# FOUNDATIONS OF FLIGHT | BELLY-TO-BACK BACKFLIP 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.

















## **Prerequisites**

- Proficiency at balance during range-ofmotion drills on your belly (see "Foundations of Flight—Range-of-Motion Drills for Belly Flyers," and "The Neutral Belly Position," December 2015 and February 2014 Parachutist)
- Proficiency in the back-fly orientation (see "Foundations of Flight—Basic Back-fly Position," July 2012 Parachutist)
- Ability to perform a 180-degree backto-belly barrel roll (see "Foundations of Flight—The Barrel Roll," April 2011 Parachutist)

### **Purpose**

- Increase air awareness
- Gain an introduction to flying through multiple axes, including the vertical
- Assists in learning to fly head-up

### **Execution**

Start in the neutral belly 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 down to look toward the ground while simultaneously bringing your knees—which should be slightly wider than shoulder width apart—quickly toward your chest. As you do this, try to flatten out your chest by rolling your shoulders forward. Flex your feet and keep your legs bent at around 90 degrees (which will help you begin to assume the neutral back-fly position).

As you pass through the vertical axis, keep your legs bent. Resist the urge to straighten them, which will only cause an over-rotation on the finish. Extend your hands above your head and produce a proud chest. Look at your hands if you are able to, which will help produce a more powerful stop. Once you arrive on your back, continue to proactively fly your body, especially your legs.

## **Helpful Hints**

During the transition, the relative wind will change locations on your body. While on your belly, the air makes contact with your quads. As you pull your legs in toward your chest, the air will make contact with the inside of your thighs, then your hamstrings. As you arrive on your back, you'll notice the pressure shift to the back of your calves. Hold this pressure by driving your heels into the wind. 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.