

It's Crosswind Time

In much of the country, it's windy season again. Particularly in mid-afternoon, these months produce the most consistent gusty conditions we see in the entire year. If you haven't been flying regularly please get current with your crosswind techniques before getting yourself into an uncomfortable situation.

Most bad landings attributed to crosswinds generally start unraveling after the touchdown. Pilots seem to track the center of the runway down through short final and the roundout and flair reasonably well. It's when the tires are on the pavement that things start to go south. Pilots grit their teeth and wiggle the stick and rudder pedals with determination until they feel that contact with the ground. Then, they breathe a sigh of relief thinking that the worst of it is over. Not so!

The rollout period during a crosswind landing is the part that requires the greatest application of skill. Don't give up the landing until you have taxied completely off the runway. **It's the rollout that'll get you.**

Bent wingtips and ground loops are usually the result of improper use of ailerons during the landing roll. Here's the scenario:

- (1) Pilot touches down roughly on the centerline.
- (2) Crosswinds push the airplane off the centerline.
- (3) Pilot responds by ruddering back toward the center of the runway.
- (4) Centrifugal force toward the outside of the turn radius causes a rolling moment. The upwind wing lifts slightly unloading the weight from the upwind main landing gear wheel.
- (5) The rolling tendency is just enough to shunt crosswind airflow under the upwind wing. The rolling moment increases.
- (6) Now turning on two wheels, weather vaneing of the tail increases and the airplane **rolls away from the wind and yaws into the wind.** Yeehaw!

The fix for this scenario is to quickly add full aileron into the wind to counter the rolling tendency and prevent crosswind airflow from getting *under* the upwind wing. Make rudder correction to maintain a line of travel parallel to the runway centerline, but don't become fixated with regaining the centerline itself. Just keep it parallel.

These are must-do actions during crosswind landings. Keep them in mind, practice them in low winds, and fly safe!