

## FOUNDATIONS OF FLIGHT

### BACK-FLY TO SIT-FLY TRANSITION

**AXIS**  
Flight School



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

#### Purpose

- ▶ Flying through multiple axes
- ▶ Recovering from sit-fly instability

#### Prerequisites

To avoid developing or solidifying bad habits, you should be proficient at flying a correct basic back-fly position (see “Foundations of Flight,” July 2012 *Parachutist*) before attempting this maneuver.

Stay altitude aware! Flying in a vertical orientation eats up your working time much more quickly than flying horizontally.

#### Execution

Start in the basic back-fly position facing perpendicularly to the aircraft’s line of flight. Stay aware of the airflow on the back of your head and neck; you should feel air pressure in these areas throughout your entire transition. Maintain firm pressure on your heels and use them to control your heading.

To initiate the transition, produce a proud chest and fly your ribcage straight up. As you do this, pull your tailbone back (as though you were trying to touch the back of your head with it) to allow your hips and legs to speed up and move straight down. Maintain firm pressure on your heels, and keep your knees about shoulder-width apart. Keep your feet apart with your toes pointed forward as you transition to the vertical. As you enter the sit-fly position, move the soles of your feet until they are splayed outward slightly and you can feel lift on the inside of your calves (see “Thinking on Your Feet,” January 2011 *Parachutist*). End the transition with your elbows at shoulder level.

#### Helpful Hints

Do not make a crunching motion using your abdominal muscles or curl your



head in an attempt to see where you want to go. Avoid rotating your shoulders forward in an attempt to push yourself up. The arms receive little attention in this text, as this maneuver can be performed without them. However, the arms can aid in stability and add lift during the proud-chest stage.

#### Countering Forward Drive



People commonly create an involuntary forward drive when performing this transition. This problem mostly stems from thrusting the hips forward and extending the legs in order to stand up. To counter the forward movement from the beginning, drive toward your head by lifting up your hips (very exaggerated in the photo) and then forcefully drop them down to initiate the transition. Hold your hips in this position throughout the transition, and keep your legs bent.



To view the instructional video, use the QR code to the left or visit the Foundations of Flight page at [parachutistonline.com](http://parachutistonline.com).