

Safety Corner

Crosswind Landings From AskACFI.com

Did you know that in the past five years there have been over 740 reported aviation accidents related to crosswind landings? That's over 150 per year!

Below is an article from a Certified Flight Instructor (CFI) on perfecting crosswind landings. It is worth a read and will show you that making crosswind landings is both a matter of physics and technique.

If you are having difficulty and need practice with crosswind landings, remember that you can purchase thirty minutes to an hour of simulator time. Your CFI will allow you to practice many short final crosswind landings to help you develop your stick and rudder crosswind skillsets.

Try it – you may like it!

3 Steps to Perfect Crosswind Landings

Whenever I fly with a new student who may have some training or even have their license, the first question I ask is, "What do you think you need work on?" The most common response is crosswind landings.



While nothing beats hands-on experience, here are three steps you can know long before your next crosswind encounter:

Know where the wind is coming from: USE THE WINDSOCK!

You wouldn't believe how many students attempt a crosswind landing with no idea where the wind is coming from. Be able to visualize the wind direction using your [heading indicator](#).

<http://www.askacfi.com/1138/crosswind-takeoffs-and-landings.htm>

There are two usual methods used in crosswind landing: The "crab" method and the "wing low" method.



Crabbed Approach

The crab method is performed by flying toward the wind with the airplane's wings level so that its ground track remains aligned with the centerline of the runway. This crab angle is maintained until just prior to touchdown, when the longitudinal axis of the airplane must be aligned with the runway to prevent the wheels from landing sideward on the runway.

I prefer to use the crab procedure, but one of the difficult things about this particular method is learning the timing and judgment needed during the flare. In essence, in the last few seconds you are transitioning from a crab to a slip -- getting that timing down can be a tricky.



Sideslip Approach

The other crosswind landing method is the "wing-low," or "sideslip," method. To use this method, start by aligning the airplane's heading with the centerline of the runway. You'll notice that the aircraft begins to drift. To counteract this, you must lower the upwind wing. With the aileron lowered the aircraft will begin to turn right. You now have to apply

just enough opposite rudder so that longitudinal axis of the airplane stays aligned with the centerline of the runway. In other words, the drift is controlled with aileron, and the heading with rudder. The airplane will now begin to slip into the wind just enough so that both the flight path and the ground track are aligned with the runway. You must hold this all the way to touchdown. If the winds increase to the point that you begin running out of rudder to hold the slip, then it is time to look for a more suitable runway.

The FAA in FAA-H-8083 Flight Training Handbook identifies the common errors during crosswind landings. Find them listed along with other FAA handbook information at the following link:

https://www.faa.gov/gslac/ALC/course_content.aspx?CID=34&SID=167

This short flight training video, developed by the FAA, discusses both crosswind takeoffs and landings. The first half of the video addresses common problems during crosswind takeoffs. The second half is devoted to crosswind approaches and landings, and includes brief demonstrations of both the sideslip and crab method of crosswind landings discussed above.

You can also download "[On Landings Part I \(1229\)](#)" which discusses other common problems during landings including crosswind approaches.