



45 Head-Down Up and Down

Pre-requisites

This skill is one that you will have some familiarity with as you will learn and understand the majority of the elements while you are learning supported and basic head-down flight. You will find that most of your time learning to fly head-down skills early on has been based around learning to fly up and off the net. Prior to learning how to fly up and down in a head-down orientation, you will need to ensure that you have a stable neutral head-down position first.

Objectives

The primary objective is to be able to safely and successfully begin in a neutral head-down position off the net, then, when signaled by your coach, fly up approximately 3-6 feet from your original altitude and stop. Then, when signaled by your coach again, fly down 3-6 feet back to your starting altitude. You should be able to complete each movement without losing your heading, moving forward or backward or needing to “bail” for any instability.

Preparation

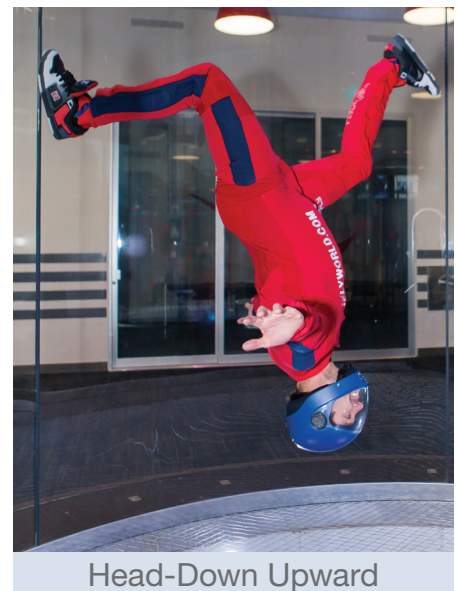
You will need to set yourself up in the center of the tunnel head down. You can begin the upward movement from either on the net or just a small distance above the net. If you are starting the downward movement, you will need to set yourself up in the center of the tunnel, head down, with enough space between you and the net to perform the movement without landing on the net. It will be important that you are able to stop yourself before reaching the net.

Technique and Drills

Keep these key elements in mind when learning this skill

Up (slow fall rate)

- You will begin in the center of the tunnel, in a neutral head-down position, approximately 2-3 feet above the net
- You will plan to use balanced inputs of your body's surface area to create lift
- Initiate the upward movement by extending your “daffy” position (spreading your front and rear leg as far apart as possible) to maximize the amount of lift potential
- As the lift begins, you will need to extend your arms out sideways
- Your arms can raise slightly, but no higher than your shoulders at any time
- Maintain balance with your inputs as your rise, to control any unwanted forward or backward movements or turns
- To stop an upward movement, you will slightly reduce the additional surface area to reduce the lift and maintain the desired altitude



Head-Down Upward

45 Head-Down Up and Down

Technique and Drills

Keep these key elements in mind when learning this skill

Down (fast fall rate)

- Begin in the center of the tunnel approximately 6 feet above the net. Depending on the position required for you to fly at that altitude, you can either be in a neutral or slow-fall position to begin the downward movement
- You will want to reduce the surface area at your arms by relaxing and lowering them and at your legs by reducing the spread between your front and back leg in your “daffy” position
- Maintain balance with your inputs as you descend, to control any unwanted forward or backward movements or turns
- To stop your downward movement, you will use the same inputs to initiate an upward movement and then once you have stopped, you will need to manage your position to maintain the desired altitude



Head-Down Neutral



Head-Down Downward

Post-Flight Questions / Suggestions

- How did your performance match the initial objectives?
- Were you able to maintain stability when flying up and down?
- During the up and down movements did you encounter any forward or backward drive?
- What techniques did you feel comfortable with and what can you improve on during the next session?

What Skill is Next?

During the learning phase of supported and basic head-down you will have the opportunity to become familiar with some of the concepts of each of the head-down movements. This is due to the fact that it will be necessary for your coach to give you some insights in to each of these skills to help you master the neutral body position. As you become a more competent head-down flyer, you will begin to master each of the movement skills, as your coach will give you specific headings or heights to maintain and move to at certain speeds.

While mastering the up and down skill, your coach will also have you mastering forward and backward movement and as well as heading control.

