

FOUNDATIONS OF FLIGHT | SIT-TO-SIT BACKFLIP



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

**Purpose**

- ▶ Increase balance in the head-up orientation
- ▶ Learn to fly through multiple axes
- ▶ Learn an advanced, over-the-head transition

**Execution**

Begin in a neutral and comfortable sit-fly position with a heading perpendicular to the line of flight (see the article “Thinking on Your Feet,” January 2011 *Parachutist*). Pick a point on the horizon, as this will be your defined heading for this maneuver. After each attempt, check your heading and altitude.

From your neutral body position, allow your upper body to sink by raising your arms up and caving your chest. As you begin to fly toward your back, bring your knees in toward your chest slightly, keeping your heels close to your butt. As you arrive on your back, extend your legs at the horizon about shoulder width apart. The amount of power (rate of rotation) will increase the more you extend your legs. As your feet travel outward, engage your hips by squeezing your seat. Shortly after you have added the power to your transition, pull your legs back into the sit-fly position. Keep your arms relaxed and use them only for stability.

Jumpers have a tendency to travel forward or backward when performing this transition depending on how they present

their legs to the relative wind. The goal is to present them perpendicularly to the airflow. If the jumper extends his legs above the horizon, he will travel horizontally in the direction of his head. If he extends his legs below the horizon, he will travel forward, in the direction of his feet.

**Step by Step**

- ▶ Begin in a comfortable head-up position while looking at the horizon.
- ▶ Raise your arms and knees up and cave your chest.
- ▶ As you transition toward your back, kick your feet out in front of you at shoulder width. Keep your feet flexed and push through your heels. You should feel the wind on your calves.
- ▶ As your extended legs begin to rise, squeeze your seat and keep your chin tucked in.
- ▶ Once vertical, bring your legs back into the sit-fly position and visually spot your end point.
- ▶ Finish with a proud chest, elbows at shoulder level and toes oriented forward.

**Helpful Hints**

Avoid trying to look back when attempting the backflip, as this can open up the chest and may slow down or even stop the transition altogether. The goal is to have the upper body sink while the lower body lifts.



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).