Seabee Dipstick Measurements

(reprinted by Steve Mestler)

Many members have inquired about the Seabee fuel dipstick and how to make one and where to put the markings for various levels of fuel in the tank. Most dipsticks I have seen are made of wood (1/8" x 1" x 3'). A modified lathing strip or yardstick works well (see illustration below). Be sure to round all edges. Below is an excerpt from Captain Dick Sanders' newsletter dated July 1985 (Volume 1 Number 6). This gives specific instructions on how to build and/or calibrate your Seabee fuel dipstick. Please remember that 12 gallons is the "NO TAKEOFF" range and this area of the dipstick should be painted red and labeled "NO TAKEOFF". Be careful and fly safe!!

"**Several Bee-keepers have kindly sent accurately calibrated fuel dipstick measurements, with only slight differences, so I've averaged the readings for you to be able to duplicate or to compare with your own. An ordinary wood yardstick can be as good as anything else - IF you have the flush fuel filler door, and IF you cut the yardstick width down to no more than ¾ inch, and smooth the edges. (A yardstick is not long enough to reach the bottom of the tank if you have the unmodified original protruding fuel neck.)**

Starting with 5 gallons, which will measure 3 3/8 inches from the rounded bottom end of the stick; then 10 gal = 4 7/8". The "NO TAKEOFF IN THIS RANGE" limit is 12 gal (5¼"). Paint that range red and label it as above. The fifteen gallon mark will be 6¼"; 20 = 7½"; 25 = 8½"; 30 = 9½"; 35 = 10½"; 40 = 11½"; 45 = 12½"; 50 gal = 13 5/8"; 55 = 14¾"; 60 = 15 5/8"; 65 = 16 7/8"; 70 = 18¼"; and 75 gal = 19½ inches from the bottom.

As you can appreciate, this method is infinitely more accurate than the fuel gauge. When you stick the tank, compare the result with what the gauge is reading, then continue to use that difference showing. The plane's attitude, whether on the ground, in flight, or in the water, makes very little difference in the reading. The normal stowage of the dipstick is in the rear transverse channel of the frame of the front seat. I realize that this is all elementary knowledge for you experienced Bee-rasslers, but think of the newer owners, and of the many who don't have, or know of, the art of dipstick-ery.

Of which, here's even more: when you stick the tank, gently tap the stick against the bottom several times. If you hear and feel solid resistance, that's great, the way it should be. But - if the tapping feels spongy, you've got a potential problem. There's liquid between the rubber fuel cell and the metal bottom. Is the liquid fuel? Or water. Put a container under the keel at the step, remove the drain plug, and examine the liquid. Chances are it'll be a combination of both, depending upon the age of your fuel cell. If it's water only, your cell is OK, but the hull may have a leak. Or, if you keep your plane outside among the elephants, and it's been raining a lot, it's only rainwater. Which reminds me: do you check your floats for water? It's easy to forget them. You've got 7 drain plugs. Rain washes down the float struts and into the neck of the floats. Run a bead of silicone sealant around the neck."

Seabee Dipstick Measurements

(1/8" x 3/4" x 34" Spruce or Pine)

75 Gal. - 19-1/2"
70 Gal. - 18-1/4"
65 Gal. - 16-7/8"
60 Gal. - 15-5/8"
55 Gal. - 14-3/4"
50 Gal. - 13-5/8"
45 Gal. - 12-1/2"
40 Gal. - 11-1/2"
35 Gal. - 10-1/2"
30 Gal. - 9-1/2"
25 Gal. - 8-1/2"
20 Gal. - 7-1/2"
15 Gal. - 6-1/4"
12 Gal. - 5-1/4"
10 Gal. - 4-7/8"
5 Gal. - 3-3/8"

12 Gallons - NO TAKEOFF!