

# Foundations of Flight

AXIS  
Flight School



## Head-Down Breakoff

Brought to you by Niklas Daniel of Axis Flight School and his teammate Brandon Atwood of Arizona Arsenal at Skydive Arizona in Eloy. Photos by Steve Curtis (digitally altered by USPA).

For more information visit [axisflightschool.com](http://axisflightschool.com) or search "Axis Flight School" on Facebook.



In this composite photo, Niklas Daniel turns and tracks away in a straight line from Brandon Atwood. (What appears to be a 90 degree change in direction is simply the effect of the wide-angle lens and the photographer's change of position.)

### Purpose

#### Safety:

- ▶ To increase awareness of your surroundings
- ▶ To create adequate separation from large groups before deploying your parachute

#### Performance:

- ▶ To increase your physical awareness


### Execution

As you approach breakoff altitude, take a quick glance around to see if anyone is near. To ensure that you will turn 180 degrees from your current position, keep looking into the center of the formation as you turn your body. You need to make this turn in place, still in a head-down position, without creating drive.

Once you have completed your 180-degree turn, look around. Make sure no one is in your intended path before you initiate your forward drive. Establish your new heading by noting a point on the horizon and any landmarks (e.g., mountains, bodies of water, etc.). Once you have determined that you have a clear space in which to move forward, do so gradually. Remain in a vertical orientation and move forward in a straight line.

As you get farther away from the formation and start to pick up speed, you'll begin to ease into a back-track. This will give you the ability to increase your horizontal speed while simultaneously clearing the airspace above you. Once you have reached peak speed on your back, perform a half barrel roll to your belly, and continue to track in a straight line. Now clear the airspace below you while continuing to increase your horizontal speed. Once you have reached your deployment altitude, signal to other jumpers that you are about to pull by waving your arms.

### Helpful Hints

- ▶ When performing your 180-degree turn, try to isolate your body movements (for example, when you turn your head, take particular care not to move your torso or shoulders).
- ▶ Be aware of the tendency to "sink out" just before breakoff. Counteract this tendency so that you avoid creating vertical separation, which can be a safety hazard. Take care to stay level with the formation as you turn, stop, clear your airspace and move out in a straight line. 



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