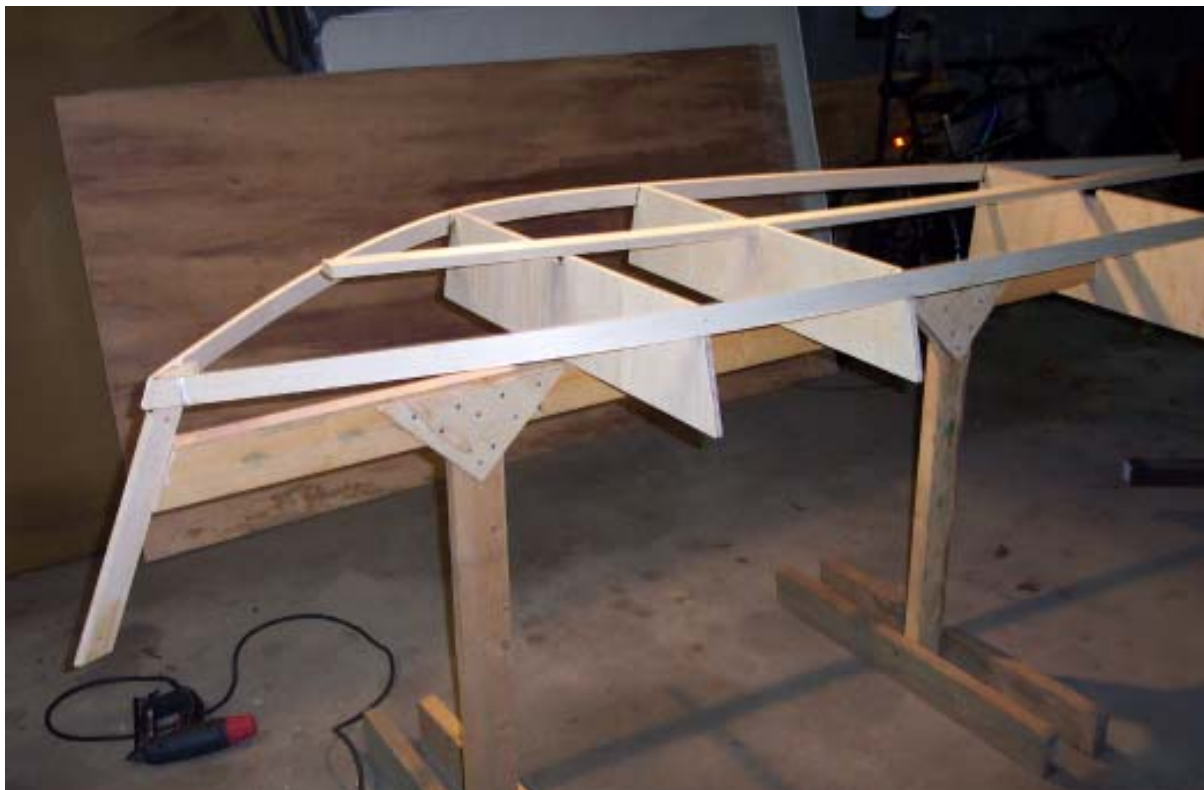


Before the boat is built, a strongback jig is made. This is detailed in the plans. A Strongback jig provides a raised beam on which the various parts of the boat are temporarily attached, raising the assembly to a comfortable height for working.



The bulkheads are then laid out in accordance with the plans and cut out. A table saw is handy, but not required. The parts may be cut out with a saber saw or even hand saw.

Next, the transom, stem, and bulkheads are positioned on the strongback beam and temporarily attached in-place so that the remaining parts can be attached to these basic elements.



Adding a chine log and keelson members completes the basic structure. The Mini Miss is a stitch and glue boat so the skin forms the main structural element of the boat. These parts simply hold the skin in place while it is bonded.



The framing is faired to accept the skin. This builder is using a disc sander. Other methods include planing or even rasping to accomplish this task. It is important that the plywood skin fit properly.



Thickened epoxy fillets edge bond the skin together on the outside. This is then reinforced with a layer of fiberglass tape to unitize the skin and create a kind of one-piece “unibody” type construction that carries the load but keeps the structure very light.

The inside joints are similarly bonded using a thickened epoxy fillet and fiberglass tape. Finally, the entire structure is saturated with epoxy for strength and durability.



Seats, rub rails, motor board, oarlock supports are added last.

Now it really starts looking like a boat.





Toss it in the pool to make sure it floats, and viola, your own home crafted boat is ready for adventure.

