



## The Sitfly Program

**Sitflying is a fun and safe way to enter the world of freefly. This program was created to help anyone safely progress from having never made a sit jump to being able to safely sit fly 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.

Beware of clothes that would normally be fine on your belly, but might blow up over your handles in a sit.

## **Become Proficient on Your Belly First:**

Your belly skills are your survival skills. They're also the skills that pay the bills. Unless you have an infinite stack of money, you may eventually want to become an AFF Instructor or student videographer/photographer. Or, if you're not quite talented enough for those jobs, a Tandem Instructor :) Each of these jobs requires advanced belly flying skills.

Also, remember that freeflying doesn't mean sit and head down. It means flying your body in any position or orientation. A total body pilot can do it all, so you might as well learn the most utilitarian body position, belly flying, first.

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

It is unsafe to jump with anyone other than a really good freeflier if you're still corking. It's perfectly fine and helpful for some accomplished freeflier to come video you, but your buddy who is just as inexperienced as you do shouldn't be chasing you out the door. When you lose control of a freefly position, a collision with another freeflier 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 sitflyers backslide a lot at first. 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 Sitfly Still and Stable?**

It's all about 90 degree angles. Arms out to your sides, with a 90 degree angle to your rib cage. Elbows bent 90 degrees, legs coming off the hips at 90 degrees, and knees bent at right angles. Spread your feet apart. You shouldn't feel any wind on your calves, shins, or chest. You should feel the wind hitting the soles of your feet, your hamstrings, your butt, and your arms. The wind should be pushing your heels straight up towards your knees. If you totally relaxed in a sit position, then your knees and arms would be blown up too high. Press the arms down to make the 90 at the shoulders and press your feet down to make the 90 at the hips. Sit up tall and straight. Keep your torso vertical.

## **How Do I Turn in a Sit?**

Use your hands at first. Angle them like the blades of a propeller. To turn left twist the left hand such that the thumb is slightly up, and twist the right hand so that the thumb is slightly down. To turn right, do the opposite. It's very intuitive. Later, you can also learn to turn by changing the angle of your legs, but this is a much faster turn, and whipping around quickly can lead to instability, so stick with the hands for now.

# Basic Stability Dives

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

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 front float facing the tail, right into a sit. Press your arms down to lift your upper body up and get your feet into the relative wind right underneath your knees. You can tell if you're basically in a sit 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 backsliding.

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

Just assume a sitfly 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.

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

Assume a good sitfly position and hold still. Your coach will close any separation, match fallrate, and video you. You will receive a signal to do either a flip, a cartwheel, or a 360. Do the trick, get back in your sit, and hold still again. You might also try running in place, clapping hands, mirror me, or a number of other games to help you practice staying stable and getting back to a good sit quickly while keeping your fallrate steady.

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

Assume a good sitfly position and hold still. Your coach will close any separation, match fallrate, video you, and dock on you. Continue holding still and fly the dock for 3 - 5 seconds. New sitflyers 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 sitflyer freaks out, stiffens up, and their 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.

# Fall Rate Control

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

## **How Do I Drop Down in a Sit?**

To increase your fall rate in a sit, there are basically two things you can do. Push your feet down into a stand and raise your arms. As with all things skydiving, the legs are more powerful than the arms, so use the arms for minor adjustments up close, and use the stand for when you really need to drop a ways. If you're still not staying down, do both. However, be aware that just like arching really hard makes it difficult to bellyfly, you probably won't feel as happy, comfortable, and totally controlled when you're standing up with your hands over your head, but you will fall very very fast.

## **How Do I Float Up in a Sit?**

To decrease your fall rate in a sit, first push your arms down hard and low. For a little more upwards movement, spread your legs wide. Get your feet out even wider than your knees. For a very dramatic upwards move, you can push your knees to the middle and your feet to the outside such that air is hitting the inside of your calves like the tunnel rats do.

# 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 sitflyers who want to see what it feels like to successfully 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, what doesn't, and what works too well!

## **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.

## **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 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 in a Sit?**

This can be surprisingly difficult in a sit. What you want to do is lean back such that your hips are in front of your shoulders. That's it, but it's harder than it sounds. It is not the most comfortable or loose feeling body position in the world. Think about getting your feet in front of your hips which are in front of your shoulders. Strong arms will help you keep your balance.

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

Easy peezy. Just lean forward. You've probably already found that sometimes you're going backwards

# 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 laterally past the coach by either side sliding or moving forward, then turn around and fly past again. Repeat. This works well for practicing sidesliding or forward movement. You can try both and, using your coach as a relative point, determine which one works better for you. I have found this to be a better teacher for basic forward movement than a flocking dive.

## **Lateral Movement Dive 2: Toe Taps**

Your coach will setup about 10 feet from you, match fallrate and video. You fly towards the coach and tap his/her foot with your foot. Each time you do, the coach flies away again. Gradually the distance you have to cover is increased. Your goal should be to park yourself right in front of the dock rather than just kick as you fly by. 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.

## **Lateral Movement Dive 3: Flock**

Your coach will setup about 10 feet from you, match fallrate and video. You begin to fly towards him/her, and as you do, the coach begins to back away. Gradually the lateral speed is increased, and you have to match. There is a problem with this one as a beginning forward movement learning tool. It seems like it would work, but experience is that it gets confusing. The problem is that if the student doesn't match the coach right away, and he keep going, then there is separation and you've lost your relative reference point. If the coach slows down, or even flies back, then the student sometimes doesn't know that they are not the ones that closed the gap. The flocking dive works best when the student knows they can move laterally, and just wants to work on really fast lateral movement.

# Sitfly Docking

All of the above skills are necessary to pull this off

## **How Do I Dock in a Sit?**

Just like RW, don't reach. Eventually you'll be able to reach from a sit just like a good rw guy can reach from their belly, but initially, it'll cause you to lose your balance and feel scared. Instead, think about flying the rest of your body such that your hand, right where it is in a comfortable sit, naturally makes contact with the target. First you must match fall rate, then you can approach either by flying forward or side sliding, and then turn such that your hand naturally lands on the target. It's important to match fall rate before approaching the dock.

## Sitfly Docking Dives

### **Hand Dock Dive 1: Alterante Hands**

Your coach sets up within docking distance from you and videos as you dock his/her foot with your hand. Don't reach in front of you. Instead, try to turn your body such that you're pointing your hand in at the foot in a comfortable body position. Then try to fly the hand over to the dock using the other hand, legs, and torso. Try to fly the dock for a couple of seconds when you get it. Then, just turn such that you dock with the other hand. Nothing fancy, but it's way harder than it sounds to do really well.

### **Hand Dock Dive 2: Forward to Dock**

Your coach sets up about 10 feet back, matches fall rate, and videos. It's the same as above, but you have to cover some ground and park it in your slot before taking the grip. This help teach you to fly your torso, legs, and other arm such that the hand you want to dock with ends up on the target after an approach.

### **Hand Dock Dive 3: 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 foot with your hand. If you get too far away, such that the video is no longer infomative, then your coach will close the distance and setup a new base near you.

We'll be happy to show you the correct body positions for any of these skills as best as 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.