FOUNDATIONS OF FLIGHT | HEAD-UP TO HEAD-DOWN SHELF 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 are available at axisflightschool.com.





















Goals

- Increase mobility
- Gain ability to transition from one flight mode to another mid-jump
- · Learn a skill used extensively in vertical and mixed formation skydiving

Prerequisites

Ability to:

- · Hold a solid head-up neutral position (see Foundations of Flight—Head-Up Neutral Position, February 2015 Parachutist)
- Control heading in a sit
- Perform a sit-to-sit backflip (see Foundations of Flight—Sit-to-Sit Backflip, December 2014 Parachutist)

Execution

After exiting, turn perpendicularly to the aircraft's line of flight and assume a comfortable, neutral sit-fly posture. Check your altitude between each maneuver or every five seconds.

Start the move by raising both arms straight up until you feel the airflow on the back of your arms. Envision reaching your arms toward the sky with your elbows nearly locked. Your upper back and shoulder blades should be rounded. Keep your arms in this position in space through the entire transition. The rest of your body will essentially pivot around your shoulders. Then, cave in your chest by exhaling and look in the direction of your belly button (as if you were trying to make the tip of your nose touch your belly button).

Keep your legs in the sit-fly configuration (knees bent at 90 degrees) but allow your hips to thrust forward by squeezing your glutes. Your knees should remain about shoulder width apart, and you should feel the air on the outsides of your thighs and calves. (Think of it as moving your knees away from your torso.) The hip thrust contributes to the transition's power, so you'll have to throttle it back appropriately.

Keep your chin tucked in and allow the air to flow over the back of your neck and head.

As your spine approaches the vertical axis, it is time for your head to uncurl from the tucked position, and you should begin to focus on flying on the crown of your head. Accomplish this by looking at the horizon through your eyebrows.

In addition, make sure that your elbows are in front of your torso. Pulling or curling your arms will make the head-down posture more difficult to fly.

Helpful Hints

Avoid throwing your head back to see where you are going. This will only hinder—or in some cases, altogether halt—the transition by inducing unwanted drag on the upper body.

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