

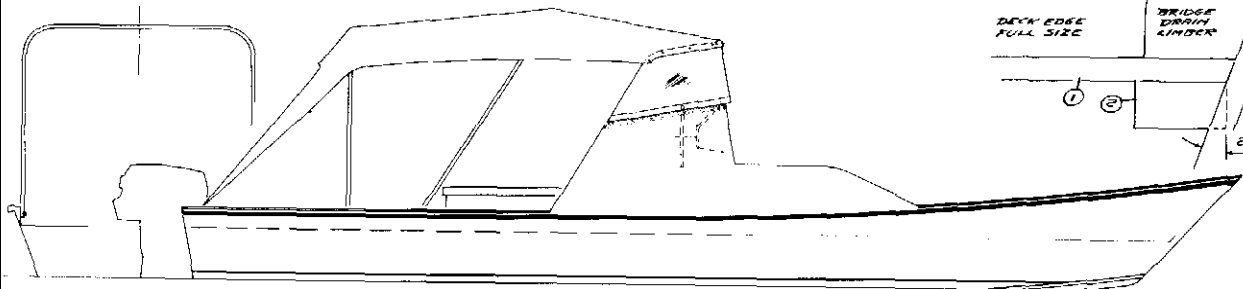
Sharpshooter

Length overall	23 feet
Breadth	5 feet 7 inches
Builder	Waterlines. Inc., Southold. New York

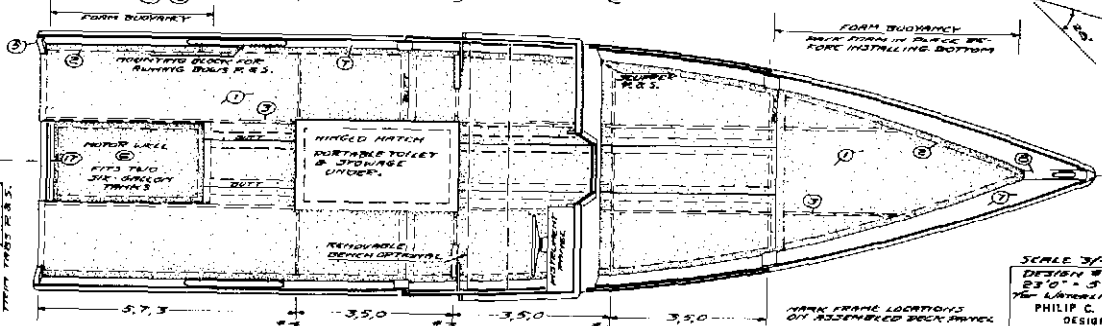
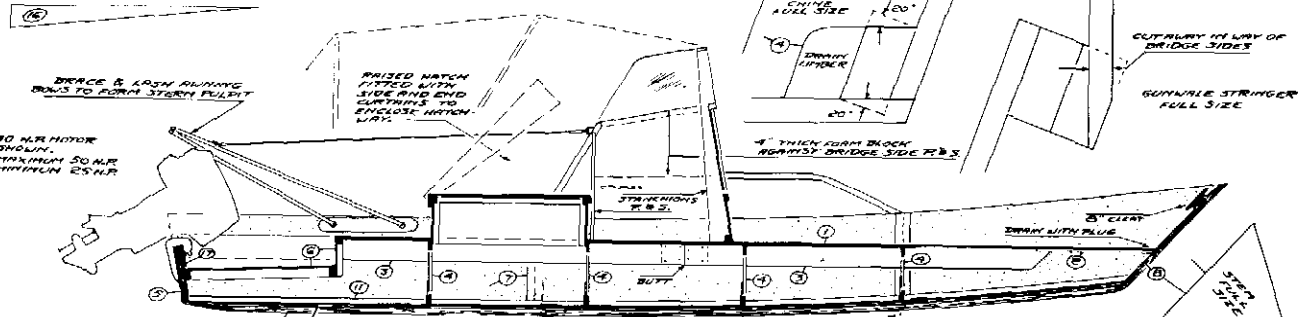
This design was a sharp lesson in over-ingenuity. It was meant to be the first item in a proposed boat plans business, and I took my assignment to be to come up with something distinctive, to draw attention and get the enterprise started.

I've lost count of how many of these "square-tail dories" I've designed since 1954, when I first picked up the idea from a magazine article. It must be at least 20 different variations from 15 to 45 feet long. Results on all the others went into this one, plus the prefabricated no-jig construction that Harold Payson and I had worked out. She was about the last word in proportioning hulls to use stock plywood with minimum waste. That part worked out well. The prototype was built without many problems by a man who'd never built a boat before, and it came out the intended shape. She ran well, making 11.25 m.p.h. with a 10 h.p. motor, carrying 510 pounds; and 25 m.p.h. with 25 h.p. She could even be rowed well enough to be useful at times. She was naturally a very dry boat and apparently pounded no more than other shallow-bodied outboards — not destructively, at any rate.

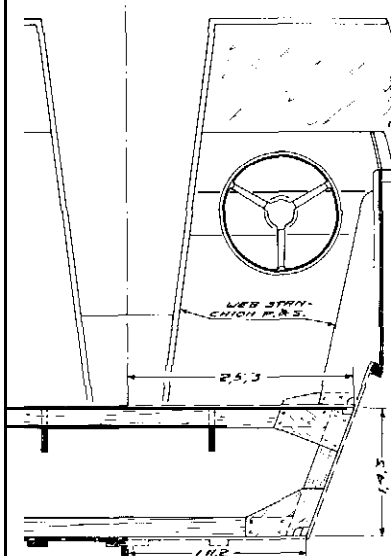
GALVANIZED OR ALUMINUM
RUNNING BOLTS



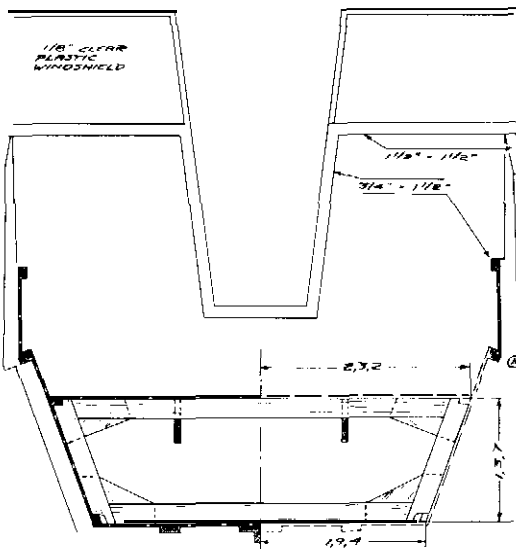
TRIM YARD 1/2 FULL SIZE



SCALE 3/4" = 1'-0"
DESIGN # 339
28' 0" x 5' 11"
THE WATERLINES INC.
PHILIP C. BOLGER
DESIGNER
GLOUCESTER, MASSACHUSETTS

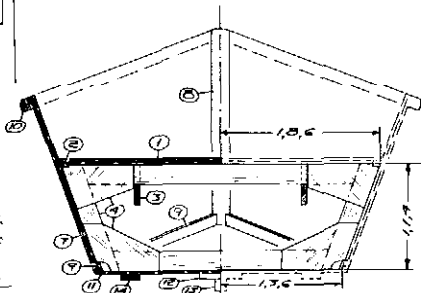
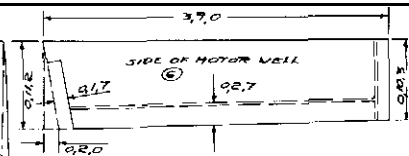


FRAME #3 LOOKING FORWARD
NO BOTTOM BEVEL - SIDE BEVEL 1"



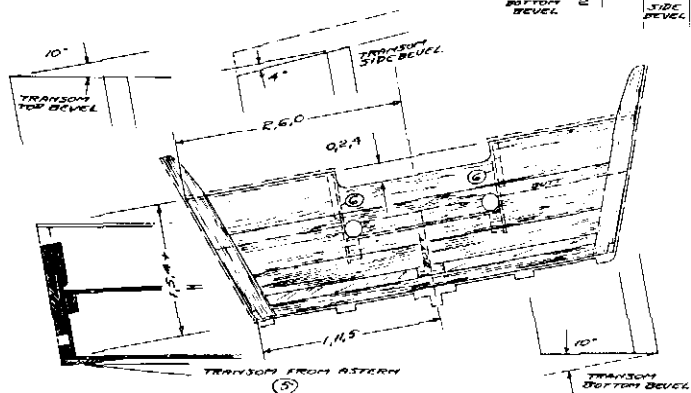
FRAME #2 LOOKING AFT

BOTTOM BEVEL 2" SIDE BEVEL 1 1/2"



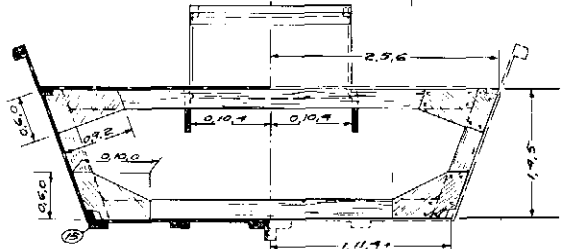
FRAME #1 LOOKING FORWARD
DIMENSIONING BEGINS FOR
DECK & SIDE BUTT STRAPS

BOTTOM BEVEL 1" SIDE BEVEL 1 1/2"



TRANSOM FROM STERN

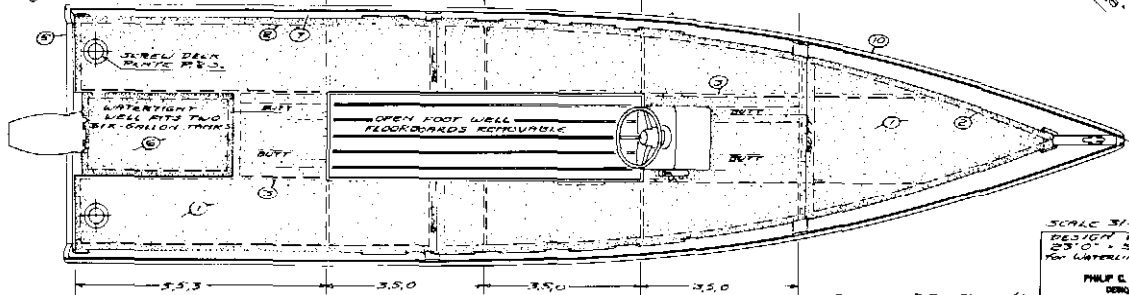
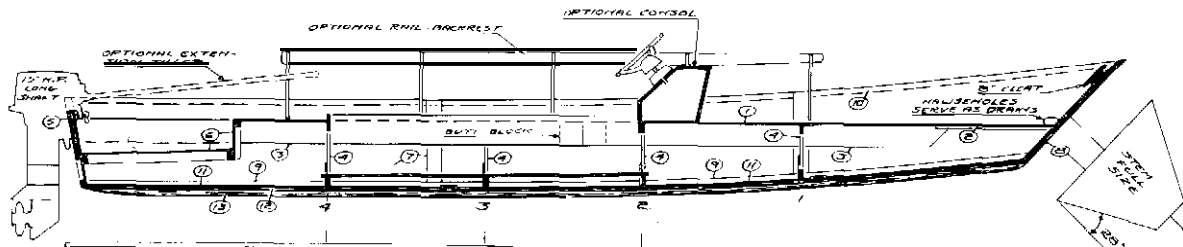
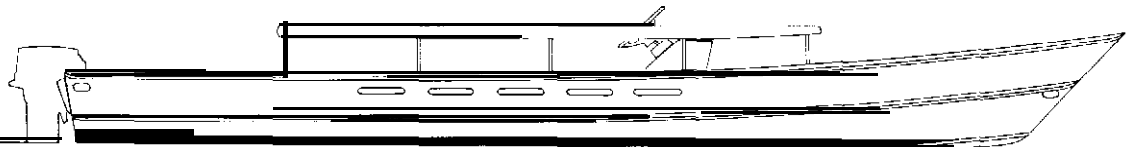
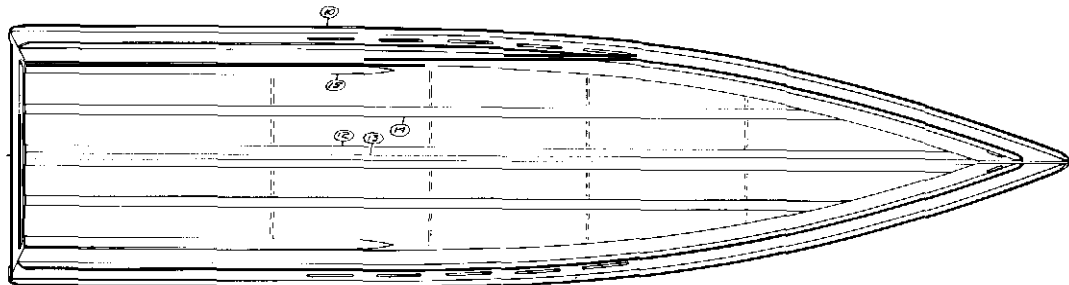
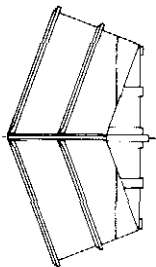
TRANSOM
BOTTOM BEVEL



FRAME #4
LOOKING FORWARD
NO BEVEL

SCALE 1 1/2" = 1' 0"
DESIGN #337
23 1/2" x 31 1/2"
FOR LAYERS, INC.
PHILIP C. BOLGER
DESIGNER
GLOUCESTER, MASSACHUSETT.

DIMENSIONS IN FEET, INCHES
& EIGHTHS TO INSIDE OF
MARK BEFORE BEVELLING.



SCALE 3/4" = 1'

DESIGN #339
23' 0" x 8' 0"

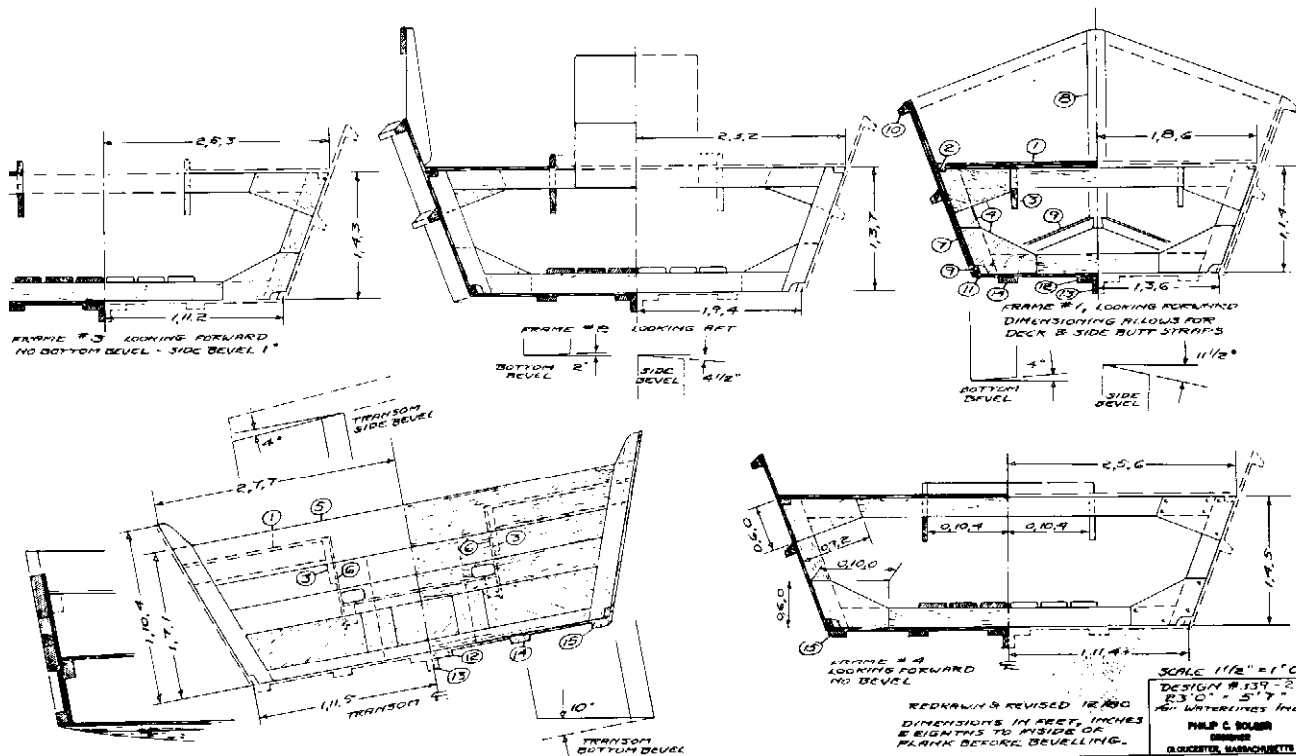
FOR WATERLINGS, INC.

PHILIP C. BOLGER

DESIGNER

DORCHESTER, MASSACHUSETTS

REDRAWN & REVISED 12/80



So far, so good. But I had decided that I could make her self-righting by giving her the high flush deck and the bridge structure to carry some buoyancy high up; that is, far out if the boat got down on her side. I imagined a spectacular demonstration with the boat recovering from bottom-up with water cascading off her deck. I'm not sure Burge Whiteside, who commissioned the design, was **as** enchanted by this vision as I was, but he liked the "Russian destroyer" styling it produced.

His disillusionment began when he found how tender she was. She felt top-heavy, and is so, though not quite in the way a first glance might suggest. The superstructure isn't that heavy. The trouble is the height of the weight of crew and passengers, especially since the layout encourages them to stand up.

Confident that she was safe, I brushed off the complaints, arguing that it was a safety feature that reminded people to keep their weight centered. "She'll warn you of a stability problem in good time," I said, "**not** like these stiff boats that will flip bottom-up all of a sudden." This isn't a terribly stupid position, by the way, though it probably isn't one that would do a salesman much good. It's possible that I'd have gotten away with it to some extent if the boat hadn't revealed a dismaying vice. As she crossed the wake of a heavier boat on the same course, she started to yaw. Burge put the wheel over to straighten her out, whereupon she lurched horribly. Everybody grabbed for handholds, which pulled the boat over still more, while the yaw continued. Burge pulled the throttle. She stopped at once, as these light boats will, and recovered her balance.

It was a demonstration of sorts of my point about reserve stability and buoyancy, but it was pure luck that nobody went over the side and maybe through the propeller. It had **not** felt like the gradual heel I had talked about, and had been alarming, to put it mildly. Further testing showed that it had not been a fluke. She would do it every time she went through a following wave at a certain angle. Nobody could get up the nerve to see what the ultimate position would be if she wasn't stopped, nor was there much point.

We had to abolish my superstructure and cut away the deck to make a footwell, as the photo and second set of drawings show. She was no longer self-righting. The boast of ability to cope with big breaking seas had to be dropped. But the lurching ceased, and she became a well-mannered, forgiving boat.

Relieving her of the weight of the upper works also made her even faster and cheaper to build and run than she'd been originally,



Sharpshooter is sleeker and no longer scary, without the tophamper. (Mike Richter photograph)

and it improved another of her virtues — she left very little wake to disturb her surroundings at any speed.

So *Sharpshooter* ended up an excellent boat, but I was much embarrassed at what Burge went through getting there. He, however, had improved the time by inventing the Dolphin spline weight, the one with the molded-in grips, so much handier to use than the old patterns that nobody who has tried them will use any others if he can help it. Waterlines, Inc., has been so busy filling orders for these and other improved marine drafting equipment that selling boat plans ceased to have a high priority.