

FOUNDATIONS OF FLIGHT | RELATIVE POSITIONING UNDER CANOPY

Brought to you by Niklas Daniel and Brienne Thompson of AXIS Flight School at Skydive Arizona in Eloy. Photos by David Cherry. Information about AXIS' coaching and instructional services is available at axisflightschool.com.



In the three images, the camera is level with the blue canopy.

Understanding your position relative to other jumpers under canopy is an essential skill, whether you are trying to avoid the other person or engage in a canopy formation skydive. To do this, you need to train and keep your skills of perception current by understanding your altitude and position in the sky and assessing the other jumper's location and actions.

Performance Goals

- Learn to visually assess your position relative to other canopy pilots using the horizon as a reference.
- Anticipate where other canopy pilots are going.
- Achieve adaptable flight modes to best avoid congestion in the landing pattern.
- Learn the basics of a skill to apply to formation flights, canopy formation skydiving and XRW (mixed canopy and wingsuit flight), etc.

Purpose

As a jumper, you are the pilot in command of your canopy and need to be vigilant about scanning your surroundings. Do not assume that others see you and will take appropriate action on your behalf. Make a habit of doing a continual scan for hazards and other traffic. This is a style of flying that

goes beyond knowing the basic mechanics of flying a parachute and simply following the rules of the drop zone. The aim is to reduce risk by anticipating and avoiding dangerous situations despite adverse conditions or the mistakes of others.

Knowing where you are in relation to traffic in the pattern will help you make informed decisions on how to integrate into the landing pattern, avoid others and create vertical separation from other canopies.

Execution

In order to figure out where you are in relation to another canopy pilot, start by determining levels (i.e., whether you are higher, on level or lower than the other jumper). Compare the other jumper's position relative to the horizon. Keep in mind that the horizon will be below mountaintops if you have them in your surrounding terrain.

If:

- the jumper appears completely surrounded by sky (the jumper is above the horizon), then you are lower.
- the horizon intersects the jumper's head, then you are on level (at the same altitude).
- the jumper appears surrounded by ground (the jumper is below the horizon), then you are higher.

We are pretty good at finding canopies above the horizon because the sky provides a good contrast. Canopies on or below the horizon are harder to see, especially if the landscape is not uniform and is cluttered.

Helpful Hints

Under canopy, many jumpers display that they are aware of your presence by kicking their legs. If you mimic this action, it confirms visual contact. However, kicking and waiting for a response can waste precious time in cases where you should be taking immediate evasive action.

Any canopy that appears to have no relative motion is likely on a collision course with you. In addition, if a canopy shows no lateral or vertical motion and is increasing in size (blossom effect), take immediate evasive action. Waiting for a jumper's appearance to grow or shrink in size can waste precious time.

The authors intend this article to be an educational guideline. It is not a substitute for professional instruction.