### DRAWING EQUIPMENT

The list of drawing equipment below is all that is needed to make the drawings for a surfboard. The total cost of everything is about \$20. Of course, you don't have to rush out and buy all this stuff; make do with whatever happens to be around the house.

drawing board 20 x 26"
T-square, 24" long
18" ruler marked in tenths of an inch
450 right triangle
2 french curves
backing paper for drawing board-unlined
masking tape
tracing paper

The backing paper should be taped over the drawing board. Leave one edge of the board exposed for the T-square to rest against.

The two french curves shown below have enough curves in the right proportions to draw just about any rail outline.

Tracing paper with 10 lines per inch on one side can be purchased in 17" x 22" sheets. A number to ask for is Clearprint No. 1000H-10, or efficiency cross-section paper No. 1110.

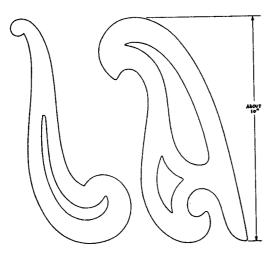


FIG. 3-14 FRENCH CURVES

# Chapter 4

# Surfboards to Build

The surfboards described in this chapter are just a few of the many shapes that are currently popular. All of the possible variations on these shapes are not discussed because the intention here is to provide basic shapes.

Usually a surfboard is tailored for the person who is going to ride it. Length and thickness depend partly on his weight. It is not easy to say that a particular surfboard should be riden by a particular weight surfer because there are many surfers weighing over 180 pounds that are riding a surfboard that would be recommended for a much lighter surfer with less experience. A beginning surfer will find a larger surfboard much easier to learn on. Greater floation will make catching waves easier and the surfboard will seem more stable to ride.

Most of the surfboards given here are for experienced surfers whose average weight is between 140 to 160 pounds. A large surfboard for a 130 pound surfer would be a small surfboard for someone weighing 180 pounds. Each would find the same surfboard different to control. The shapes given here can be made a few inches longer or shorter by adding or subtracting from the length in the middle of the rail outline (plan) template when it is laid out on the foam blank. They can also be made slightly thinner or thicker in the center without greatly changing the basic shape of the rail cross-section. It is also possible to use the rail outline from one surfboard and the rail cross-sections from another as long as the thickness corresponds.

There is an endless variety of fins that can be used on these surfboards. Use of a fin box makes experimentation easy because fins can be interchanged. Only a few fins are given here as examples.

I want to thank the people who provided some of the surfboard shapes and have given a brief discussion about them and their involvement with surfing.

#### STEVE LIS

Steve is the original developer of the fish. He first built it as a kneeboard for himself, then he built a few as surfboards for his friends. The transition between the super slow paddling take-off to the super fast speed turn-on shocks your awareness into a new time frame. The fish has affected a lot of surfers the same way. You have to ride it to believe it.

Steve has been surfing in and around San Diego for the last.11 years. Living close to Sunset Cliffs has provided him with a good proofing ground for his kneeboarding and surfboard shapes. He makes occasional long term trips to Mexico and has spent 3 years on Kauai.

He is totally involved in the discovery that surfing has to offer and is currently working on a new dimension by combining the kneeboard and surfboard.

#### TONY STAPLES

Tony likes to surf with a strong accent on hot dogging and manueverability. He grew up surfing in Pacific Beach and La Jolla, California. He got into shaping his own surfboards in the 8th grade. For the last 5 years he has been riding rounded egg type surfboards that he specializes in shaping. Tony has recently opened the Solana Beach Surf Shop where he takes custom orders for his shapes. His father helps him operate the shop. Tony has placed well in a number of surfing contests, and is respected for his surfing and shaping ability.

#### RICK McHALE

Rick is a student studying criminal justice in Long Beach, California. He is also an independent student of art, doing mostly paintings and drawings of surfing and ocean scenes.

He began shaping his own surfboards about 4 years ago. Once past the trial and error stage he began making surfboards for side money, and set up an arrangement with a friend to do the fiberglassing. An original home grown business was born. He is open to sharing techniques of surfboard shaping with beginners because he finds it expands his interest in surfing.

Rick has experimented with the swallow tail for about 3 years, doing most of his surfing in and around Huntington Beach. The 6'7" swallow tail given here is one that he is currently riding.

#### **ED TALBOT**

Ed has been involved in surfing and making surfboards for the last 8 years. He originally worked on surfboards in Greg Noll's shop in Hermosa Beach, California. Within three years he was signing checks and handling other responsibilities. He found that he liked working with customers and was good at the business end of operating a surf shop.

Three years ago he opened his own shop in Hermosa Beach with expert shapers Bob Moore and Pat (Gumby) Ryan doing the shaping. He co-sponsored a winter surfing contest that went off very well. Ed frankly admits that the energy he gets from surfing helps him do all the things he is into.

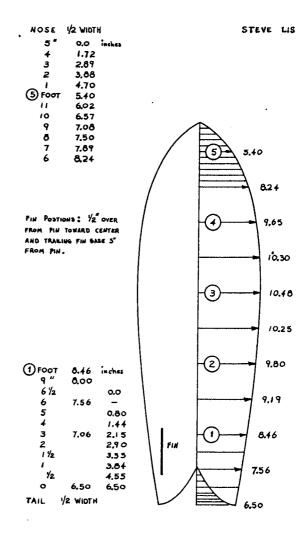


FIG. 4-1 5'5" FISH KNEEBOARD - RAIL OUTLINE

# STEVE LIS

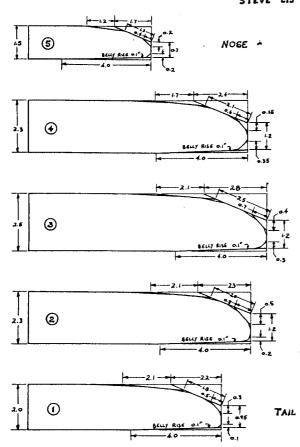


FIG. 4-2 5'5" FISH KNEEBOARD - RAIL CROSS-SECTIONS

# 5'5" FISH KNEEBOARD

ROCKER

| POSITION    | ROCKER      |
|-------------|-------------|
| Nose<br>63" | 3 1/4"<br>3 |
| 58          | 2           |
| 52<br>44    | 1 1/2       |
| 37          | 1/2<br>1/4  |
| Tail        |             |
| <u></u>     |             |

THICKNESS

| POSITION  | THICKNESS                        |
|---|----------------------------------|
| Nose<br>(3)<br>(4)<br>(3)<br>(2)<br>(1)<br>Tail | 1.5"<br>2.3<br>2.5<br>2.3<br>2.0 |

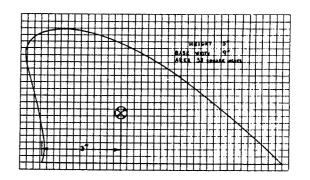


FIG. 4-3 FISH KNEEBOARD FIN