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# SKYDIVE GREENE COUNTY

## STATIC LINE STUDENT SKYDIVING TRAINING GUIDE

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## DISCLAIMER

This manual is not intended, in any way, to teach skydiving. It is reference material to be used in conjunction with the Static Line first jump course. It is intended to be used during and after the first jump class as a study aid for exams and to use as a guide for practice skills.

## WARNING

### IMPORTANT NOTICE

**SPORT PARACHUTING OR SKYDIVING IS A POTENTIALLY DANGEROUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH. EACH INDIVIDUAL PARTICIPANT, REGARDLESS OF EXPERIENCE, HAS FINAL RESPONSIBILITY FOR HIS OR HER OWN SAFETY.**

It is the responsibility of each student to ask whatever questions are necessary for him or her to have a thorough understanding of the actions and procedures that he or she must perform in order to make a safe jump. Each skydiver has the responsibility to exercise certain practices and perform certain actions to maintain safety for himself or herself and for other people.

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# Terms

USPA – United States Parachute Association

FAA – Federal Aviation Administration

FAR – Federal Aviation Regulation

BSR – Basic Safety Requirement (USPA)

COA – Circle of Awareness (Horizon, Altimeter, Jump Master, Other jumpers)

TLO – Target Learning Objective

RSL – Reserve Static Line

AAD – Automatic Activation Device

PT – Practice Throw (Main Pilot Chute Launch)

BOC – Bottom of Container

JM – Jumpmaster

DZ – Drop Zone

S&TA – Safety and Training Advisor

JUMP RUN – Line of Flight for jumpers to get out.

SPOT – Ground reference which jumpers use while at altitude to determine where they get out of the plane.

MANIFEST – The person or location where jumpers get scheduled to jump and where they pay.

SIM – Skydivers information Manual

SGC – Skydive Greene County

RUNNING – Flying in the same direction as the wind.

CRABBING – Flying the canopy in a 90-degree angle or perpendicular to the wind.

HOLDING – Flying in the opposite direction as the wind.

## USPA Basic Safety Regulations (BSR)

- Maximum Ground winds for all solo students is 14 mph for ram-air canopies.
- All students and A-License holders is 3,000 feet AGL (Skydive Greene County requires 3,500 feet AGL)
- Maximum time between jumps is 30 days. Over 30 days requires a refresher course before jumping. Also if the student was cleared for the next level and an excessive amount of time has

passed between jumps the student may be required to repeat the last jump before being cleared for the next level.

- Minimum Exit Altitude for Static Line students 3,500 and must meet cloud clearances requirements.
- All student jumpers will jump gear that is equipped with and AAD and RSL.

## Introduction/Orientation

### Course Concept

1. The static line program allows students to gradually learn the arch position and parachute deployment while building confidence.
2. This program is designed for people that are looking to obtain a skydive license.

### Introduction

1. Skydiving can be a very physical sport and if you have any debilitating injuries or physical limitations that you may think will preclude you from jumping, please notify your instructor, jumpmaster or manifest.
2. Prior to every student jump you will be introduced to your instructor/coach (depending on jump level) He/She will review you last skydive, your logbook and the skydive that you will be performing.
3. All students will have a logbook to track all of their jumps (verification by signatures) from the beginning of their training and for the duration of the skydiving career. Skydive Greene County will provide a temporary log book that will hold the first 4 jumps. The student is required to purchase a logbook for the remainder of the jumps. Logbooks can be obtained online or if available from manifest.
4. Prior to skydiving all students will fill out registration forms and waivers.
5. After jump #12 all students are required to be members of the USPA. Since membership processing takes several weeks. It is recommended that students send in their membership application 3 weeks prior to jump #12.
6. Before every jump student's will remove all jewelry, valuable and anything they do not wish to get lost during the jump.
7. Please make sure to wear shoes that do not have snag points on them. If you are unsure of your footwear, please ask your instructor prior to jumping.

### Orientation

1. During the first jump course these items will be discussed during the ground school. However, if you are a returning jumper the instructor will go over the following as a refresher.
  - a. Tour of the drop zone.
  - b. Review of the aerial photo of the drop zone and discuss landing patterns for the day and/or jump.
  - c. Manifest procedures.
  - d. DZ Rules
  - e. Emergency Procedures

# Ground Training

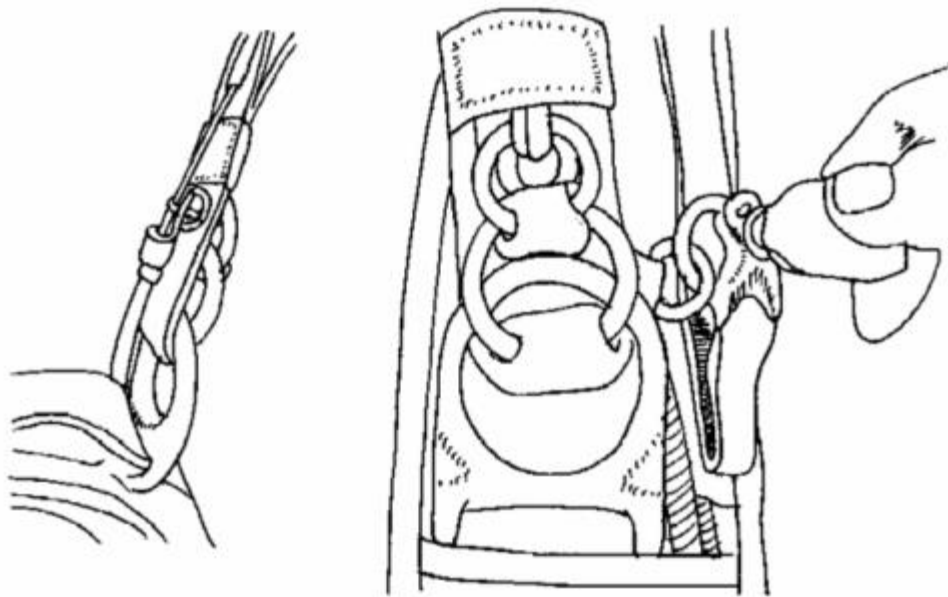
## Equipment

### The student parachute system

1. *Harness*: Webbing which secures the container and parachutes to the skydiver.
2. *Container*: Mounted to the harness, located on the skydivers back, holds the main and the reserve parachutes.
3. *Main Pilot Chute*: This deployment system consists of a small parachute approximately 25" – 36" across., that when thrown into the wind, will pull the pin and then the parachute from the main container. This pilot chute handle is located on the bottom right side of the container, usually with a small piece of orange PVC piping for student rigs. Other rigs may have a handle which looks like a rope ball or can be made out of leather. The pilot chute is stored in the BOC (Bottom of Container).
4. *Main Parachute*: Located in the lower container and attached by the risers to the harness at the shoulders by a three ring release system. This parachute is rectangular in shape and is referred to as a ram air parachute.
5. *Risers*: Webbing material that attaches the main and the reserve parachutes from the harness to the connector links. There is a front riser and rear riser on each side of the parachute.
6. *Connector Links*: Metal or corded links that attach the suspension lines of the parachute to the risers.
7. *Cutaway Handle*: This handle when pulled to full arm's length extension, releases the main parachute via the three ring system. This handle is a soft pillow, located on the right side of the harness under the chest strap and is held in place by Velcro.
8. *RSL (Reserve Static Line)*: A back up device that connect the main parachute riser to the reserve parachute ripcord. When you pull your cutaway handle, and your main detaches the reserve pin will be pulled. This is a USPA BSR for student jumpers.
9. *Reserve Handle*: This handle when pulled to full arms extension, deploys the reserve parachute. This is a metal D-ring style handle and is located on the left side of the harness under the chest strap. It is held in place with Velcro.
10. *Reserve Parachute*: Located in the upper container and is permanently attached to the harness. This parachute is also rectangular in shape and called a ram-air canopy.
11. *Steering Toggles(Brakes)*: Soft, loop handles responsible for the steering and landing of each parachute. The toggles are attached to the rear risers with Velcro.
12. *AAD (Automatic Activation Device)*: An electronic or mechanical device designed to activate the reserve parachute at a predetermined altitude and descent rate in an emergency situation. This is an electronic device and is subject to failure, therefore is not to be depended on for deployment.



**See Diagrams Following:**



**Figure 1 Three Ring Release**

## On Each and Every Jump

Each time you jump you will be required to wear the following equipment

1. A student rig provided by SGC. After jump 12 the student may rent the rig for a fee per day. If the student decides to buy their own gear it must have and properly sized main for the student's level, AAD and RSL with an in date reserve.
2. Altimeter, worn on the left hand.
3. Goggles worn underneath the helmet.
4. A Rigid Helmet appropriate for skydiving.
5. A Radio (Used only as an aid and training device not to be relied upon)
  - a. A Jumpsuit
  - b. Proper shoes or boots, no hooks on footwear.
6. Student must understand how to put on/operate Rig and Other Equipment
  - a. Rig Adjustment, must be secure
  - b. Proper fastening of straps
  - c. Correct fit of footwear, jumpsuit, helmet, goggles, and rig.
  - d. Position of altimeter.

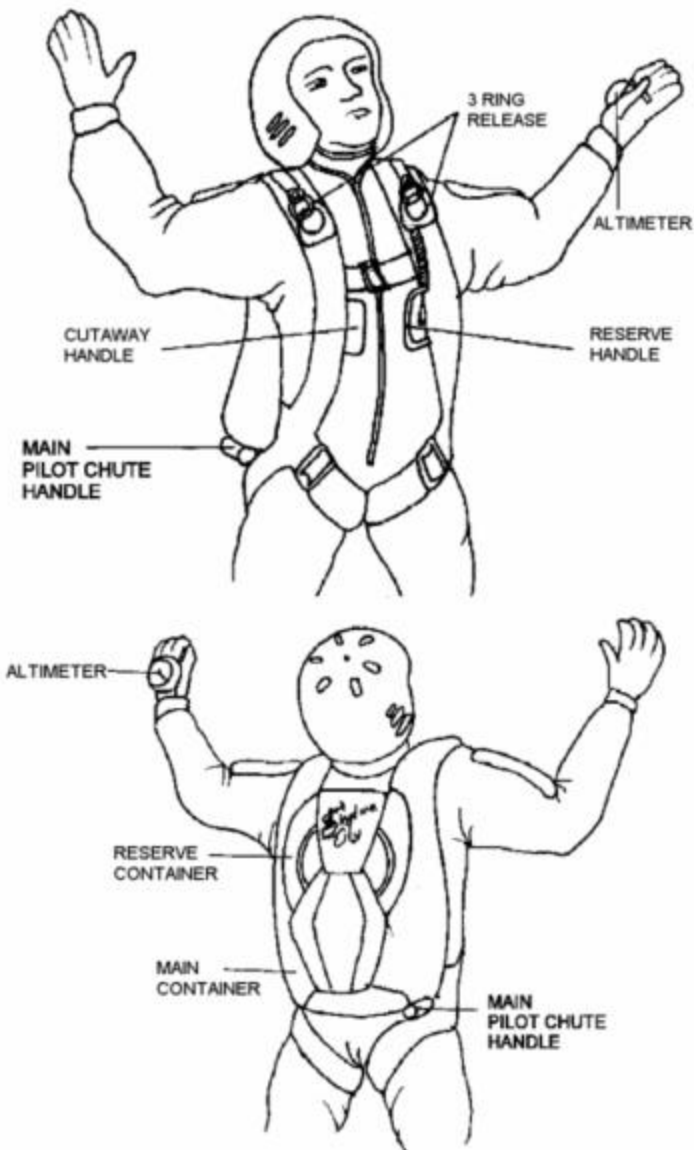


Figure 2 - Student Harness and Container System

## Gear Checks

The most important rule of gear checks is to perform the check in the same order every time so that nothing is missed.

1. *Canopy Release System* – Check both three-ring systems to make sure that the small ring only passed through the medium ring. Make sure the medium ring only passed through the

large ring. Make sure nothing else is routed through or wrapped around the rings that could prevent them from releasing the main parachute. To gear check the cutaway cable, locate and follow the yellow cable on the upper left side of the rig passing through the white locking loop holding the 3 ring in place. Check the reserve handle by following the yellow cable up through the white locking loop holding the 3 ring in place. Check that the locking loops are not frayed. Check that the 3-ring system can rotate in place and is not stuck. On the silver D-ring you should see part of the cable extending.

2. *Reserve Static Line(RSL)* – The RSL should be hooked up to the small silver ring on the right riser of the main parachute. Make sure that the RSL is routed over the right shoulder and that the reserve cable passes through the smallest silver loop at the end of the RSL lanyard.
3. *Stitching/Material* – Check over the entire rig to make sure that all stitching is secure and there is no fraying of the stitching or holes in any of the material of the container. Check the harness webbing for any fraying and check the yellow indicator thread on any outer edge for any breaks that would indicate a compromise in the structural integrity of the webbing.
4. *Leg Straps* – Check that the ends of the leg straps are folded over and securely sewn in place. Also make sure that the straps are properly routed through the metal hardware and that the friction adapter prevents the straps from coming loose.
5. *Chest strap* – Make sure that the chest strap is securely fastened to the vertical straps of the harness, and the end of the chest strap is folded over and securely sewn.
6. *Red Cutaway Handle* – Check to make sure that the emergency handle is properly stowed in the right velcro harness strap and that the Velcro is functional and secure.
7. *Reserve Handle* – check to make sure there is a silver ball attached to the end of the silver cable that passes through the D-ring. Check that the cable moves freely and that there is at least some extra cable present.
8. *Reserve Data Card* – When you rent or borrow a rig make sure that the reserve is in compliance with the FAA regulations. The reserve must be repacked by a certified FAA rigger every 180 days. Skydive Greene County rental rigs that are available are in compliance with this ruling. However, it is your responsibility to verify the data card if you own the rig. Students are not to remove the data cards from the club gear.



9. *AAD* – check that the AAD is on and says “student”. If it has not been turned on follow the procedures to turn on the AAD.
10. *Rigger’s Seal* – Check to make sure that the red thread is fastened above the flatter end of the reserve pin and below the closing loop. The red thread should have some slack so that it does not break too easily, but not so much that you can slip it off the end of the pin. The thread should pass through the gray seal of the rigger. The seal must have an identifiable mark on it that lets you know which rigger packed the reserve.
11. *Reserve Closing Loop* – Check that the loop does not have any fraying and that the reserve pin is the only item passing through it.
12. *Reserve Pin* – Check to ensure that the pin is 3/4 of the way through the closing loop.
13. *Main Closing Loop* – Check to make sure the ripcord cable passes through the loop. Also check the loop for any fraying. If there is mild fraying, have an instructor check it to make sure it is okay. In case of severe fraying, the rig should not be jumped until the closing loop is replaced. A main closing loop with damage greater than 10 percent warrants replacement.
14. *Static Line* – If you are still on static line jumps your instructor will make sure that the static line is properly connected to the rig.
15. *Pilot Chute and Handle* – if you are cleared from the static line you will check to make sure that the pilot chute is securely tucked into the BOC and that the handle is visible and accessible.

## Protect Handles

To prevent premature deployment of the main and or reserve parachute it is important to protect your handles. Also while on the static line it is important to protect the line from snagging on anything during exit. Protecting your handles should be your main concern when:

1. Entering the aircraft
2. Moving in the aircraft
3. Anyone else is moving near you
4. Exiting the aircraft

You should always check your handles prior to the door opening to ensure proper placement.

Your instructor will give you a gear check before exit. If you are on solo status and think you might have bumped your pins/handles, ask someone for a gear check before the door opens.

## *Parachute Open in Plane*

By protecting your handles and minimizing movement inside the aircraft you nearly eliminate the possibility of a parachute opening in the plane. However, if a parachute opens in the plane you will yell and get everyone’s attention and then do one of two things:

1. Contain – Do everything you can to contain the material, shut the door and land with the plane.
2. Dive – if the parachute is attached to you and goes out the door, dive out of the plane.

## Understanding the deployment of a parachute

Understand how the deployment system works (for static line students the pilot chute is attached to the static line and is connected to the plane. The pilot chute is automatically deployed when the student lets go of the plane)

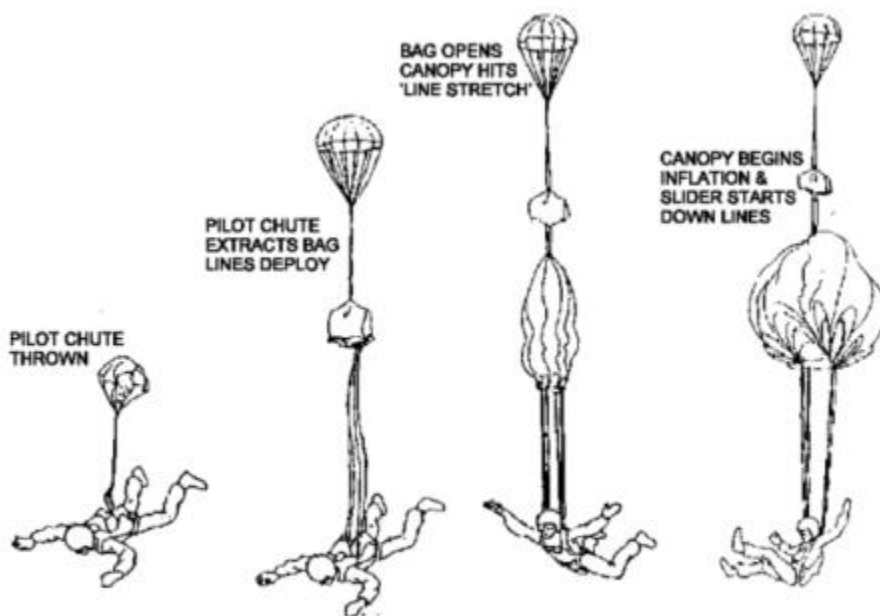


Figure 3 - Parachute Deployment Sequence

## Body Position

### Hanging from the plane

For your first few jumps you will be exiting the plane from a hanging position. Your instructor will give you 3 commands, sit in the door, out on the strut and the thumbs up or go command.

### *Climb Out*

The instructor will open the door of the plane and will then check the spot. Do not attempt to leave the aircraft until the instructor gives you the command to do so. The instructor will give the command "sit in the door." To sit in the door, swing both legs out and place them on the step then scoot forward until you are sitting on the edge of the doorframe. (See Image Below)





The instructor will then give the command “Out on the strut” and will point toward the wing of the plane. Grasp the strut and pull yourself forward until you are in a crouched standing position on the step. Slide your feet to the far right edge of the step and slide your hands out on the strut until your left hand is on the right side of the black tape. Once your hands are in place, shoulder width apart, gently step off the step one foot at a time. Once you are in a hanging position look back at the instructor and wait for the go command.



### *Hanging Exit*

We use a hanging exit at this drop zone, as it puts you in a good arch position before letting go of the plane. Start the hanging exit by following the instructions for Climb Out. The instructor will then signal you to let go of the plane with a thumbs up signal. Look at the underside of the wing to give yourself a focal point, take a breath, then release the strut with both hands.

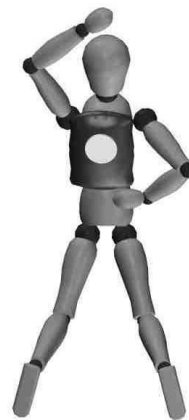


## Simulated Parachute Deployment (ARCH-REACH-THROW)

Execute your simulated deployment ARCH – REACH – THROW. The instructor must see you throw the tube away or you will be required to repeat the jump. You must successfully throw the tube 3 times on 3 separate jumps in order to move to the next level jump.

Begin by presenting your arched body to the relative wind as you let go of the plane. As you do this simultaneously bring your left hand above your head and reach your right hand to the lower right corner of the container, this is a symmetrical body position to prevent instability. Locate the pilot chute handle (or dummy pullout) and pull it as you return both hands back to their original position. As you are returning your hands to the original position throw the pilot chute as far as you can in a single motion.

As you are moving your arms you will be counting ARCH-REACH-THROW – 4 THOUSAND – 5 THOUSAND – 6 THOUSAND.





## 3 Rules of Pulling

Pulling on time and stable is your goal for each jump. There are rules to pulling. In order of importance, they are:

1. **PULL** – Pull something!
2. **PULL ON TIME** – Pull on time regardless of stability.
3. **PULL ON TIME AND STABLE** – Pulling on time and stable offers you the best opportunity to:
  - Provide the parachute the best platform for deployment
  - Ensure enough time/altitude to properly react to any deployment issues
  - Move forward in the progression

## Under Canopy

### Canopy Check

Once you have let go of the plane and counted to 6, your canopy should be fully deployed and you will need to perform a canopy check.

1. Is it there? (is there anything above your head or are you in freefall?)
2. Is it square? (Rectangular in shape, looks fully deployed)
3. Is it steerable? (Unstow the breaks and pull down on the left and let up, pull down on the right and let up. Does it turn when you do this? Does it stop turning and fly straight after letting up on both break lines?)
4. Is it flarable? (Pull down on both break lines to simulate a landing flare. Does the canopy rock back?)

### Emergency Procedures

If the above canopy checks fail, follow the steps below to execute emergency procedures

1. Look Red – look down and find the red pillow on the right
2. Grab Red – put both hands on the red pillow
3. Look Silver – look down and locate the silver handle
4. Pull Red – pull the red handle downward. You will feel a sudden drop when the parachute is cut away.
5. Pull Silver – grab the silver handle and pull to deploy your reserve.
6. If possible, keep hold of the handles. Tuck them into your jumpsuit after your reserve is open. Follow canopy check as above.

**Your decision altitude for using emergency procedures is 2500ft above the ground. Any canopy issues must be cleared before this altitude or initiation of emergency procedures must be started at this altitude.**

**DO NOT cut away your main parachute below 1000ft.**

After determining the controllability of your parachute it is necessary to execute the descent strategy as explained by your instructor. Look down at the ground and locate the landing area. If you are too far from the designated target find an alternate landing area by 2000 ft. Then look between your feet at the ground and ensure that you are in the predetermined holding area upwind of the target. Constantly monitor your altitude and location, working your way closer to the pattern entry point (1000ft). Listen for instruction via radio from the ground instructor, however it is your responsibility to fly your parachute to the ground.

## Upwind/Downwind

The world is divided into two sides, the upwind side and the downwind side. The center of this division is the X and the line that divides the two sides runs perpendicular to the wind line.

*Upwind* – The upwind side of the target is the side where the wind is coming from. It is where you want to exit the plane, open your parachute, and where our holding area is. The upwind side is the preferable side because the wind can be used to your advantage to push you back to the landing area

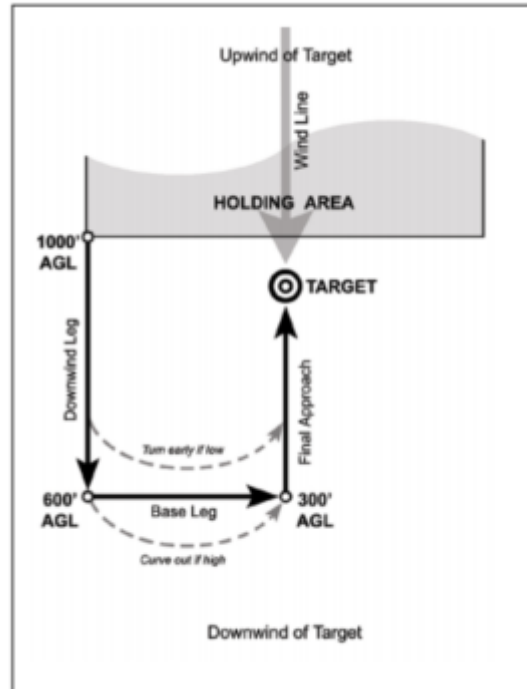
*Downwind* – The downwind side of the target is the side where the wind begins pushing you away from the target is for your landing pattern. The downwind side is less desirable than the upwind side because you will fight the wind to get back to the target.

## Landing Pattern

Before you go to the plane, plan out your anticipated descent strategy with your instructor including your Pattern entry point, Downwind leg, Base Leg, and Final Leg. Be aware that it is likely you will adjust your plan for the actual wind conditions under canopy. Adjusting a good plan is usually easier than coming up with a whole new plan.

After performing your canopy checks, it's time to locate the target (X) and ensure you are on the upwind side of the target. This should be the same side of the target that you exited the plane from, but fly towards the target to verify you are in fact flying with the wind (Running) and will be able to make it to the planned landing area in time to fly a normal landing pattern. By 1500ft you should be close enough to the landing area so you can clearly read the windsock on the ground. Map out your landing pattern based on the wind direction and determine the location of your pattern entry point.

1. *Downwind Leg* – 1000 ft. to 600-500 ft. Fly with the wind, with the X 90 degrees to the side and slightly behind you, then make a 90 degree left turn toward base leg.
2. *Base Leg* – 600 -500 ft. to 300 -200 ft. Flying crosswind, with the X 90 degrees to the side and slightly in front of you, then make a 90 degree left turn to final leg.
3. *Final Leg* - 300-200 ft. until touchdown. Flying into the wind, with the X directly in front of you. Put your arms all the way up, keep feet and knees together, eyes 45 degrees out in front of you and be prepared to flare when the command is given on the radio or you are 8-10 feet off the ground (lower in higher winds). On final only slight heading changes should be made.



## No wind or light wind scenario (See diagram above)

Fly to an area that is slightly upwind of your chosen pattern entry point so you are in a position to start your landing pattern at the correct altitude. To begin your landing pattern on time, plan ahead so that you are crossing over the top of your pattern entry point at 1000 ft and flying in the same direction of the target to fly the downwind leg of the landing pattern. At approximately 500-600 feet, make a 90 degree left hand turn in the direction of the target to fly the base leg of the landing pattern. The base leg is where you do your major adjustments for accuracy. At approximately 200-300 feet, make a left handed turn onto your final leg of the landing pattern. On this leg you should be flying directly into the wind. Make smooth turns to: line yourself up with the wind and the target for accuracy and avoid obstacles as traffic and altitude permit. Above 50ft, make heading corrections using half break turns only to keep the parachute flying into the wind. Heading adjustments should stop at 50 feet to shift focus to landing priorities.

## Downwind or Crosswind landings

Even with the best intentions, you may find yourself in a situation requiring you to land downwind or crosswind. If it is a light wind day or bad weather is approaching, the winds may shift after you have already entered your landing pattern. If you find yourself in this situation, do not panic or make any drastic turns close to the ground. To land downwind or crosswind, flare at the same height above the ground as you would if you landed into the wind. Do not try to run out the landing as you will be going too fast and may risk serious injury. On a crosswind landing. You may have to flare more on one side vs the other to keep the canopy flying level to the ground. Stay calm, fly your parachute all the way to the ground. And perform a PLF upon contact with the ground.

## Recovery from Low Turns

Low turns under canopy are one of the biggest causes of serious injury and death in skydiving. A low turn can be caused by premeditation, an error in judgement, or inexperience. To avoid low turns, fly a planned and predictable pattern to a large open area away from other canopies and obstacles. Make only minor adjustments below 200ft. If you see you have started a turn too low to the ground for a safe landing you should:

- i. Use your toggles to neutralize the turn and get the canopy overhead.
- ii. Stop the dive of the canopy
- iii. Flare the canopy and prepare for a hard landing (PLF)
- iv. In case of premature contact with the ground, no matter how hard, keep flying the canopy to prevent further injury.

## Landing Priorities

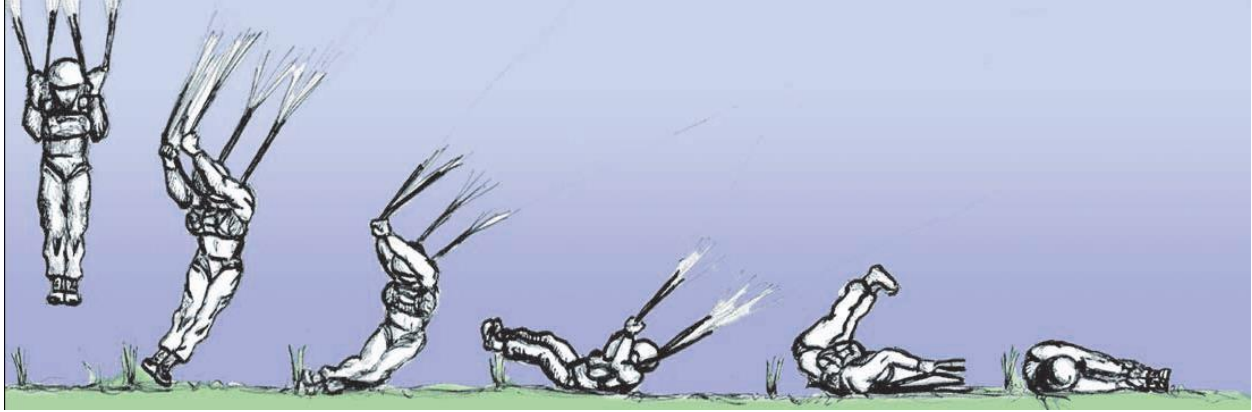
1. *Wing Level* – Canopy Overhead, not turning or diving towards the ground.
2. *Open Area* – free of obstacles.
3. *Flare* – Flare at the appropriate height.
4. *PLF* – Perform a Parachute Landing Fall.

*Flare* – A flare is the action that skydivers use to land softly on the ground. A flare converts forward speed to lift and is accomplished by pulling the toggles down to the waist or lower.

1. Flaring in no or light winds should be 8 – 10 feet off the ground. (0 – 7 mph)
2. Flaring in winds higher winds 6 – 8 feet off the ground. (7 – 14 mph)
3. If you are coming straight down flare 6 feet from the ground
4. If you are going backwards under canopy on landing do not flare until you are less than two feet off the ground.
5. If you realize that you have flared too early, stop the action and hold it and either finish the flare at the correct height or maintain it and PLF upon contact with the ground.

## Parachute Landing Fall (PLF)

A PLF is used upon landing to help prevent and/or minimize injuries. Be prepared to perform a PLF on each skydive. To PLF, start by keeping your feet and knees tightly together. With the knees slightly bent just before landing. There are five points of contact when doing a PLF. The balls of your feet should be the first point of contact, followed by the side of your calf, the side of your thigh, but and your back on a diagonal from you butt to the opposite shoulder.



## Aircraft Procedures

### Seatbelt Use

The primary Federal Aviation Regulation (FAR) that covers seatbelt use is FAR Part 91 section 91.107 (SIM pg. 195). According to this regulation:

- All passengers must be briefed on how to fasten and unfasten the seatbelt they will be using.
- Seatbelts are required to be fastened while the plane is taxiing out or in and during take-off and landing.
- Skydive Greene County requires we leave our seatbelts fastened until the aircraft reaches 1000 feet. Static line students are required to keep their seatbelts on until they are secured to the static line at 2000 feet. Once a student is no longer using the static line they are required to keep their seat belt on until 2000 feet until they reach self-supervision status.

### Aircraft Emergency Procedures

#### Emergency Landing Procedures

Make sure your helmet and seatbelt are on, bring your knees to your chest, interlock your fingers and put them behind your neck, remain still until landing, and quickly but orderly exit the aircraft. If the aircraft is compromised immediately get at least 100 feet away from the plane.

#### *Emergency During Flight*

The pilot is in command of the aircraft and will communicate to the instructor to exit or stay in the aircraft. The instructor will give you one of 4 commands:

- *Emergency Landing* – Everyone is landing with the plane.

- *Exit on Reserve* – Dive out and deploy the reserve parachute. Do this firmly by grasping the emergency handle with you left handle. Keep you right hand above you head as you dive. Pull the reserve handle as soon as you clear the plane.
- *Exit on Main* - Dive out and deploy the main parachute. If you are on the static line dive out with both hands extended in front of you. The static line will automatically deploy the parachute. If you are a freefall student pull the pilot chute.
- *Routine Exit* – Perform a routine exit if instructed to do so by your instructor. While on solo status or as a licensed jumper, you will take instructions from the pilot about whether to stay in the plane or leave and it will be up to you to decide which parachute to use for that emergency situation.

After an Emergency Exit look for the instructor’s parachute, if possible, and follow them to a clear, open landing area. Select any clear area for landing if you cannot locate the instructor’s canopy.

## Malfunctions

There are several potential parachute malfunctions in which you will need to immediately execute emergency procedures:

### Bag Lock

In this situation, the last two line stows do not release preventing the bag from opening and the parachute from deploying.

### Streamer

A streamer happens when the parachute has deployed, but does not completely inflate.

### Line Over

A line over is when one or more lines are crossed over the top of the canopy causing it to spin.

### *Horseshoe*

A horseshoe occurs when you have a second point of connection to any part of the parachute assembly in addition to the risers. An example of a second point of connection is the pilot chute or lines are caught on any part of your body or the parachute had deployed and the pilot chute is still in the bottom of container. Make two attempts to free the second point, but do not take more than 2 seconds. If you are unable to clear the horseshoe, initiate emergency procedures.

### Two-out

You may at some time experience having two canopies out at the same time. There are three canopy formations that are possible.

*Biplane* - Once canopy in front of the other.

*Side by Side* – Canopies flying next to each other

*Down Plane* – Canopies start in side by side configuration and then separate downward on either side.

In the event you have two out and your canopies are not entangled. Turn the front canopy to get the parachutes to move to a side by side configuration. Turn the canopy toward the side that the main canopy is on by pulling on the main canopy riser. Get separation between the two canopies and pull the red handle to release the main canopy. The main canopy will fall away and then fly the reserve as you would your main.

## Total Malfunction

A total malfunction occurs when you attempt to activate deployment and the container does not open. Quickly check over your shoulder, to make sure you are not experiencing pilot chute hesitation. If your parachute does not deploy, immediately initiate emergency procedures.

## Missing Deployment Handle

If you are unable to locate your main deployment handle or it is missing, try to locate the handle a second time. If you are not successful, initiate your emergency procedures. This is also considered a total malfunction.

## Hard Pull

A hard pull occurs when it is very difficult or impossible to pull the ripcord. A hard pull may be caused by a misrouted ripcord, a gouge in the ripcord cable that catches on the closing loop, or foreign debris located in the housing for the ripcord. To prevent a hard pull, make sure you complete a thorough gear check before putting on the gear and receive a pin-check in the plane prior to exit. If you do experience a hard pull, try pulling a second time. If you are not successful, initiate emergency procedures. This is also considered a total malfunction.

## Pilot Chute Hesitation

Pilot chute hesitation occurs when the pilot chute gets stuck in the jumpers' burble immediately after pulling. This is caused by a very stable body position at pull time. The easiest way to prevent and/or fix pilot chute hesitation is to look over one shoulder after pulling. This will allow airflow into the burble to help the pilot chute create sufficient drag to deploy the main parachute. If the problem is not resolved by doing this, initiate emergency procedures.

## Pilot Chute in Tow

A pilot chute in tow occurs when the pilot chute has been deployed, however the container remains closed and prevents the parachute from deploying. Looking over one shoulder, will not fix a pilot chute in tow, however is necessary to identify the malfunction. If you experience a pilot chute in tow, initiate emergency procedures.

## Injured Arm

If for any reason you injure your arm during an exit or skydive, it is important to remain calm and proactive until you land. Here are some possible procedures for an injured arm scenario:

### **Left Arm Injured:**

1. Deploy main parachute immediately
2. If possible, leave brakes stowed
3. Fly the parachute using rear risers
4. Land the parachute with brakes
5. Protect Injured arm on landing
6. PLF

### **Right Arm Injured:**

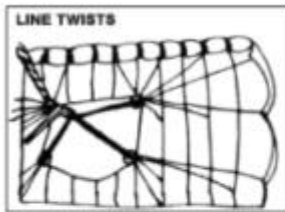
1. Deploy reserve parachute immediately
2. If possible, leave brakes stowed
3. Fly the parachute using the rear risers
4. Land the parachute with brakes
5. Protect injured arm on landing
6. PFL

Ideally, you will leave the brakes stowed in this situation and will avoid steering with both toggles in your uninjured hand. If you do un-stow the brakes, hold on to the toggles and do not release them. You may not be able to grasp both toggles again. Practice your flare as best you can but conserve your energy for your final flare.

Mentally prepare yourself for potential minor problems that will need to be fixed after the canopy opens.



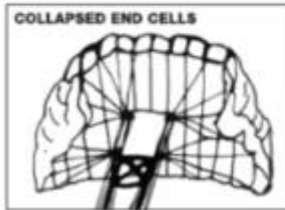
## YOU MAY NEED TO FIX . . .



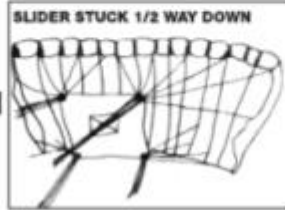
**BY**



DETERMINE which way the lines are twisted and then vigorously KICK your legs and body in the opposite direction. Kicking out of line twists requires prompt physical response. DO NOT unstow the brakes until the line twists are unwound. Once the line groups are untwisted, unstow the brakes. If the slider needs to be brought down or the end cells inflated, follow the instructions for fixing collapsed end cells or slider stuck 1/2 way down.



**OR**



**BY**

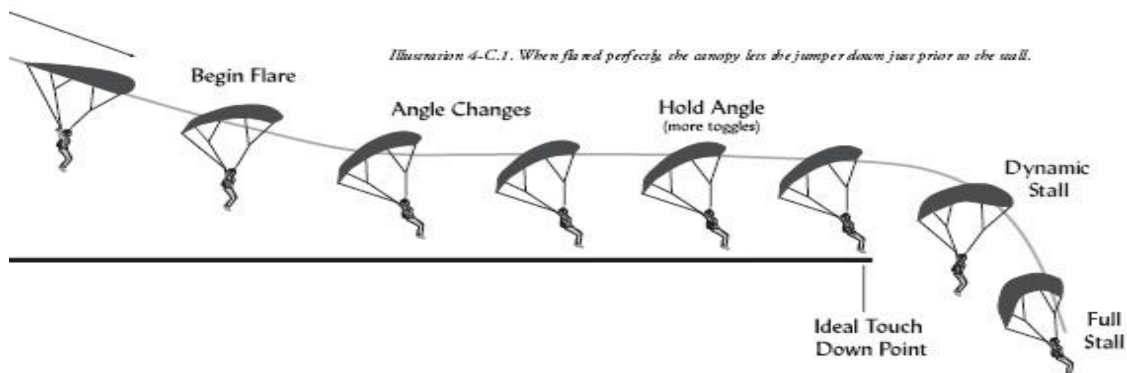


SMOOTHLY performing two practice flares to full arm extension. Perform controllability check. (Two flares, right turn, left turn)

## Stalls

A stall occurs when the canopy's tail is held below its nose for too long; the angle of attack is too great regardless of speed and the point where loss of lift occurs due to lack of forward speed. Knowing the stall point of your canopy is important. It gives you a definite limit to your control range. There are several different types of stalls: aerodynamic stall, dynamic stall, and full stall. Each time you flare you are essentially stalling your parachute, you just happen to touch the ground before the canopy stalls, which is ideal for landing your parachute. When you stall your parachute your glide decreases and your rate of descent increases.

If you find yourself stalling your canopy, smoothly raise your toggles to full flight and the canopy should recover. Raising the toggles too quickly may induce line twists or a partial collapse of the canopy. A good thing to know is where you need to raise your toggles to recover from a stall, in case you are near the ground and find your canopy in a stall.



For more information on stalls refer to the appendices under **Canopy Skills**.

## Deep Braked Turns

Practicing deep braked turns helps you get comfortable with the slow flight characteristics of your canopy. Pull the toggles down, slightly above your waist, and then raise the opposite toggle of the direction you wish to turn. Be careful, the canopy may be very close to its stall point during these maneuvers. If your parachute begins to stall, do not panic; smoothly raise your toggles to full flight.

## Obstacle Avoidance

The first rule for obstacle avoidance is to know where obstacles are located. The second rule is, look away then turn away. If there is no way to avoid hitting an obstacle, follow the procedures for hitting such obstacles:

## Power Line Landings

When landing in power lines, bring the steering toggles down to half brakes to minimize the speed with which you will hit the lines. Keep your legs tightly together and your arms pulled tightly into your chest. The goal is to be as narrow as you can to prevent getting hung up on the lines or touching more than one power line at a time. Try to fly as parallel as possible with the power lines. In the event that you become suspended in the power lines, do not allow anyone to touch you. Wait for the fire department to arrive and determine that the utility company has turned off the power to the lines. Do not try to get down to the ground on your own. If you land in power lines at this drop zone, you will be billed by the PUD for the cost of turning the power off and back on again.

## Tree Landings

When landing in trees is your only option, aim for the center of a large tree. Bring the steering toggles down into half brakes to minimize the speed with which you will hit the tree. Keep your legs tightly together and pull your knees up as high as you can in front of your mid-section. While holding the steering toggles, pull your hands and forearms close together in front of your chest and tuck your face behind them. Once you have stopped traveling forward, grab the tree and hang on. Do not try to get down on your own, wait for competent help.

## Building Landings

If it looks like you will land on top of a building, stop any turns in time to make sure you are ready for a PLF. Make sure your feet are the first thing to make contact. On high-wind days, be ready to disconnect

your RSL and to pull your emergency handle to cut-away your main parachute to prevent being dragged off the roof.

If it looks like you will hit the side of a building, try to make a minor turn so that you glance off the side of the building at an angle versus impacting it head on. Make sure you are in a half brakes (to minimize speed), and hit the object feet first. Be prepared to hit the ground hard and PLF.

## Water Landings

Avoid the water if at all possible. Once you have determined that a water landing is inevitable, unthread your chest strap and fly into the wind. You will not fall out of the equipment. If you have goggles on over your eyes, take them off or get them propped up on your helmet, they will fill with water and make it very difficult for you to see. As you approach the water, bring the steering toggles down into half brakes and be ready to PLF.

Your depth perception will be off over water so do not try to flare completely or cut away your main. Take a big breath of air as you hit the water, let go of the toggles and remove the top half of the rig – similar to removing a school backpack. Unsnap the leg straps and swim down and away from the equipment; or using a gentle leg kick, swim free of the leg straps. Be sure to swim completely clear of the canopy before surfacing. If you become disoriented and do not know which way is up, blow a few bubbles and swim the direction the bubbles travel. The other thing you can do is note which direction the suspension lines are going. They will also go up to the canopy at the surface. Do not try to save the gear. Save yourself.

## Landing Off Target

By 2,000 feet decide on your landing area, if you cannot make it back to the intended landing area, prepare to land off target.

- Choose the biggest area with the fewest obstacles
- Transfer the planned landing pattern to the new landing area
- Identify and avoid all obstacles
- Perform a PLF
- Be respectful of the property on which you land
- Walk toward the nearest road.
- Relative Wind Concepts

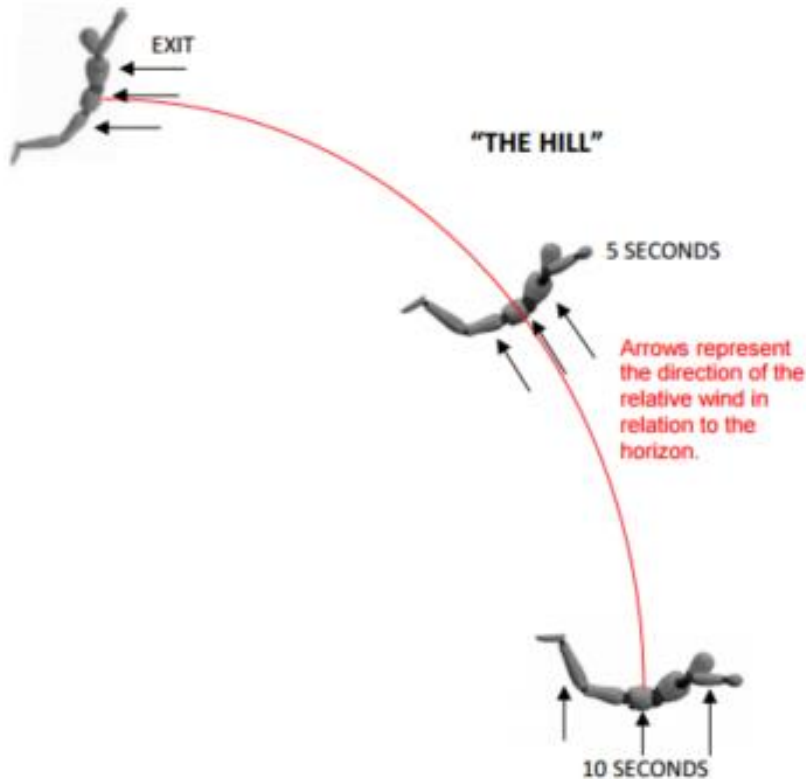
o

## Relative Wind Concepts

The relative wind is the airflow coming from the direction you are going. Upon your release from the plane the relative wind is coming from the direction the plane is flying. Once you have reached terminal velocity (constant freefall speed), the direction of the relative wind is now coming from the ground. The directional

transition between the relative wind on exit and the relative wind at terminal velocity is referred to as “the hill” and takes approximately 7 – 10 seconds. It takes 10 seconds to fall the first 1000ft and 5.5 seconds for each 1000 ft. after.

For now, your goal on each exit is to present and maintain your hips and chest directly into the relative wind. This will establish and maintain stability whether you are performing a hanging, step, or diving exit. When you put yourself in a position presenting your hips and chest to the relative wind while arching you will be able to establish and maintain stability regardless of your body’s position to the ground.



## Altimeter Use

In skydiving, the altimeter is specifically used for altitude above the surface of where you intend to land. To use an altimeter, turn the dial on the side of the altimeter so that the needle is on the zero. Do this while you are on the ground so the altimeter will read accurately during your jump. Each number on the altimeter represents 1000ft. As the plane climbs, you will see the needle turn clockwise indicating an increase in altitude. You may check the altimeter you are using with the altimeter located on the instrument panel in front of the pilot. Ask the pilot to show you which gauge it is. Always check your altitude prior to exiting. During your skydive, the needle will go down. When it reaches zero, you should be on the ground.



There are many styles of altimeters. Make sure you are familiar with the proper way to wear and read the one you are using.

## Spotting

Spotting is a critical skill that you need to develop to open your parachute in the correct area, and to minimize the chance of landing in an unfamiliar or potentially hazardous area. Plan on getting on your knees at least 1000ft before your exit altitude. Once you are on your knees, begin looking out of the aircraft checking for any other planes in the air and locating the landing area. Planes that may be a hazard are those that are at or near the same altitude as the plane you are in and those approaching the airspace above the drop zone. The planes approaching the target may be in the way by the time you plan on exiting. **Point out planes that you see in the immediate area and around the same altitude as you to the pilot.**

As you are coming onto jump run, the pilot will either nod at you or call out “door!” You are now in charge of operating the door and spotting the aircraft.

1. Open the door. In the Cessna that means pulling on the string tied to the latch. In the Westwind you will need to slide the door up completely.
2. In the Cessna place your head completely out the door to be able to look straight down.
3. Look forward through the props to the horizon and down the side of the aircraft to determine line of flight. Look off the wingtip to the horizon and run a line perpendicular to find your position on the line of flight.
4. If corrections are needed point your hand, in the direction you wish the plane to go, where the pilot can see your hand. For your first few jumps your instructor will be spotting for you. However, after you have completed several jumps your instructor will teach you spotting.
5. The pilot will correct his heading in 5 degree increments until you stop pointing.
6. When the plane is lined up to fly over the exit point, begin your climb out. Be sure to begin early enough to get into position, without hurrying, and to exit directly over the planned exit point.

## Dive Flows

Dive flows are the predetermined plan of the skydive. Free fall has a dive flow and canopy flight has a dive flow to encompass the entire skydive. It is important to know these dive flows and practice them for as long as it is necessary to develop muscle memory for each new skill presented. As you progress onto later jumps, the dive flow becomes more complex. By repetitively practicing them from start to finish you will deposit them into muscle and mental memory, ensuring you remember what to do next. A dive flow is the ideal

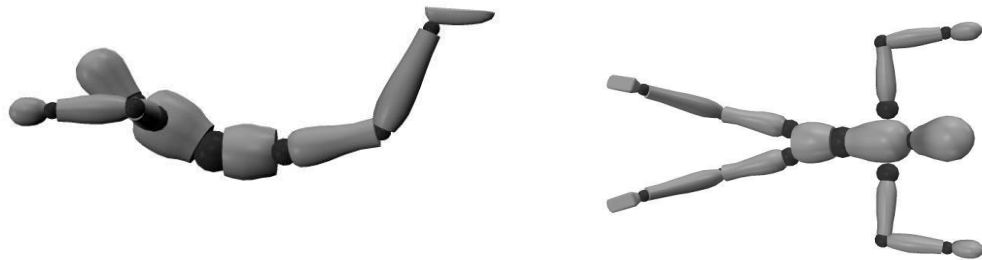
skydive and should be followed as closely as possible, however, skydiving is a sport that requires fluidity and things may change.

## Heading Awareness

When you leave the plane, you establish your heading. Initially, your heading should be the plane to keep your head up. As you fall down “the hill” your heading should transition to the horizon. Establishing a heading will make it easier to identify and fix an unintentional turn.

## Neutral Freefall Body Position or “Box” Position

The neutral freefall body position is performed in a belly-to-earth position. As the name implies, this is your neutral freefall body position where you are not moving forward, back, right, or left. It is the foundation from which you will learn to maneuver around the sky. Your body should be in an arched position with 90-degree angles at the shoulders and elbows. You should be able to see your hands in your peripheral vision. Your legs should be slightly apart so that the knees are in line with the shoulders and the knees should have a 45-degree bend. The most important factors for successfully performing this position are to have a good arch, your head up, and positive pressure on your legs and to keep your body symmetrical.



In studying these illustrations, take note of the body’s symmetry in this position in both height and width.

## Correcting Stability Problems

New jumpers may experience some stability problems now that they are falling for longer periods of time and reaching terminal velocity. The two most basic problems are losing stability (tumbling) and uncontrolled turns/spins.

If you find that you are losing stability:

- Look up (looking down promotes a de-arch which then promotes instability).
- Press your hips down and lift your knees up to achieve a better arch position (a good arch will stop you from tumbling through the sky).
- Keep positive pressure on your legs.

## Stopping Unintentional Turns

If you find that you are in an unintentional turn or spin, there are three basic things you can do to help stop the turn:

1. Check the position of your arms (make sure they are symmetrical and in the correct “box” position).
2. Click your heels together to make sure your legs are symmetrical (it is very easy to let one leg drop slightly below the other causing a turn).
3. Try to turn slightly in the opposite direction you are currently turning (turn by rotating/tilting your upper body the direction you wish to go).

A good body position allows you to have more success and less frustration. Make sure to practice your skills on the ground and get feedback from your instructor prior to jumping.

## Start, Coast, Stop Principle

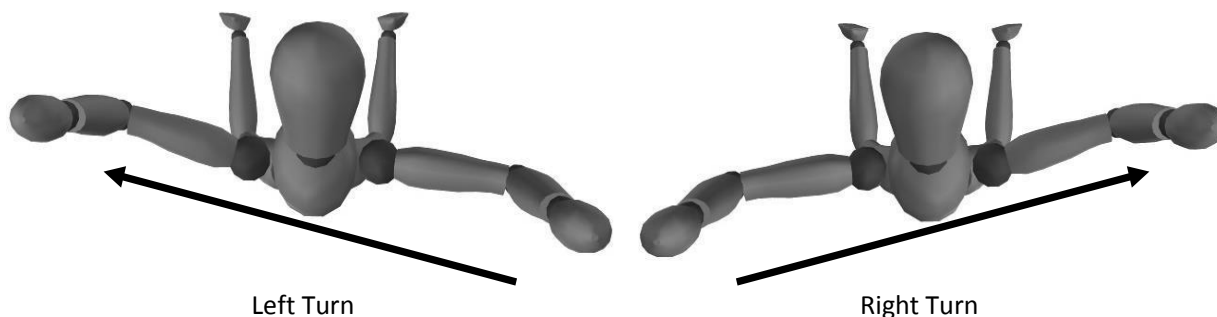
The Start, Coast, Stop (SCS) principle is how most maneuvers are taught in skydiving regardless of the discipline. It consists of three phases: Start, Coast, and Stop - phases to complete one maneuver.

1. The initiating movement (start phase) is the first movement out of a neutral body position that causes the body to move.
2. With that momentum built, return to a neutral body position (coast phase) until the desired heading or maneuver is nearly complete.
3. Counter (turn the opposite direction) the initial maneuver to stop it (stop phase). Once the motion stops, return to a neutral body position.

## Turns

To perform a turn; begin in a neutral “box” position, look to your new heading, lower the elbow in the direction you want to turn while raising the opposite elbow. When your new heading approaches; return to a neutral body position, counter the turn to stop on your desired heading. (Example: To turn left; look over your left elbow, lower your left elbow while raising your right elbow. As your new heading approaches; return to a neutral body position, counter the turn to stop the rotation on your desired heading.) The speed of the turn is determined by the angle of the arms against the relative wind.

Upper-body turns: Only use shoulders and arms. Do not use legs.... yet.



Arrows illustrate the direction in which air is being deflected by the arms and shoulders only. This deflection of air causes a rotation in the opposite direction.

## Barrel Rolls

Barrel rolls are an excellent way to regain a belly-to-earth orientation after instability leaves you back-to-earth. For a right barrel roll:

- Start in your neutral freefall body position (“box” position).
- Extend your right arm out in front of your head and dip your right shoulder into the direction of the roll. At the same time, extend the right leg and dip your right hip into the direction of the roll.
- Once the rotation begins, align your left arm and leg with the right arm and leg.
- As your rotation brings you belly-to-earth, return to your neutral freefall position to stop the roll. (Initiating a left barrel roll may be necessary to counter any extra momentum.)



Initiating Right Barrel Roll

Mid Barrel Roll

Initiating Left Barrel Roll

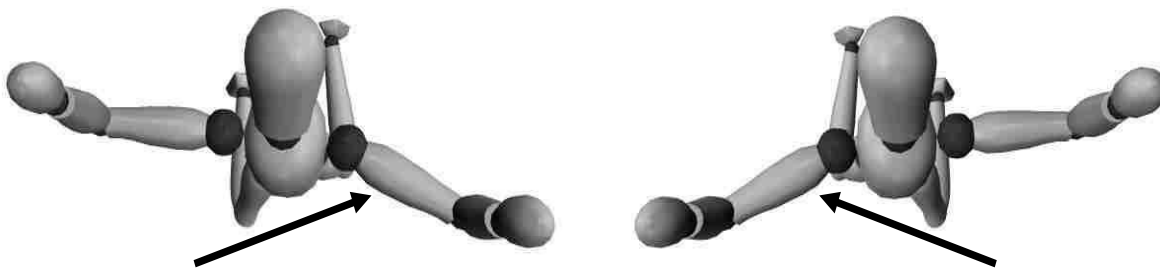
(To perform a Left Barrel Roll, reverse the steps for a Right Barrel Roll.)



## Center Turns

The goal of a **center turn** is to pivot around your center axis, which is your belly button area. Center turns are more efficient than upper-body turns and help make relative work more successful. Center turns are accomplished by using your upper body to deflect air in one direction and using your lower body to deflect air in the opposite direction, much like a propeller. To perform a center turn:

- Start in a stable “box” position.
- Initiate the turn by pressing down with an opposite elbow and knee.
  - By pressing down with the right elbow and left knee, you will perform a right turn.
  - By pressing down with the left elbow and right knee, you will perform a left turn.
  - As either knee is being pressed down for a turn, the foot on the same leg should lean towards the other leg.



**Left Center Turn**

**Right Center Turn** Arrows indicate the

**deflection** of air generated by the position of **the lower body**.

Always make sure that you maintain a good arch when performing center turns. If you have a slower fall rate, you can perform center turns by lifting opposing arms and legs to initiate a turn while maintaining a faster fall rate.

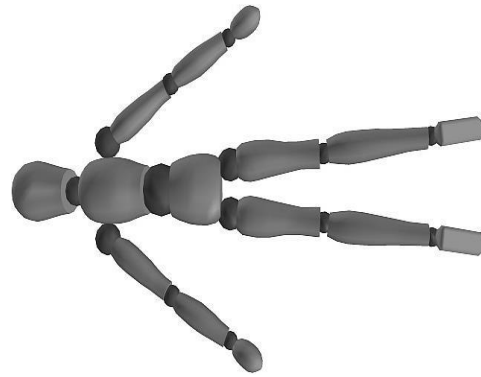
## Delta

A delta is the beginning stage of learning to track. New jumpers learn this skill before learning a flat track, as the delta achieves separation from other jumpers while maintaining a greater degree of stability.

Start in a box position, then straighten your legs and point your toes, keeping 1-1 ½ft of separation between them. Smoothly move your arms back until they are 45 to 90 degrees away from your sides and straighten them. Your palms should be faced down and approximately 1-1 ½ft away from the body. This is the delta position. Keep your head up during the delta and look out 45 degrees below the horizon to stay aware of your heading and other jumper traffic. Dip your shoulders slightly to make heading corrections while in delta; try to avoid big corrections while tracking. To stop the delta, return to a box position.



*Delta Side View*



*Delta Top View*

## Back Loop

To perform a back loop, throw your head straight back while you tuck your knees to your chest and grab them with your arms. This all needs to be done simultaneously. To stop a back loop, simply arch again. Do not begin to re-arch until you have almost fully completed the loop. Remember that while performing loops, your fall rate will increase and you will lose a lot of altitude quickly. Check your altimeter after each attempt or every 5 seconds. If you lose stability or stop on your back, ensure you are above your pull altitude, relax, and perform a barrel roll to regain stability. Do not initiate a back loop below 7000ft.

If you are having trouble mastering back loops on solo jumps, try starting from the step of the plane. Stand on the step of the plane with both feet, as you let go of the strut, lean back and grab both knees with your arms. This will initiate your back loop. You may also go to a swimming pool or lake and practice doing backward somersaults in the water.



Initiating Back Loop



Mid Back Loop

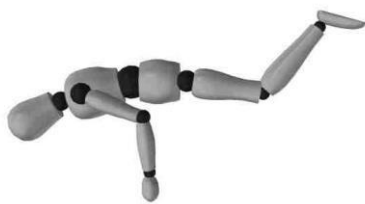


Stopping Back Loop

## Front Loop

To perform a front loop, you will need to throw your upper body forward by tucking your head down to your chest, quickly pressing both arms down and pulling them into the center of the body, and tucking your knees to your mid-section at the same time. Keep the head tucked down with the arms and legs pulled in tight until you have almost fully completed the loop before you re-arch. If you re-arch before you have completed at least  $\frac{3}{4}$  of the loop, you will not complete the front loop. If you lose stability or stop on your back, verify you are above your pull altitude, relax, and barrel roll to regain a belly-to-earth orientation.

If you are having problems mastering the front loops on solo jumps, try by starting the front loop from the step of the plane. When you are ready, door dive, tuck your head down and tuck your knees up to your mid-section grabbing them with your hands. Just like back loops, try going to a swimming pool or lake and practice. Do not initiate a front loop below 7000ft.



Initiating Front Loop



Mid Front Loop



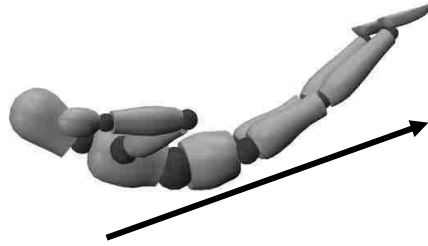
Stopping Front Loop

## Using the Altimeter in Freefall

Instead of counting as you have done on previous jumps, you will now use your altimeter to determine your altitude and when to pull. Check your altitude after every maneuver, when encountering difficulty in completing a current task, when uncertain of the altitude, and continually every few seconds. When checking your altimeter, your hand/arm should not move; use your head to look at your altimeter to avoid an unwanted turn. **Remember: your most important task in freefall is altitude awareness to recognize and act at the assigned pull altitude.** At 3500ft wave-off, and then pull.

## Forward and Backward Movement

In order to maneuver with another jumper in the air, it will be necessary for you to move forward and backward in a controlled manner.

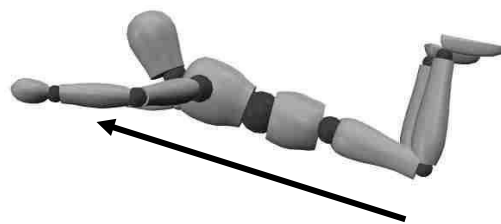


Arrows illustrate the deflection of air. This is what causes forward movement.

**To move forward:**

- Start in a neutral “box” position.
- Extend your legs to move forward.
- Keep your arms in a box position and head up looking at the person you are approaching.
- To stop moving forward, apply the techniques for backward movement (described below) and return to the box position.
- Make sure you slowdown in time to avoid a collision with another jumper. Collisions are very dangerous and can result in serious injury.

You may have quite a bit of separation from the jumper you are trying to dock with. It may be necessary to transition into a delta by bringing your arms back to close the gap. Remember to slow down prior to contact with the other jumper. The best method of approach initially is a staged approach where you perform a delta until you are a short distance from the other jumper then use the above procedure with your arms in a box position.



Arrows illustrate the deflection of air. This is what causes backward movement.

Backward movement is used to slow down your forward movement, or to avoid a collision from someone approaching you too fast.

**To move backward (Back slide):**

- Start in a box position
- Extend your arms out in front of you.
- To stop moving backward, return to a “box” position. You may extend your legs if you need to stop faster.

- If you need to move backward at a faster rate, you may <sup>also</sup> bend your knees pulling your lower legs (from the knee down) out of the relative wind and lower your knees.

### *Side Slides: Sideways Movement*

To perform a side slide, press down with the elbow and knee on the same side of the body. The more you press down, the faster and farther you will travel during the slide. To stop a side slide, return to the box position (if necessary, do a counter slide by pressing down with the elbow and knee on the opposite side of the body). You are using the same concept as forward and backward movement except you are now deflecting air to the side. It is important that you deflect the same amount of air with your lower body as you do with the upper body to prevent turning.



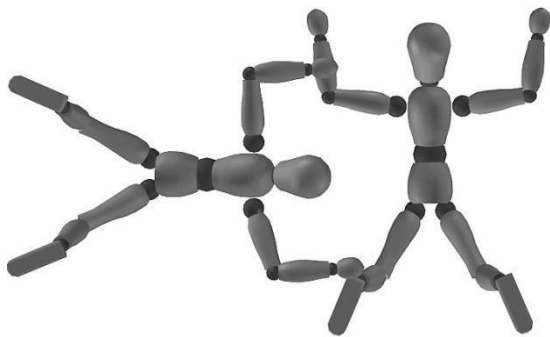
Left Side Slide



Right Side Slide

### *Sidebody*

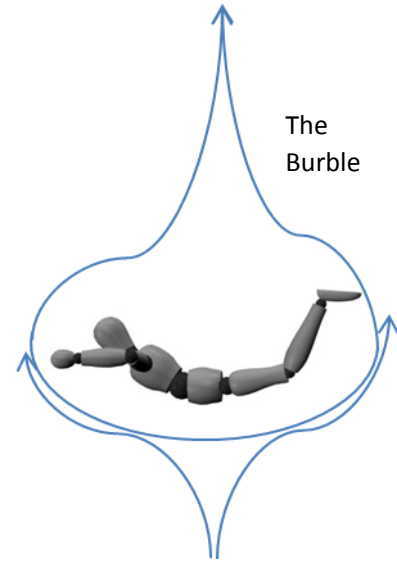
A side body is a formation used in formation skydiving (FS) to link two or more jumpers. One jumper (A) presents their side to another jumper (B) and jumper B takes grips on jumper A's upper arm grip and leg grip.



## Docking

Docking is the art of making and keeping contact with one or more jumpers in the air. There are a few challenges when you are first learning to dock with another jumper.

The first challenge is breaking through the “burble”. When a jumper is falling, they are displacing air around them. This displaced air creates what we call a burble. The first time you approach and try to make contact with another jumper, you may feel air resistance making it difficult to make contact. Breaking through the burble is done by extending your legs to create forward momentum to counter that resistance. **Do not reach forward with your arms**, this will cause you to travel backwards and lose momentum.



The second challenge is to anticipate putting on the brakes as soon as you break through the burble. The tendency is to drive forward too hard and possibly collide with the other jumper. To prevent a collision when breaking through the burble, slowly extend the legs until you break through. Be ready to retract your legs to stop forward movement. Once you have made contact a few times, it will become much easier, and you will learn to carry enough momentum from your approach to break through the burble.

The third challenge to docking is to approach from straight ahead and not from an angle. A straight in approach is much easier and docks are accomplished much more quickly. If you try to approach at an angle, you will find that you end up sliding all over trying to get lined up or if you try grabbing another jumper before you are in the correct position, you may cause the skydive to be “funneled”. Adjust your position to the other jumper first, then move straight forward to dock.

**After docking, extend legs slightly to keep positive pressure and keep flying your body (do not stop flying).**

## Loss of Altitude Awareness

**If at any point you are unsure of your altitude deploy your parachute.** If you lose altitude awareness, your instructor will deploy their parachute at 3500ft to signal for your deployment. If you see this, immediately deploy your main parachute. If you check your altimeter and you are at or below your decision altitude of 2500ft, immediately deploy your reserve parachute. It is **your responsibility** to monitor altitude and act appropriately at the designated altitude.

## Wave-off

The wave-off is a critical skill to learn. Whenever you are in the air with one or more jumpers, you must signal that you plan to initiate deployment to avoid possible collisions. Skydivers can drift in the air and unintentionally fly into the airspace of another jumper. It is important to notify other jumpers around you before you initiate deployment. The signal jumpers use to let others know that they are pulling is the wave-off.

To perform the wave-off, approximately 500ft before you plan on pulling, wave both arms by quickly pulling the hands in front of the face and then back out a little wider than their normal position for the box. Repeat this once more to make sure that all jumpers in the area are able to see the signal. Make sure that you look around to ensure that your airspace is clear of other jumpers. Only after you have done your wave-off and checked the area, deploy your parachute.

## Hand Signals

Hand signals are used in skydiving because verbal commands are difficult due to the constant noise we are surrounded by.



Arch / Hips forwards into the relative wind



Extend legs six inches and hold

Legs in (Retract legs slightly)

Head up/ GO!



Relax (breathe)

check arm position

Knees together slightly/ toe taps



Deploy the parachute (Pull)

## Cloud Clearance

At no time may a skydiver jump into or through a cloud or come closer to clouds than listed.

Minimum cloud clearance at or above 10,000ft MSL:

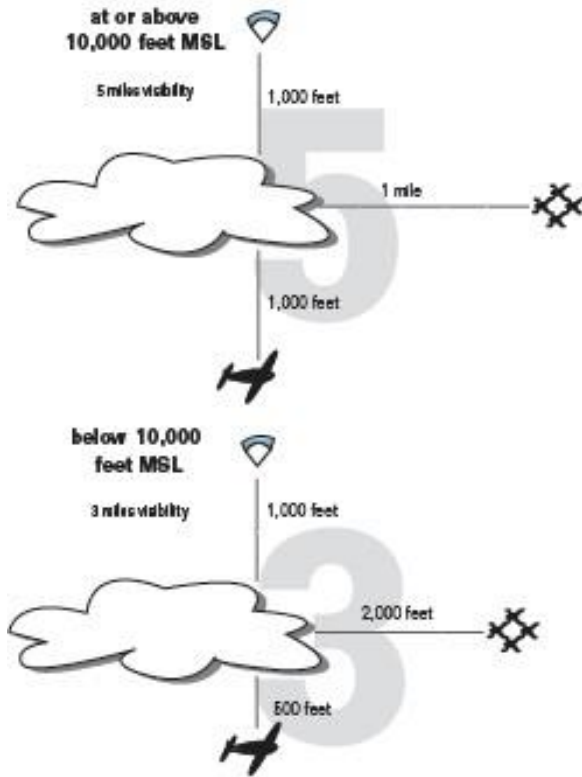
- 5 statute miles for flight visibility
- 1000ft below clouds
- 1000ft above clouds
- 1-mile horizontal distance from any cloud

Minimum cloud clearance below 10,000ft MSL:



- 3 statute miles for flight visibility
- 1000ft above clouds
- 500ft below clouds
- 2,000ft horizontal distance from any cloud

FAR part 105 section 105.17 (SIM pg. 202) covers this information.



## The jumps

### Static Line #1 -3

Jump altitude: 3,500 feet

Objectives:

- 1.) Climb out of the plane
- 2.) Perform a hanging exit
- 3.) Present body to relative wind in an arched position
- 4.) Let go of the plane
- 5.) Perform simulated deployment
- 6.) Land at DZ safely

## Static Line #4 & 5

Jump altitude: 4,000 feet

Objectives:

- 1.) Climb out of the plane
- 2.) Perform a hanging exit
- 3.) Present body to relative wind in an arched position
- 4.) Let go of the plane
- 5.) Deploy parachute
- 6.) Land at DZ safely

## Static Line #6 & 7

Jump altitude: 4,500 feet

Objectives:

- 1.) Climb out of the plane
- 2.) Perform a hanging exit
- 3.) Present body to relative wind in an arched position
- 4.) Let go of the plane
- 5.) Stable arch
- 6.) Count to 5 (One 1-thousand, Two 1-Thousand, etc)
- 7.) Deploy parachute
- 8.) Land at DZ safely

## Static Line #8 & 9

Jump altitude: 5,500 feet

Objectives:

- 1.) Climb out of the plane
- 2.) Perform a hanging exit
- 3.) Present body to relative wind in an arched position
- 4.) Let go of the plane
- 5.) Stable arch
- 6.) Count to 10 (One 1-thousand, Two 1-Thousand, etc.)
- 7.) Deploy parachute
- 8.) Land at DZ safely

## Static Line #10 & 11

Jump altitude: 7,500 feet

Objectives:

- 1.) Climb out of the plane

- 2.) Perform a poised exit
- 3.) Present body to relative wind in an arched position
- 4.) Let go of the plane
- 5.) Stable arch
- 6.) Count to 20 (One 1-thousand, Two 1-Thousand, etc)
- 7.) Start using altimeter in freefall (Circle of awareness)
- 8.) Perform turns, barrel roll, flips
- 9.) Deploy parachute
- 10.) Land at DZ safely

## Static Line #12

Jump altitude: 10,000 – 13,000 feet

Objectives:

- 9.) Climb out of the plane
- 10.) Perform diving or poised exit
- 11.) Present body to relative wind in an arched position
- 12.) Let go of the plane
- 13.) Stable arch
- 14.) Perform turns, tracking, barrel roll, flips
- 15.) Deploy parachute
- 16.) Land at DZ safely

At this point in the program after you have completed 12 jumps you will be cleared for self-supervision. You will be required to have two additional coached jumps to learn docking. Remember at this point you are not allowed to jump with any groups or other fun jumpers. Until you have obtained your A license you are only allowed to jump with coaches and instructors.