



## The Headdown Program

Headdown just plain looks cool, and it's a ton of fun. Unfortunately, it's inherently zoomy, and this makes it both dangerous and frustrating in the early stages of the learning process. This program was created to help anyone safely progress from having never made a headdown jump to being able to safely fly headdown with a group.

# Safety First

## **Ensure that Your Gear is Freely Friendly:**

Bottom of container throw out pilot chute or a PUD are good deployment mechanisms. Leg throw outs are unacceptable because they're too likely to snake out of the pocket, and at higher freefall speeds, a premature deployment becomes even more dangerous. Also, your main pin cover should be tight enough to stay closed regardless of your body position, your riser covers should always stay shut, and your bridle should be completely covered or have very little exposed. If your rig doesn't meet these qualifications, then get it fixed or get a more freely friendly rig before you put yourself in any danger.

Wear a helmet, and get it setup with an audible or two. The need for head protection and altitude awareness is amplified by freeflying.

## **Become Proficient at Your Sit First:**

From a safety perspective, you have to start out on your belly, and then you can perfect your flying on your back, belly, sit, or tracking in any order that you want. I recommend belly flying first for the reasons mentioned above, but I also think it's reasonably safe to start sit flying, backflying, or tracking early on if that's what you want to do. The body position that has a built in safety concern is head down.

Laterally, sit flying tends to be anchored to one spot or maybe backsliding, but not much else. You still have to worry about corking, so it is more dangerous than belly or back, but it's not likely to zoom anywhere but backwards.

Headdown is straight up zoomy and corky. Unless you're one of those naturally gifted individuals who totally pisses everyone off because freeflying isn't difficult for them, you're probably going to find that you're zooming all over the sky the first few times you flip up onto your melon. This is normal. Do not panic. Just be aware enough to realize that you're flopping all over the place and go back to your sit. Then try again. Note: you cannot go back to your sit, if you cannot sit.

Why sit? Because sit flying has approximately the same fall rate as head down, and it isn't as inherently zoomy. Say, for instance, you were able to hold headdown for the entire jump, and you wanted to start working on headdown relative work. The first thing we'd need to do is get your true neutral headdown body position figured out. That's the body position where you're falling straight down on your head. If you started zooming, I'd want you to go to your sit because it will stop the zoom, but keep the fall rate at around the same speed. Then after a brief pause of non-scariness, you could roll back over on your head.

## **Do Solos Until You Can Stay Stable in For the Entire Dive:**

It is unsafe to jump with anyone other than a really good freeflyer if you're still corking or zooming. It's perfectly fine and helpful for some accomplished freeflyer to come video you, but your buddy who is as inexperienced as you are shouldn't be chasing you out the door. When you lose control of a freefly position, a collision with another freeflyer can be fatal, or worse yet, make you look uncool. Until you can hold the position, you're not really learning anything more by having somebody else in the air (unless they're really good and able to video you and offer advice. In which case it's called coaching, and that's plenty helpful.)

Other stuff you can learn on solos.

Heading control - you can just use the horizon.

Free Hands - practice reaching one hand out in front of you as if you're docking, then the other, and then both. Do you feel like you're keeping your balance or losing it?

Cartwheels, loops, and 360s - practice flipping, cartwheeling, and spinning. Nailing the sweet spot after each move.

## **On Your Solos, Face Perpendicular to Jump Run:**

Many new headdowners are unwittingly zooming forwards or backwards very fast. Facing perpendicular to jump run will greatly decrease the chances that you're flying over top of the group that left before you or underneath the group that left after you.

# Basic Stability and Heading Control

You have got to be able to stay stable, maintain fallrate, and maintain heading before you can do anything else.

## **How Do I Fly Stable Headdown?**

At first, you're going to be zooming forwards and backwards. Just accept that fact, face perpendicular to jump run as you do your solos, and don't get frustrated. Do some solos. You will initially find that you flop on your belly a little and zoom backwards, and then you flop on your back a little and zoom forwards, and that somewhere between those two flops is a sweet spot that feels nice. You need to learn to hold that sweet spot for the entire dive. The sweet spot is readily easy to feel, so the basic body position can be learned on solos, but having a coach sure doesn't hurt.

Spread those legs. Get your feet as far away from each other as you can. Have your arms out in the wind, but not too high. Hands should be below your shoulders. Think Fonzi. "HEEEY!" Now hold that pose. Some people get into a bad habit of raising the arms up too high. But you don't want to do that. I think a lot of times people do so because they're trying to slow down, but having your hands over your head is actually less surface area presented to the relative wind.

## **How Do I Turn While Headdown?**

Use your hands. Many find that turning while headdown is easy and intuitive, but if you need something to think about, think about twisting your hands a little just like sit fly turns. It's best not to do anything dramatic since you presumably just got the neutral body position dialed very recently. Soon, you will be able to turn using the force. The horizon makes just as good a reference as another person for learning turns, so don't be shy about making solos to dial this skill in. Turn 90, stop, turn 180, stop, turn 360, stop, repeat. These types of dives are very helpful when you're first starting out.

## **How Do I Transition to a Sit?**

If you can cartwheel in a sit, then you can do this. You're going to need to be able to do this pretty well in order to ensure that you can safely get into a sit if your headdown gets out of control. Bring your knees up and start a half cartwheel, then press your feet down into the wind. Now you're sitflying.

# Basic Stability Dives

## **Basic Stability Dive 1: Solo Headdown**

Solos don't suck when you're trying new body positions. They're great, they're fun, and there's no reason to risk a collision with somebody else on your first tries. I highly recommend you do several when you first start out. Some people get it right away. Some people need about 3 or 5 or 10. Exit from front float right into a headdown. You should be looking up at the plane, and you should be parallel with it at first. Then spread your legs and good luck. You can tell if you're basically in a headdown or not, and you can tell if you're balanced or if you're losing it. You can also figure out how to turn on a solo using the horizon.

Remember to face perpendicular to jump run in case you're zooming. You probably are.

## **Basic Stability Dive 2: Pose for the Camera**

If you think you're holding still, get a coach to come video you. The coach will be able to fly relative to you and let you know for sure if you're holding still, or if you're actually moving around the entire time. Just assume a headdown position and try to hold still. Your coach will close any separation, match fallrate, and video you. Watch for hand signals indicating that you need to change something. If your coach gives you the thumbs up, then you're falling straight down. If you're doing well, your coach may request some tricks and stunts.

If you can't see your coach, go to your sit. If you feel out of control, go to your sit. Take a break, and once your coach gives you the signal, then try again.

Note: You may notice that the learning curve for headdown is slower in the beginning stages than it was for sitflying. The good news is that the learning curve for headdown accelerates once you past the basic stability stage, and most people find that they're soon stronger on their heads than their feet.

## **Basic Stability Dive 3: Tricks and Stunts**

Assume a good headdown position and hold still. Your coach will close any separation, match fallrate, and video you. You will receive a signal to do either a clap your hands, touch your elbows, do a 360, a flip, or a cartwheel. Do the trick as controlled as you can, and hold still again. This helps you practice staying stable, freeing up your arms, and getting back to a good headdown quickly while keeping your fallrate steady.

## **Basic Stability Dive 4: Dockable Student**

Assume a good headdown position and hold still. Your coach will close any separation, match fallrate, video you, and if you're doing well, dock on you. Continue holding still and fly the dock for 3 - 5 seconds. New headdowners often lose stability when docked. It's as if the docker is charged with 30,000 volts. As soon as contact has occurred, the new headdowner freaks out, stiffens up, and the body flight suffers. This dive helps you learn to stay relaxed while docking, and to keep flying your torso and other limbs throughout the dock.

MILESTONE - At some point your coach should let you know that it's OK to try and fly headdown with other reasonably competent freefliers. Once you've reached that milestone, feel free to lurk some decent freefliers on your head, but be ready to switch to your feet if anything starts to get out of hand.

# Fall Rate Control

You can't approach to dock until you've matched fall rate.

## **How Do I Fall Faster Headdown?**

Relax those arms and let them fall by your sides, and don't spread those feet apart quite so hard. Much like forward movement, you'll find it's easy to increase your fallrate, but it's difficult to figure out how much relaxation gives you exactly the amount of acceleration that you want. The tendency is for people to initially overdo it, so keep it under control. Slowly relax and descend to the level you want.

## **How Do I Float Up While Headdown?**

Not surprisingly, it's the opposite of speeding up. Force those feet very far apart. If you need more slow down, try a daffy with the front foot very far out in front of you and the back leg very far behind you. If you need more, you can straighten out those arms, but that's the last resort. Stiff arms straight out to your side take away some of your ability to dock. At that point, you'd just as soon switch to your sit where you can typically fall a little slower more comfortably. Hang from a chinup bar and spread your legs to get a feel for upwards movement headdown.

# Fall Rate Control Dives

## **Fall Rate Dive 1: Up and Down**

Your coach will setup about 10 feet from you, match fallrate, and video. You drop down about 10 feet, stop, and then come back up and climb above your coach about 10 feet. Your coach maintains a steady fall rate. Then repeat. This is basic, and basic is good. This works well for new headdowners who want to see what it feels like to change fall rates. Try to keep in your column of air, but the coach will help keep the lateral separation to a minimum, you just focus on fallrate. Using your coach as a relative point, you'll be able to see what works and what doesn't.

## **Fall Rate Dive 2: Match Me**

Your coach will setup about 10 feet from you, match fallrate, and video. Then the coach changes fallrate. You have to get back on level with your coach. Try to keep in your column of air, but the coach will help keep the lateral separation to a minimum, you just focus on fallrate. Repeat. This dive is good for people who have a problem fall rate. That is to say they tend to always be faster than everybody else or slower than everybody else. It teaches you to match and maintain a different fallrate.

## **Fall Rate Dive 3: Over Unders**

Your coach sets up about 10 feet from you, matches fallrate, and videos. You fly down below and underneath the coach, and then turn around and fly up and over top of the coach who maintains a steady fallrate. Then repeat. This is simply a slightly more advanced and more fun version of the Up and Down dive. The idea for this one is to help you make more minor fall rate adjustments, and to fly in a more complicated path as you do it.

# Lateral Movement

Once you're on level, it's time to approach

## **How Do I Move Forward Headdown?**

You'll love it until it scares you. It's very easy to move forward on your head. As a matter of fact, it's so easy to do that at first it's difficult to control how fast you go. To move forward, lean slightly forward. Your body will follow your head. If you get your head slightly in front of your hips, you will go forward. To hit the turbo chargers, flip your hands over and press them down by your hips towards the wind hitting your back, but you should only have to do that when you're on a flocking dive. Don't zoom at your poor target. Take your time. Try to drift over to your target at walking speed. It's done by leaning forward just a little bit, or by just slightly pressing your legs behind you. It takes practice to learn just how much input is the right amount for the forward speed you want. Until you get it figured out, try to err on the slow side.

## **How Do I Fly Backwards or Hit the Brakes?**

If you're going to be moving towards somebody, you're going to need to know how to stop. If your approach is controlled, then you should just be able to coast to a stop or apply only a very slight backward input. But if you accidentally find yourself zooming at your target, then smoothly bring your head back behind your hips and let your legs come forward. Try not to overdo this as well and go zooming back the way you came, but for the love of God, don't keep zooming forward towards your coach.

# Lateral Movement Dives

## **Lateral Movement Dive 1: Back and Forth**

Your coach will setup about 10 feet from you, match fallrate, and video. You fly forward right up beside your coach, try not to over shoot, and then back up as close to the original 10 feet as you can. Repeat. This works well for practicing controlling forward movement such that you can park it in your slot.

## **Lateral Movement Dive 2: Forward to Flower**

Your coach will setup about 10 feet from you, match fallrate and video. You fly towards the coach and present a hand grip to your coach. Each time you do, the coach takes the grip, then releases it and flies back a little more. Gradually the distance you have to cover is increased. Your goal should be to park yourself right in front of the coach. This dive forces allows you to work on moving laterally to a precise location, and it allows you to work on bringing yourself gently to a stop.

# Headdown Docking

All of the above skills are necessary to pull this off

## **How Do I Dock on My Head?**

Your hands are a lot more free when headdown as opposed to sitflying. The hardest part for new headdowners is parking it in their slot and holding still. If you're in position, you'll be able to pick up the grip no problem. It's still kind of a best practice to fly yourself such that your hand naturally ends up on the dock, but you can get away with a whole lot more reaching on your head.

# Headdown Docking Dives

## **Hand Dock Dive 1: Spaceball Camera Flyer**

Your coach sets up anywhere within 20 feet of you and taps his/her chest indicating that this is the spot. The coach will only move if necessary to keep the camera on you. Otherwise the coach is a true base holding as still as possible and maintaining a consistent fallrate. You will have to change fall rates to come on level, and then move laterally to dock his/her hand with your hand. If you get too far away, such that the video is no longer informative, then your coach will close the distance and setup a new base near you.

# Breakoff

## **How should I leave a HD dive?**

The breakoff is one of the more important aspects of a HD jump. The opportunity for vertical and horizontal separation at this point is at its greatest, and you need to know where others are, or more importantly, are not. How to leave breakoff altitude is quite simple though, you have to clear your airspace. To do this, all you do is turn 180, while maintaining fallrate, and clear the airspace that is now in front of you. Now this is a deliberate and purposeful maneuver....turn, stop and look. When you have cleared your airspace is when you can start your track. Start the track slow while maintaining fallrate, and with increasing forward movement do you eventually end in a full back track, thus decreasing your fallrate. You don't ever just want to go flat, that's considered a cork. Tracking on your back allows you to clear the airspace above you. When you feel confident that no one is above you, flip to belly and clear airspace below you. At pull time, do a barrel roll for one more final look to the sky above you as insurance that someone hasn't crossed paths with you. Pull with a good wave off.

# Final Thoughts

A few final thoughts on learning to fly headdown. Don't get frustrated. When you are motivated enough, you can learn how to do this, it's just that you only get to practice in little bitty snippets of time. Eventually you will get it, and you'll find it's actually easier than sitflying. Do not be aggressive on your head. Freely collisions are very serious. Always set up and come to a complete stop just prior to the grip, then cover that last foot with very little energy. Headdown is tricky at first, but eventually, it just clicks. Maybe it'll be your next dive, maybe it won't. Just do the best you can, stay safe, and keep jumping. You will get it in no time.

We will be happy to show you the correct body positions for any of these skills as best we can on the ground any time were not busy. Just grab us and ask. We'll also be happy to do any of the dives in this program with you for slot.