# FOUNDATIONS OF FLIGHT | HEAD-DOWN FORWARD MOVEMENT IN THE DAFFY POSITION

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

# AXIS Flight School



### **Prerequisites**

#### Ability to:

 Hold a neutral daffy head-down position (see "Foundations of Flight— Head-Down Variations," March 2013).

#### **Purpose**

- Necessary skill for success at headdown formation jumps (vertical and mixed formation skydiving).
- Ability to better deal with leg traffic while flying in close proximity to others.

#### Execution

Start in a comfortable head-down-daffy position oriented perpendicularly to the aircraft's line of flight. A jumper can utilize various body parts to create forward drive while in a head-down orientation. A flyer can apply inputs from just one of these sectors to make a small movement, or combine several inputs to move forward farther and more quickly:

#### Head and Torso

Align your head so that the air makes first contact with the crown. Look through your eyebrows to avoid flying on your forehead. To move forward, move your forehead toward the horizon in front of you. Tilt your torso so that you feel slightly more air pressure on the back of your body. This means that when your body tilts or turns during a maneuver, you'll need to use your neck muscles to maintain this alignment, which effectively allows your head to move independently from your torso.

#### Hips

You should have already engaged your core to fly in the head-down orientation by balancing your hips above your head. Once you've initiated a forward drive, you may need to use more muscle tension in your glutes to maintain this balance. This tension will also allow you to tap into the power of your back leg.





#### Legs and Arms

Flying in the daffy leg position gives you great stability and a large fall-rate range. If you need to cover only a few inches or feet of distance, you can remain in the daffy position and merely bend your forward leg more at the knee by moving your heel toward your butt. This removes air resistance from the forward shin and will allow you to coast forward. As this happens, you should extend your back leg (focus on your calf and hamstring) and point your toes.

You can contribute to your forward drive by pulling your elbows back slightly while keeping the forearms parallel to one another. However, this position is not great for traveling long distances since the shape is asymmetrical and only the back leg provides the main driving force. To travel long distances, use the shelf position instead (See "Foundations of Flight—Head-Down Forward Movement," November 2015)

## **Helpful Hint**

Remember that there are three stages to a controlled movement: the initiation, coast and counter of the initial drive to stop (e.g., driving backward to stop a forward drive).

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