

FOUNDATIONS OF FLIGHT | OUTFACING HEAD-DOWN CARVE



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



**Purpose**

Greater mobility while flying head-down, as well as while angle-flying.

**Execution**

Any outfacing carving maneuver is essentially a backslide combined with a turn. Depending on how you vary these two inputs, you can alter your orbit drastically.

Although you can start a head-down carve from numerous positions, for this exercise, start from the static head-down-daffy position (see "Foundations of Flight," March *Parachutist*). In this position, whichever leg is forward will dictate the direction of your carve. In the photos, the jumper has his right leg in front and therefore travels to his right.

Begin by looking in the direction you wish to travel (in this case, to the right). Use your right front leg as a rudder by angling your foot in slightly toward your centerline, while simultaneously angling

the leading knee in the direction of travel. This will expose the inside of your calf to the relative wind, creating a side-slide.

Next, add a slight turn with your leading (right) arm and shoulder. Point the elbow of your leading arm in the direction of travel while exposing the inside of your forearm and palm to the relative wind. Your goal is to travel backward when performing an outfacing carve, so you'll move your leading shoulder back by ever so slightly twisting your torso.

As you get moving, keep your head back to continue flying on the crown of your head. Bring your rear leg forward in front of your body with your knees shoulder-width apart. At this point, you should feel the relative wind on both upper thighs. Continue to look over your leading shoulder in the direction of travel. Your left arm and shoulder should remain mostly passive, and your left shoulder should be slightly forward (because you're in a turn).

**Helpful Hints**

If you have problems with stability, it may be because your chin is curled too far in toward your chest. Relax your arms and resist the urge to pull your shoulders toward your ears. Do not try to control your level by applying pressure with your hands; instead, focus on flying with your torso and legs. The leg mechanics are very similar to those in a belly side-slide. Revisit the basics to strengthen and speed up your learning curve.



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).