

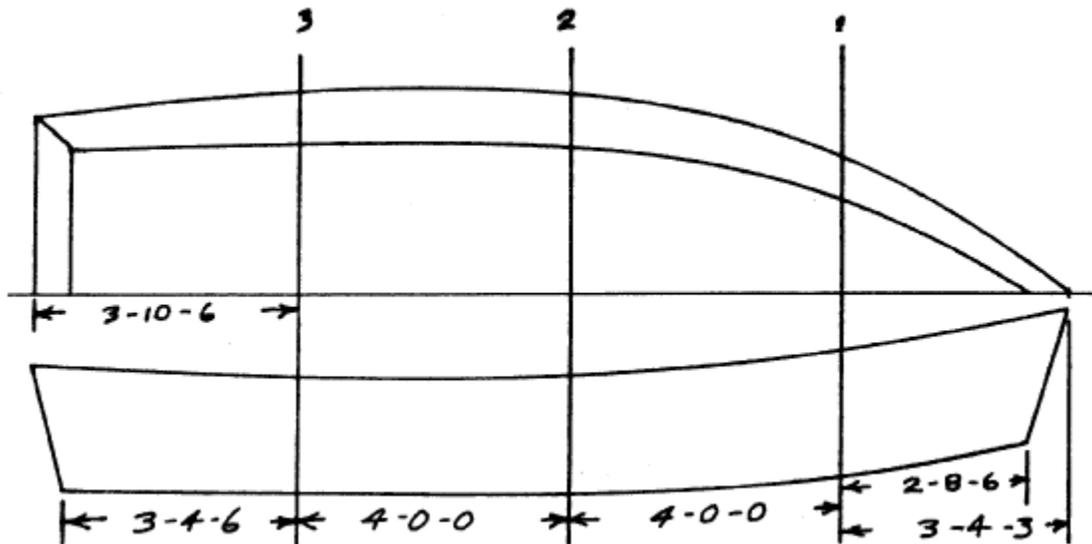
Below is the original article from Number 18 of Lines & Offsets c. 1979 (edited and published by Robert B. Chapel) on the building of a small Pacific City Dory type skiff by Gilbert Vik. The skiff article shows two traditional methods of dory skiff construction. On the skiff built by Gordon Gleason for Thom V we used a combination of the Stitch & Glue or Tape & Seam and Epoxy method of construction. No frames were used, the motor well, center seat, center bridge deck with middle athwartships bench seat and bow deck bulkhead, along with the full length outside spray rail hold the boat together. A 3 / 4" ply bottom was fastened to an inner chine. This may not be necessary if a thick epoxy fillet is used as the inside chine with glass tape saturated with epoxy on the outside joining the sides and bottom together. Particulars of the Vik Skiff: LOA 15' 2", Beam at Sheer 6' 4", Hull Depth 22", Dry Weight around 250 Lbs., Horsepower 25 HP.



Here is how the modified little Pacific City Dory looked fresh out of the Gleason boat shop in the spring of 1986.

A PRACTICAL OUTBOARD SKIFF by Gilbert Vik

Although I cannot say my father, Brit Vik, was using flat bottomed skiffs before outboard motors were invented, I can say he was using them for many years before outboards came into common usage. Not only that, he has continued using them right up to the present, mostly in connection with his occupation as a commercial fisherman. In 1961, he designed and built three flat bottomed outboard skiffs of a model that I feel cannot be improved upon in its perfection of proportions and shape for good handling and performance. I have had considerable experience with flat bottomed outboard skiffs and have not seen or used any before or since that can compare with these. Everyone who has used them agrees.



The variables one has to work with when designing a boat of this type are: 1) depth, 2) beam to length ratio, 3) flare to the sides, 4) the curve of the chine as it sweeps in and up to meet the stem, and 5) the slope of the stem. The depth of this model has proved to be about perfect for its beam to length ratio for it has sufficient freeboard to carry well without having so much that windage becomes a problem when light. The beam to length ratio has proved to be excellent as well, since it turns in a very good top speed when light, yet will plane when heavily loaded with modest power. Improved stability and appearance are the benefits of flare in the sides of a skiff, but if carried too far, it becomes difficult to work over the gunwales and disagreeable to tie alongside another boat. I think the perfect compromise has been achieved in this design. Perhaps the most troublesome aspect of this type of boat is the shape of the chine forward since it has a tendency to “trip” or “catch” in a swell or chop and throw the bow sideways, sometimes in an alarming and dangerous fashion. This design does “catch” or “trip” but in a very mild manner never causing any loss of control for an operator who is alert to this possibility. Perhaps someone among my readers will say, “Aha, but I have seen designs that claim to eliminate this problem”, and I must reply, “You will notice that such a design resembles nothing so much as a piece of pie, and its only useful purpose would be for transportation in a lightly loaded condition”. The rake of the stem in boats like this must bear some relationship to the flare of the sides, but it can vary to a degree (not 1/360th of a circle), the notable virtue., of the stem angle in this boat being the ease with which one can step in or out of the bow, Yes, if I were to build a flat bottomed outboard skiff, I would adhere strictly to the proportions of this design, no matter if it was to be larger or smaller.

From the accompanying drawing and table of offsets, one can visualize the appearance of the boat referred to and have the measurements necessary to build one of these wholesome craft, Such a

boat can prove to be very valuable to waterfront dwellers having a multitude of aquatic pursuits, surely of much greater value than the modest cost of materials. A construction section is included as well, located at station two. Side A shows plywood bottom and sides, whereas B shows planked bottom with plywood sides which I think is preferable. Bottom framing can be 1 by 3 to 1 1/2 by 3 on 12-inch centers, with durable hardwood preferred or the same material as the bottom planking in the planked version. If the bottom is plywood, use three 3/4 by 3 battens scalloped into the frames as shown, giving a limber hole each side, then terminate the battens on the last frame before the transom, allowing athwartships passage for the water to your pump or transom drain plug. The limbers on the planked bottom should be about 1/2" by 1" each side, fairly close to the side in the center of a plank. Plywood for the bottom should be 5 ply, 3/8 or 7/16 marine grade or heavier if you like, For planking the bottom I would pick 3/4" cedar, although slightly lighter or heavier would be fine.

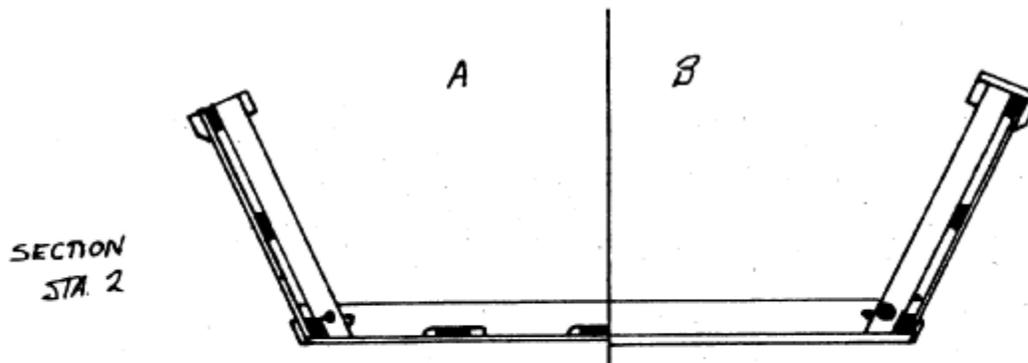


Table of Offsets - Lines to inside of plank - Dimensions in feet - inches - eighths

Station	Transom	3	2	1	Stem
Half Br. Sheer	2-8-1 ⁺	3-0-4	3-0-6	2-1-1 ⁻	0-0-3
Half Br. Chine	2-2-1	2-2-6 ⁺	2-2-6 ⁺	1-5-5 ⁺	0-0-3
Height a.B Sheer	1-0-6	1-3-0	1-2-7	0-10-4	0-1-4
Height a.B Chine	3-0-0	3-0-0	3-0-0	2-9-1	2-2-5

One piece of marine plywood 4' by 16' will make the sides if cut in the middle, and 3 ply 3/8 will be adequate for all but severe treatment. Let the straight edge of the side planking dictate the sheer line regardless of what the lofting indicates it should be, Frames for the sides should be 1" by 2" A durable hardwood spaced every other bottom frame, and put an extra one in if needed for fastening something like a bulkhead, etc. The chine log is to be 1 1/4" by 1 1/2" durable hardwood which will require a piece 11,4 by about 2 1/2" before it is beveled. Use 5/16 bolts to fasten side frames to bottom frames and chine log to side and bottom frames. The battens for the plywood on the sides should be 1" by 2" durable hardwood fastened to the frames with 8d common nails (2) on each frame, except the batten at the sheer should have only one nail clear of the spot where the bolt will go through guard, plywood, batten, frame, and inner sheer batten. All these longitudinal items should be full length. The top of the middle batten should be beveled so it will not trap water against the side of the boat. The guards and inner sheer batten are best of hardwood, too. Since the bolts through the gunwales need to be countersunk inside and out, I will suggest 1/4-inch bolts to minimize the weakening of the wood by countersinking. Noticeable by their absence are the frame knees so common to this type of boat. If a bulkhead is placed somewhere in the vicinity of the middle of the boat, the truss effect of the gunwales eliminates the need for such knees, If you

want frame knees, by all means put them in. The original example of this boat has a thwart just forward of station two with bulkheads on the fore and aft sides forming a locker. Do not leave out a good breasthook and transom knees at the gunwales. An option illustrated in section B is a covering board on the gunwales which will stiffen them and enhance the life expectancy of the boat by improving its weatherability. You thereby lose some handy places to tie lines; however, this construction allows the tying of lines to the side frames. To stiffen the transom of an outboard boat, I like to bolt something like a 2" by 6" piece on edge just low enough to clear the motor mounts running the full width of the transom; remember to countersink the inside ends of the bolts. The addition of floor boards of some kind will save wear and tear on the frames and planks as well as increasing the efficiency of movement of occupants.

Perhaps a few comments are in order regarding things not to do with this or other similar boats. Do not use a motor with anything less than a 20' shaft. Do not put an eyebolt on the outside of the stem. Do not leave the oars at home. Do not believe everything you may have heard about flat bottomed outboard boats being extremely seaworthy, etc. While you can rely on them to carry you safely over most any sea if moving slowly or not at all, you will surely be mistaken to expect them to take you very far or very fast in really bad conditions. The last half of this last statement likely applies to many other types of outboard boats as well, whereas the first half might not apply to them. If you choose to ignore these and other warnings, perhaps you should take along a 98-channel 1500 killi whack transmuter which automatically compensates for nautical density.

One additional construction detail that occurs to me is to crowd the inner sheer battens down some as they approach the transom to keep it from being unnecessarily high. This crowding should be done in a gradual, graceful fashion.

If a considerable amount of towing is expected, the stem can be made to take a towline without using any hardware, but this must be done during construction. This is done by making the stem extend a couple of inches behind the bearding line of the stem rabbet. Next, drill a hole through it from side to side twice the diameter of the towline and low down on the stem and carefully mark the location of the hole on the outside face of the stem. Make some filler pieces to fit between the stem and the planking where the hole is, and after the planks are on, use the marks you placed on the stem to bore from the outside of the plank in to meet the hole at the side of the stem. This gives you a hole with beveled corners that needs only a little smoothing before inserting the line and splicing it back on itself. This is a most satisfactory way of attaching the bow tie-up line even if you do not expect to tow the boat much.

This is enough on the subject for one who has even a vague idea how to proceed with such a project, while someone who does not would not find three times as many words adequate. If you find yourself in that boat, try to locate some help.



The Vik Skiff as she looked in 2006 with her Sunbrella 'hat' with integral roll down windshield, the Tempress pilot seat, and the front cushioned passenger seats.