

Foundations of Flight

Level Changes While Belly Flying

Brought to you by Axis Flight School at Skydive Arizona in Eloy.
Photos by Niklas Daniel.

AXIS
Flight School

Reasons to Perfect a Side-Slide:

Safety

- Collision avoidance
- Understanding and navigating through burbles
- Staying with students (for rating holders)

Performance

- Getting to different vantage points (for camera flyers)
- Making a powerful stop after diving to a base
- Increasing ability to fly with a wide range of people with a variety of fall rates
- Improving your track with slow-flight skills

Increasing Your Fall Rate

By altering the size and shape of your flight surfaces (presenting less surface area to the relative wind), your body will increase in downward speed, giving you the illusion of going down toward a target (generally a person or formation).



Execution:

Relax, and simply arch more. Keep your chin up and draw your arms and legs closer in toward your body (for example, bring your heels toward your butt). Your downward speed will increase significantly.

Decreasing Your Fall Rate

By increasing the amount of flight surface you present to the airstream, your body's downward speed will slow, giving you the illusion of going up toward a target.



Execution:

Though jumpers often refer to assuming the slow-fall position as “de-arching,” you are actually not trying to lose your arch—what you are doing is attempting to present the maximum surface area to the relative wind. Your goal should be to get your body completely flat. Perform the following movements simultaneously:

Project your arms straight out on a plane from your shoulders, allowing the inside surface of your biceps and elbows to be exposed to the air. Also, project your legs straight out and tilt your feet outward so the inside surfaces of your feet and legs are exposed to the air. Round your shoulders forward and suck in your gut enough to ensure that your shoulders and chest are on an even plane with your hips.

While working on slowing your fall rate, it is crucial that you keep an eye on your target, particularly if you are far below it. To do this, while off to one side of the person or formation, turn 90 degrees from it and tilt your head so that one side of your face is exposed to the airflow and aligned with the plane of your torso. This will allow you to keep an eye on your target while using your head to increase your surface area.

Common mistakes:

- Dropping arms and legs lower than the torso (decreasing the surface area presented to the relative wind)
- Engaging the upper and lower body unevenly, resulting in “potato chipping.”

Helpful Hints



The Bootie Trick

You can use your booties to help with slowing your fall rate during a formation skydive. While maintaining a neutral position, simply put the insides of your feet together, creating a triangle with your legs. Your bootied feet will create a surprising amount of drag, slowing your fall rate while leaving your arms free to take grips.