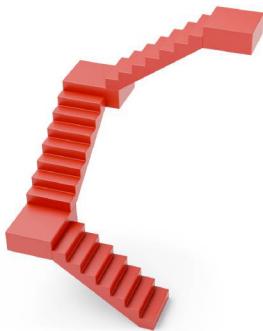


Foundations of Flight: Approach with Confidence—Part Three, Landing Pattern



Brought to you by AXIS Flight School Instructor Niklas Daniel at Skydive Arizona in Eloy. For more skydiving educational content and professional coaching services, visit axisflightschool.com.

A canopy landing pattern is a course with specific legs relative to the landing area that a skydiver flies over the ground to maintain safe, efficient traffic flow. The standard pattern has three legs—downwind, base and final—which form a pattern resembling a descending staircase with quarter turns. (See reference image.) Each “flight of stairs” is perpendicular to the next, connected by a section where a 90-degree course change occurs.



These turn points act as checkpoints, where canopy pilots compare their position over the ground with their altitude and glide-path visuals. This method helps with maintaining alignment, judging ground speed and confirming the projected touchdown point.

Landing-pattern altitudes are unique to each canopy pilot, but for the purpose of this article we will use 900, 600 and 300 feet. In addition, we will add a fourth leg—the entry leg—that starts at 1,200 feet and connects the holding area (see last month’s installment) to the downwind leg.

Preparation and Considerations

Because you cannot stop midair when there is congestion in the pattern, you must anticipate it and adjust your strategy on the fly to minimize conflicts while landing accurately (when possible). Before making a skydive, plan your landing pattern using an aerial map and the current winds. However, remain alert and flexible, as wind conditions can change by the time you exit or land. The exact nature and execution of each landing pattern depends on several factors, including your chosen landing

direction, the wind conditions, obstacles and your canopy type. Drop zones may also have their own procedures, policies and pattern layouts. As a result, landing patterns may differ in size, shape and altitudes depending on your canopy selection, flying style and local rules.

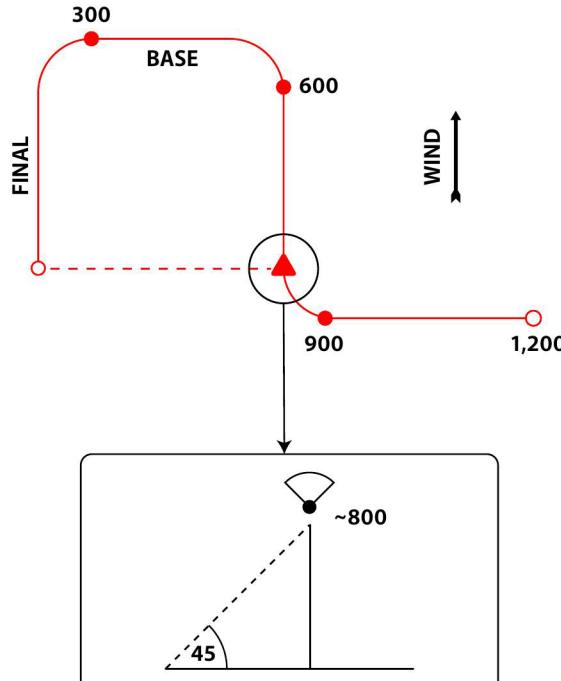
Execution

You may not always be able to align the landing-pattern legs directly with the wind, even though their names suggest it. For example, you could find yourself flying into the wind on your base leg. The leg names simply identify your locations and flight direction relative to the target. For clarity, the pattern described below assumes a no-wind day. Next month’s installment will cover making adjustments for landing accuracy.

-1,200 feet – Pattern Entry: This is the altitude where you’ll depart your holding area and start your entry leg—regardless

of your position within the “tiger turns” (a holding area technique covered in the previous installment). Fly directly toward the intended target, generally perpendicular to the final approach. While on the entry leg, take note of wind indicators and your speed over the ground to anticipate any adjustments you may need to make. Flying a perpendicular entry leg provides an oblique view of the landing area, making it easier to monitor merging traffic and assess wind indicators.

-900 feet – Downwind: The downwind leg is parallel with and opposite to the final approach. Start this leg at 900 feet, slightly ahead/upwind of the target. When executed correctly, you will find yourself located roughly abeam the target at approximately 800 feet and at about 45 degrees from vertical. Fly in a straight line until you reach the next checkpoint altitude. The corner connecting the downwind and base legs is tricky, because this is the



This image shows the canopy reaching about 800 feet at the abeam point after the turn onto the downwind approach at 900 feet.

farthest point downwind, and the target is likely either partially or fully obscured. This can create an uneasy feeling, causing jumpers to turn prematurely, which often leads to overshooting the target.

- 600 feet - Base: The base leg is the transitional leg between the downwind and final approach. It is generally perpendicular to both and downwind of the target. The base leg is critical for accuracy, as it sets up the depth to the target. If you are too close, you will likely overshoot; too far and you may come up short. The base leg needs enough length so you can make small adjustments before committing to final. While on the base leg and before turning onto the final approach, make sure you are not too close to other jumpers already on their final approaches. When multiple jumpers are approaching a target, the lower jumper has the right-of-way. If the turn to final could create a collision hazard, an avoidance maneuver is necessary. Remember, safety is more important than accuracy.

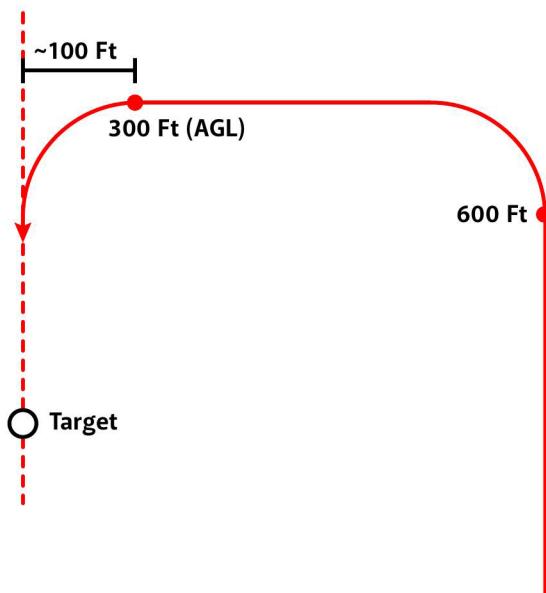
- 300 feet - Final Approach: This leg begins after the base-to-final turn and continues to the point of touchdown. This is the most critical leg for safety because of your proximity to the ground, obstacles and other jumpers. This phase requires careful judgment and precision to control your airspeed and descent angle while

approaching your intended touchdown point. Imagine a line that cuts your target in half, left from right. This is your projected course over the ground for final. The goal is to straddle that line with your feet on either side of it until touchdown. Begin your turn from base to final about 100 feet in horizontal distance before reaching that line to account for the radius of the turn from initiation to completion.

Using the landing-pattern methodology outlined above is a great way for you to get your bearings and learn how to implement a proper landing pattern, especially at new locations. A crucial part to successfully implementing this strategy is developing an intuitive understanding of how the wind conditions affect your canopy's glide. By following defined legs and checkpoints, you can spot deviations from your intended approach early, giving you the chance to make small corrections to improve safety and landing precision.

Next month: Making adjustments for accuracy.

Information about AXIS' coaching and instructional services is available at axisflightschool.com. The author intends this article to be an educational guideline. It is not a substitute for professional instruction.



This image shows initiating the base-to-final turn 100 feet before the projected final line to account for turn radius.



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