

FOUNDATIONS OF FLIGHT | BACK-FLY-TO-BELLY FRONT-FLIP TRANSITION

Brought to you by Niklas Daniel and Brianne 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.

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Prerequisites

- Proficiency at maintaining balance during belly range-of-motion drills (see “Foundations of Flight—Range-of-Motion Drills for Belly Flyers” and “The Neutral Belly Position,” December 2015 and February 2014 *Parachutist*).
- Proficiency at maintaining balance during back-fly range-of-motion drills (see “Foundations of Flight—Range-of-Motion Drills for Back Flyers,” January 2016 *Parachutist*).
- Ability to perform 180-degree barrel rolls between the belly and back orientations (see “Foundations of Flight—The Barrel Roll,” April 2011 *Parachutist*).

Purpose

- Increase air awareness
- Gain an introduction to flying through the vertical axis
- Learn to fly through multiple axes
- Assists with learning to fly head up

Execution

Start in the neutral back-fly position facing perpendicularly to the aircraft's line of flight. Begin by stretching your arms out to your sides, level or parallel with the horizon. Rotate your head back to look toward the horizon while simultaneously quickly bringing your heels toward your butt at slightly wider than shoulder width apart. As you do this, try to expand your chest by rolling your shoulders back (inhale deeply). Tilt your pelvis in the anterior direction, pointing your tailbone toward the back of your head. Flex your feet and keep your legs bent at around 90 degrees while driving your heels into the relative wind.

As you pass through the vertical axis, keep your legs bent and resist the urge to straighten them or thrust your hips forward. This will only cause you to lose your balance. Look at the horizon in front of you and allow your body weight to shift forward slowly and smoothly. Extend your arms forward on the finish to dampen any excess momentum that may cause you to over-rotate.

Once you arrive on your belly, continue to proactively fly your body with a solid arch by squeezing your gluteal muscles.

Helpful Hints

Note that during the transition, the relative wind will change locations on your body. Focus on your calves and thighs. While on your back, the air will make contact with your heels and calves. As you drive your heels into the relative wind to initiate the transition, the air will make contact with your hamstrings and the insides of your shins. As you arrive on your belly, notice the pressure shift through the inside of your thighs to your quads. Keep the air pressure on your legs as symmetrical as possible during the entire transition.

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