

■ FOUNDATIONS OF FLIGHT | HEAD SWITCHING

Brought to you by Niklas Daniel and Brianne Thompson of AXIS Flight School at Skydive Arizona in Eloy. Photos by Brianne Thompson. Information about AXIS' coaching and instructional services are available at axisflightschool.com.



Incorporating head switches into your turns can improve your turning performance by increasing your body and spatial awareness and mitigating blind spots. You can use this technique in most flight orientations (although it's not typically used in back-flying) to:

- establish a fixed focal point for the eyes to prevent dizziness or spatial disorientation, especially during continuous turns (spins)
- maintain orientation, balance and control
- help with directional control during a turn
- stay in proximity to other flyers (remain in your slot)
- allow better grip targeting and angle control for formation skydiving disciplines
- provide cleaner aesthetics for artistic events

Jumpers can use this technique in any body-flight orientation and axis of rotation. This article focuses on turns around the vertical axis.

Prerequisites

- comfort and control in your flight orientation of choice
- ability to isolate head movements from the torso (e.g., ability to turn your head left and right without turning your body or keep your head fixed in space while your body rotates 90 degrees)

Execution

To properly execute a head switch, you must rotate your body and head at different rates. Regardless of your flying orientation, your eyes should first lock onto a target. As you initiate the turn, your body will rotate at a constant speed while your head should stay visually locked onto the spotting point (e.g., another flyer's eyes, grips, center of mass, etc., or for artistic events, perhaps an object on the horizon or the camera flyer).

Your eyes should remain sharply focused on your spotting point. Do not let your

vision go soft (i.e., develop a "million-mile stare," which causes disorientation). Once you can no longer comfortably see your target, rotate your head faster than your body to quickly pick up the visual reference point again. Head switches should not be passive. You should think of visually attacking the focal point.

Keep your neck muscles relaxed to have the maximum range of motion. Keep your head level by avoiding nodding motions. Your neck should be straight and lengthened, as if your head were suspended by a balloon attached at the crown.

Initiating a head switch too early in your turn will likely cause you to drift away from your target. On the other hand, initiating it late may cause an unwanted drive. This happens when your chin is almost in line with your shoulder, which causes your neck muscles to tighten and pull the head off axis.



The blue arrow on the top of the helmet shows where the performer is looking throughout the rotation.

Helpful Hint

Whipping your head around will not increase the speed of the turn. When your head is upright (as it is when belly flying or sit flying), it will deflect very little wind because the torso is shielding it. If you are flying head down, tilting your head may produce translational movement, as the relative wind is deflected on the sides, back or front of the head. Ensure vertical alignment by feeling the air pressure on the crown of your head throughout the turn.

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