Water Handling of the Stock Seabee

<u>Editors note</u>: This article was found in a box of stuff I got with a Seabee project. The author is unknown but, I believe, it was authored by Mr. George Pomeroy; long time Seabee owner and expert. Either that or Mr. Dudley Maynard wrote it years ago. No editing of the text was done. Any errors were in the original document. Enjoy!

Generally, the water take-off characteristics of the B are easily handled by a relatively unskilled pilot after a suitable period of check out by an experienced B pilot. However, this only holds true for the conventional, into-the-wind take off position – when one must take off cross wind or down wind the fairly docile B can become a wild horse bent on unseating his rider.

The areas where even an experienced pilot can easily get himself in trouble are the cross wind take off and the down wind take off, but this is not to say that these should not be used – under carefully managed procedures they may be done regularly without becoming disasters. Down wind take offs that are DIRECTLY DOWNWIND are probably only about 10% more difficult than direct, into-the-wind takeoffs and are just as safe. The pilot will find his work load increased tremendously here tho, because the greatly increased ground (water) speed necessary breaking oose from the water much more difficult. This is because the water drag of as much as 80 to 90 MPH is much greater than the water drag of, say 40 to 60 MPH which is experienced during the normal into-the-wind take-off.

Some may find the different speeds I have just mentioned somewhat confusing they are simply <u>typical</u> speeds required for normal take-offs as illustrated by the following examples [my particular B needs 63 <u>IAS</u> to break free of the water] (wind on the nose 20 MPH 63 IAS = 43 MPH ground (water) speed needed to take-off) (wind on the tail of 20 MPH + 63 IAS = 83 MPH ground speed needed to take off)

The ordinary nose into the wind take-off presents very few real problems if the necessary clear water distance is available and the plane can be flown high enough over the shore line to avoid the almost <u>Always Present</u> Downdrafts that occur naturally at the shore line. Better to start T.O. run far enough out to turn before arrival at shore line. Direct-on-the-nose-wind tends to make water take off arc progressively easier in almost any condition of higher wind speeds, as long as the wave action is not over a couple of feet height difference between trough & high point.

Almost as soon as take off commences into a, say 40 MPH wind, the wings develop enough lift to make the plane partially fly – (40 is near planing speed on the water) and you will find that, though there will be a lot of water coming all over the plane, you only skip on the tops of the rolls or waves a short distance before becoming air borne – [This is one of the few conditions during which the landing tends to be much rougher than the take-off.]

Starting with ordinary conditions on the water, a medium load in the bee, and all the room you want for take off – light or no wind – flaps full down – trim for neutral – then simply open the throttle and let the bee climb out on the step by itself – if you adjust the trim correctly you don't need any other force to let her fly right on out of the water. Trimmed to slight nose-up-on step, just let the airplane accelerate, watching to keep wings level and keeping full power by adjustment to the propeller pitch control, just let her lift herself into the air. If you do not force it off by pulling on the yoke – you can expect it to lift off at 70-75 indicated.

The bee can be <u>forced up</u> on the step sooner than it would naturally climb up, but <u>not much</u> sooner and forcing it up too soon opens up the possibility of a porpoising situation – better to let it climb out of displacement and settle down in planing by itself. (if the porpoising should begin to occur, the only practical remedy is to cut power <u>NOW</u>) (later, in your increasing familiarity with the bee, the porpoising can be stopped in other manners, but you had better let a couple hundred hours of water work season you before trying them.)