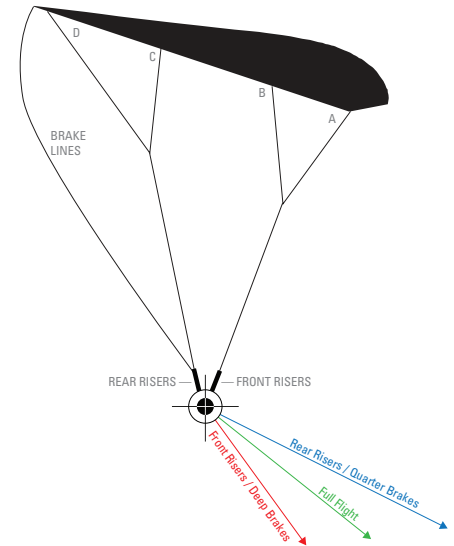


FOUNDATIONS OF FLIGHT | THE ACCURACY TRICK



AXIS
Flight School



Brought to you by AXIS Flight School Instructor Niklas Daniel at Skydive Arizona in Eloy.

Understanding your canopy's glide slope is an essential skill that you need to apply on every jump. Whether you have to navigate back from a long spot or land your reserve in someone's backyard, this visual trick will increase your chance of success.

Purpose

- ▶ To train your perception
- ▶ To improve landing accuracy
- ▶ To recognize whether you will return from a long spot
- ▶ To facilitate making time-sensitive, crucial decisions when picking an alternate landing site

Understanding Visual Cues

When your parachute flies, it generally moves down and forward, and your observational position constantly changes. You

will perceive this as a radial-optic-flow pattern: Forward movement causes you to see an expanding pattern, and backward movement causes you to see a contracting pattern. Your trajectory and the termination of your glide slope (landing point) will not seem to move, but objects at the periphery will seem to move at great speed. You can use this visual quirk to determine your heading and gauge the distance you'll cover with the altitude you have remaining.

Imagine taking a warp-speed ride on the Starship Enterprise. As the ship accelerates, you'll see stars streak across the screen in a "loud" outward direction. However, a point in the middle of the screen will not appear to move, it will remain "quiet." That quiet point is where the Enterprise is heading.

The center of the optic-flow field becomes increasingly obvious the more quickly you travel and the closer you fly to it. It becomes more difficult to locate the quiet point if you influence its position by applying canopy inputs. (In other words, if the Enterprise spins, spirals and changes its trajectory, the streaks of stars no longer appear to be a smooth tunnel but just a random, jumbled mess.)

When you first try to learn this technique, you should maintain a straight course and remain in one flight mode so you can more easily note the subtle visual

changes as your position of observation changes. As you travel through the air, stationary objects on the ground such as plants and buildings will appear to be moving at varying speeds and directions relative to you. If the object is moving toward you (down in your visual field), it means you will be flying over and past it. If an object appears to be moving away from you (up in your visual field), you will not make it to that object.

Helpful Hints

On every jump, pick out objects on the ground and notice whether they rise or fall in your vision. With practice, you will be able to find the quiet spot even at altitudes higher than 12,000 feet. The sooner you can determine that you will not make it back to your intended landing area, the sooner you can pick an alternative. Some jumpers use a frame of reference such as sighting-in an object along their thumbs to see whether the object is moving up or down in their fields of vision.



To view the instructional video, use the QR code to the left or visit the Foundations of Flight page at parachutistonline.com.