

Cross wind landings Side slip method.

Side slips are used to provide sideways movement relative to the air to oppose the sideways drifting movement caused by the crosswind.

For example if you have a crosswind from the right side. Your airplane will drift with the wind to the left. The obvious response to counteract the drift is to point the aircraft to the right into the wind slightly to fly wings level along the runway.

However Touching down in a crab like this is very hard on the tires and can possibly blow a tire because of the extreme sideload.

The better way to counteract crosswind is to lower the windward wing enough to find a balance of horizontal lift that counteracts the opposing crosswind.

When you bank the aircraft it will begin to turn toward that bank (into the wind). You do not want that!

So you add left rudder (opposite side) to resist that turning tendency caused by the bank angle (to the right).

Carefully note the left rudder position in the picture!

Side slipping the aircraft points the longidudinal axis (nose to tail) along the runway with the wheels aligned with the direction of travel. This Eliminate sideload on the tires.

The windward tire touches down first, then the leeward tire, and finally the nose tire.

