

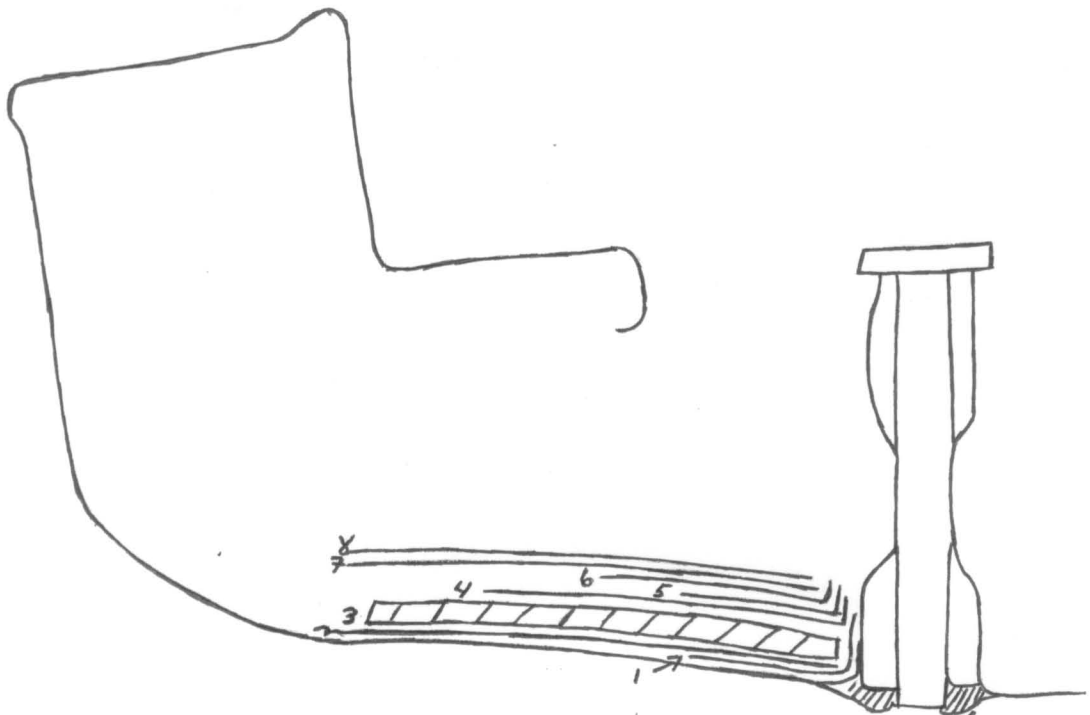
Flying Scot, Inc.
Balsa Sandwich Repair Instructions

Important: Ambient temperature has a large affect on resin cure time. At 80 degrees you may not have enough time to wet out the mat and lay the block before it cures. It is best to go with smaller pre-measured quantities that can be easily catalyzed and mixed as you go rather than one big mix.

1. Remove glass on top of balsa sandwich
2. Chisel out the old balsa blocks making sure that everything is removed as the new material will not bond to a moist surface.
3. Grind or sand smooth
4. Vacuum out all dust
5. Paint with resin and allow to cure
6. Tailor the $\frac{3}{4}$ oz. mat to cover the area under blocks
7. Wet out the $\frac{3}{4}$ oz. mat with resin and eliminate any air bubbles
8. Lay the balsa blocks in the brick pattern being sure to press down hard to eliminate any air trapped under the blocks
9. Sand smooth making sure to grind or sand well beyond the edge of the new balsa job to allow the new mat and roving to bond
10. Paint with resin and allow to dry
11. Taylor the mat and roving to fit, overlapping beyond the balsa 3 to 4 inches
12. Mix the resin in small batches (2 quarts to start). This prevents the resin from becoming hard before you have time to work with it.
13. Pour the resin onto the mat and roving
14. Work the resin back and forth with a roller or squeegee until all of the air is worked out.
15. Allow to cure
16. Brush-paint with a gelcoat that contains a surfacing agent to make sure it is completely sealed. **Tip: You can mix fine sand into the gelcoat to give you a non-skid finish.**

Layers:

1. 108" x 5" x 1.5 oz mat - under blocks & up side of trunk
2. 167" x 22" x 3/4 oz mat - under blocks
3. Balsa blocks
4. 120" x 12" x 3/4 oz mat - over blocks & up side of trunk
5. 85" x 4" roving - over blocks & up side of trunk
6. 85" x 5" x 3/4 oz mat - over blocks & up side of trunk
7. 170" x 30" mat - over blocks
8. 170" x 30" **roving** - over blocks




REPAIR OVERLAP
4" minimum

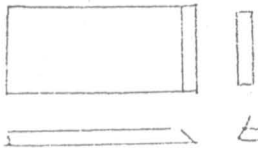
BLOCK DESCRIPTIONS

ALL Balsa BLOCKS ARE 1/2" THICK. THE GRAIN IS PARALLEL TO THE LENGTH. BLOCKS ARE RESINED IN THE BOAT WITH THE LENGTH PARALLEL TO THE CENTER BOARD BOX.

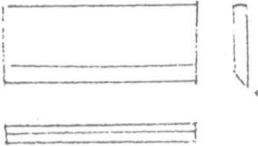
Total number (2 halves = 1)
554 for entire bottom



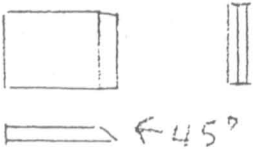
L W
5 3/4 2 1/4 F.L. (474)
FULL LENGTH - MOST OF BOAT



5 3/4 x 2 1/4 F.L. (11)
E.B. FULL LENGTH - USED ON MOST AFT PART OF CORE
45°



5 3/4 x 2 1/4 F.L. (40)
S.B. FULL LENGTH - USED ON SIDES, SIDE BEVEL
45°



3/8 x 2 1/4 H.L. (34)
HALF LENGTH - USED AT BOW + STERN
END BEVEL
45°

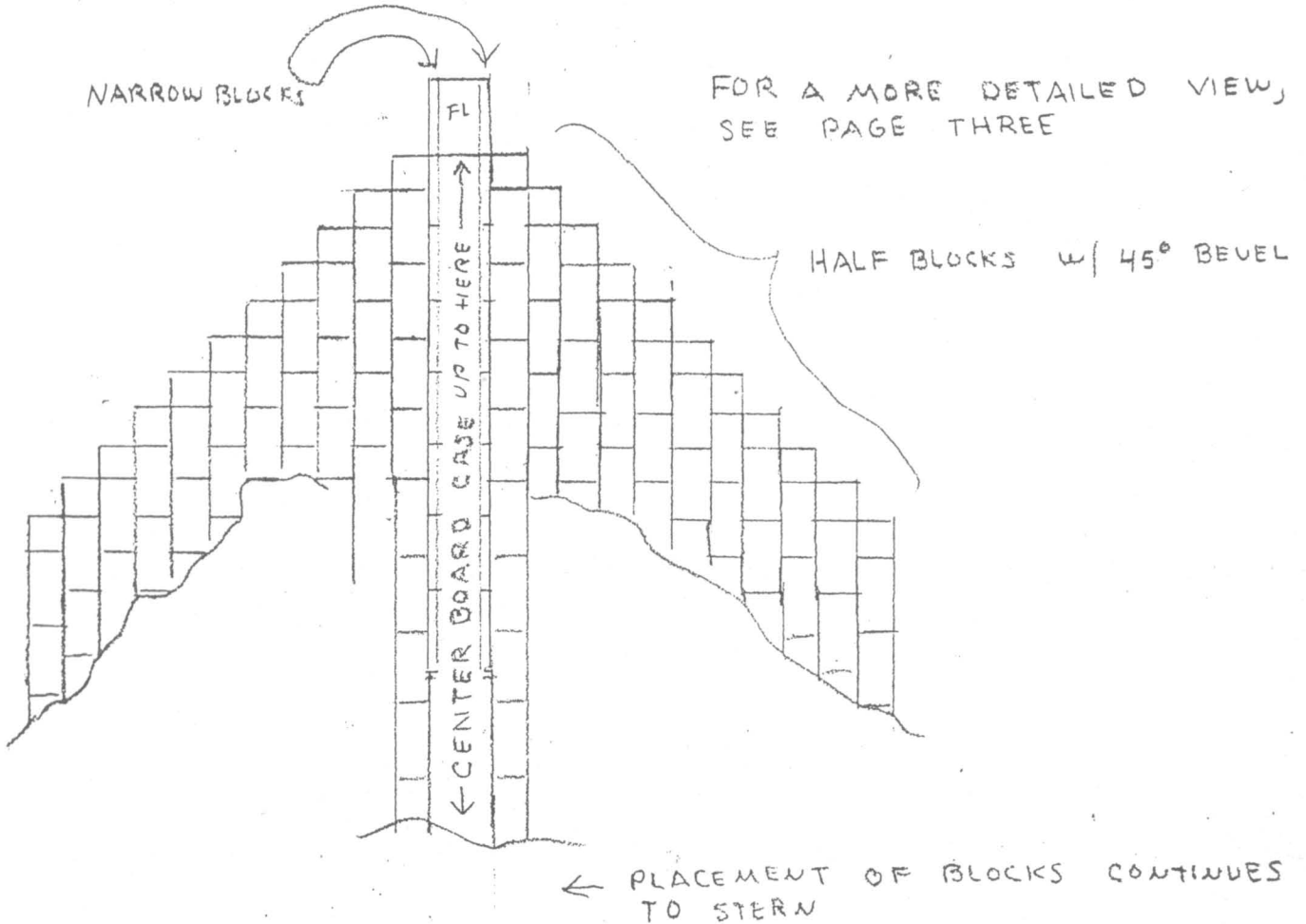


5 3/4 x 1 25 H.W. (7)
HALF WIDTH SEVEN AFT OF C.B. CASE, (ON ONE SIDE ONLY)

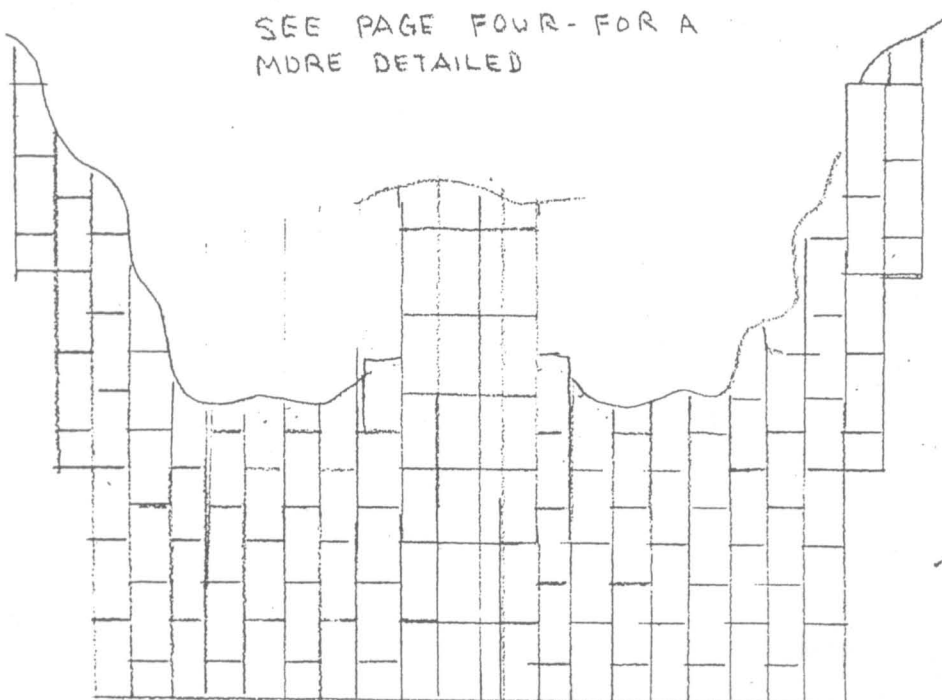


5 3/4 x 1 N.W. (12)
NARROW WIDTH - SIX ON EACH SIDE OF C.B. CASE AT BOW

BALSA BLOCK PLACEMENT AT BOW



BALSA BLOCK PLACEMENT AT STERN



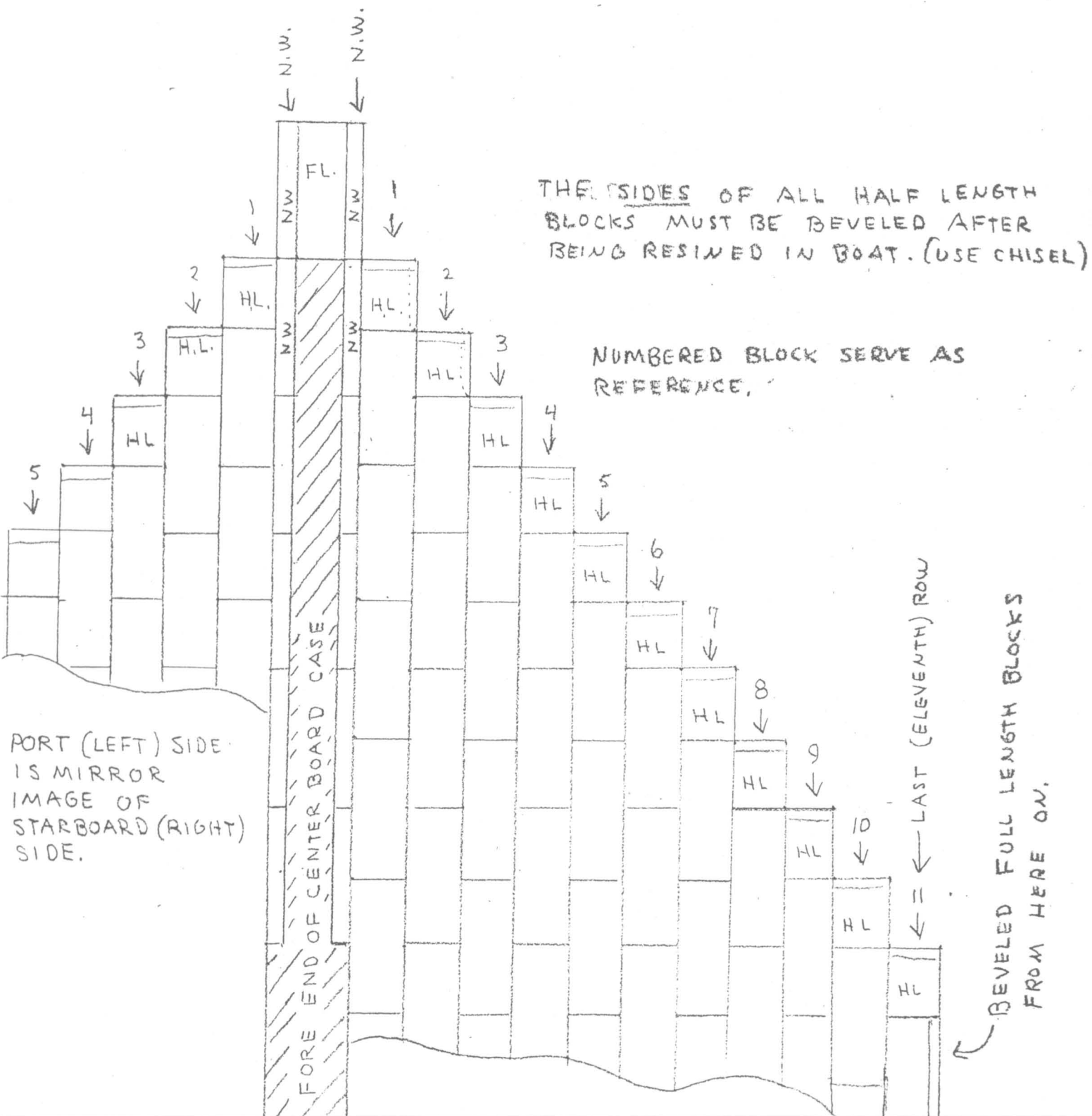
SEE PAGE FOUR - FOR A
MORE DETAILED

NOT SYMMETRICAL HERE. THESE 2 ROWS ARE IN LINE DIRECTLY AFT OF
C.B. CASE

FLYING SCOT Balsa Core - AT BOW

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SAME SCALE AS PAGE FOUR

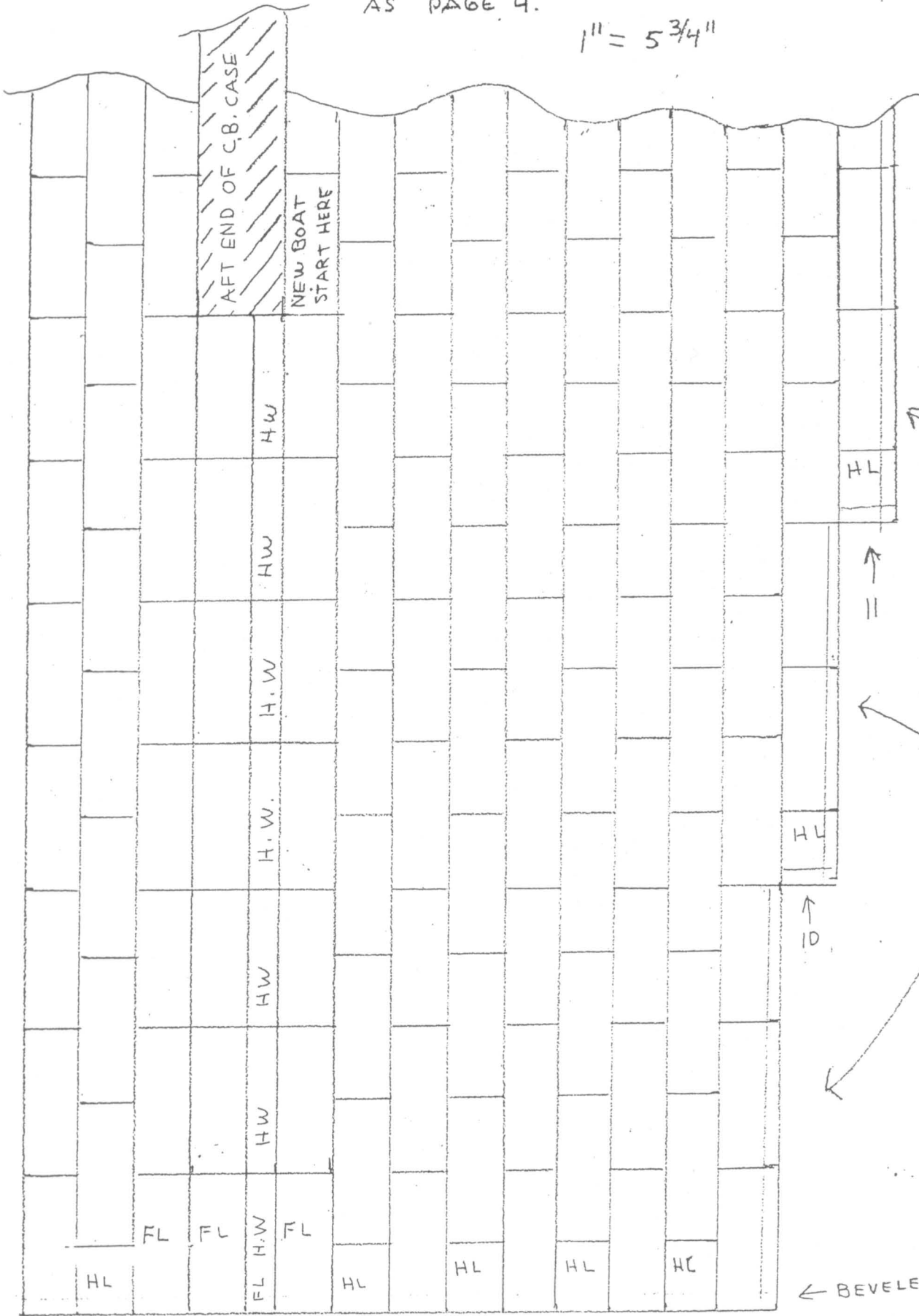
1" = 5 3/4"



THIS PAGE IS TO SCALE - SAME SCALE
AS PAGE 4.

1" = 5 3/4"

THIS SIDE IS SYMMETRICAL WITH STARBOARD



- ↑ 3
- ↑ 2
- ↑ 1
- SAME
- ↑ 1
- ↑ 2
- ↑ 3
- ↑ 4
- ↑ 5
- ↑ 6
- ↑ 7
- ↑ 8
- ↑ 9
- 10
- 11

AFT AND SIDE DECK LAYOUT

use dish pans to space your fastener blocks

side deck 4 bl. wide
ends with fwd corner of seat

from aft corner of deck:
1½ bl. fwd. 1 bl. out blocks marked H are hardwood
next 1½ bl. fwd, 1 bl. out 2½" x 3/4" x 6"
next 2½ bl. fwd, 1 bl. out
next 1½ bl. fwd, 1 bl. out
trim corners with knife

blocks on side deck
17 bl. long, 4 bl. wide
outer row 13½ bl.

H H

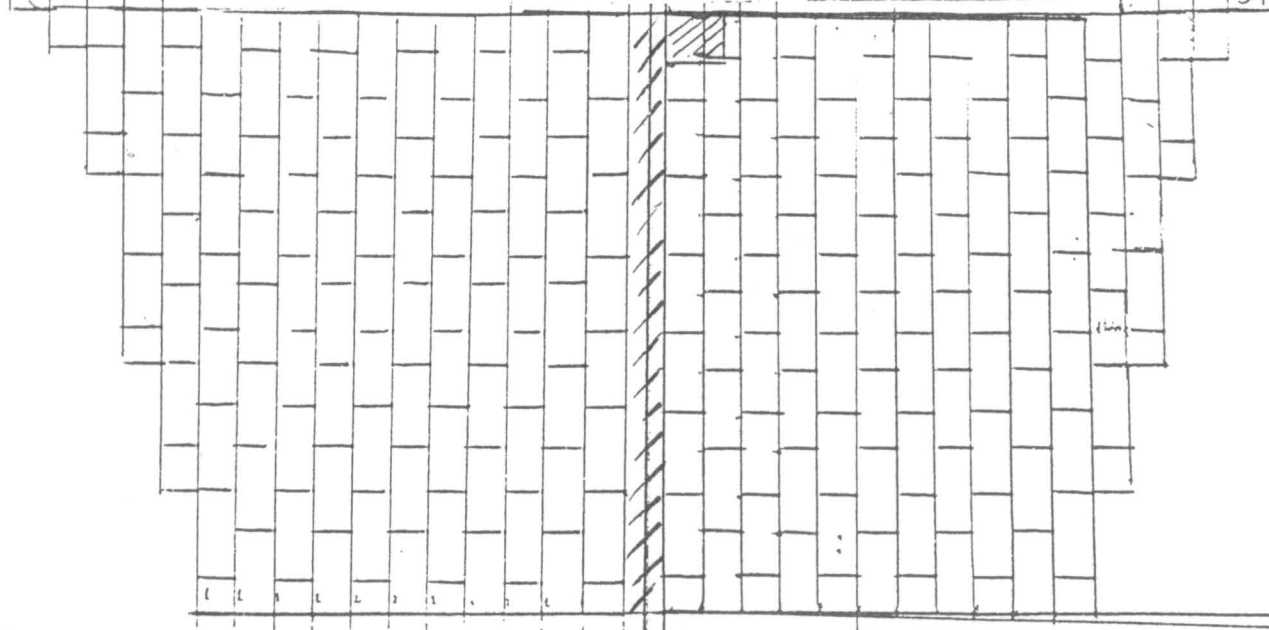
H H

H H

H H

No blocks in center groove
double 1½ oz. mat instead

11 blocks wide on aft deck 10½ blocks from boom
crutch space out
3 x 3½" double mat
no block, for boom crutch
hole



AFT DECK EDGE