

skydive *Kansas* ground school

Color Key & Legend

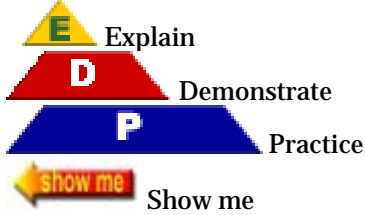
Directions, not to read aloud

Questions to read aloud

Answers to questions for clarity

For AFF students only, coaches skip this

For advanced students only



Introduce yourself appropriate to how you know them.

Have you checked in at manifest? Need to make sure they have current waiver & USPA membership

Can I see your logbook? Get student info, bio, feedback on previous jumps as appropriate for their level.

Possible springboard questions/comments:

Tell me about this last jump you made.

What's been your favorite jump so far?

What have you found that you excel at?

Where would you like to see improvement?

What are you looking forward to in these next jumps?

E I'm going to be reviewing information from the Ground School with you. It follows the same outline as tandem training and the online ground school.

First, we'll have to consider Rules,

then we Gear up,

go to the Plane,

Exit then go into

Freefall,

then we're under Canopy,

and finally Land.

rules & regulations

Where do we get our student progression from? Make sure they have program sheet.

What is USPA?

What is the SIM?

What are the BSRs?

What role does the FAA have in regulating skydiving?

How often are you required to make a jump to maintain currency?

What do you have to do if you get uncurrent?

gear

If possible, have the gear packed, and deploy main as you ask these questions. If main is unpacked, layout the canopy and start at the top.


 I'm going to ask you questions about the parts of the gear and their function.



Pilot Chute What's this? What's its purpose? Where is it located on your body in freefall?

Cutaway handle While we're talking about handles, what's this? What happens when I pull it? Where is it located on your body?

Reserve Handle What's this? What happens when I pull it? Where is it located on your body?

So, in freefall, you deploy your main at what altitude? Show me how you do that. 
Then if you have a malfunction, show me what you would do?

Bridle What's this?

Pin What's this? What does it do?

Window with blue mark What's this? What color should it be? Show me how you would cock the pilot chute. Why is that important?

Dbag What's this? What does it do?

Entire main canopy What's this?


Cell openings (nose) What are these called?

End cells What are these cells on the end called?

Slider What's this? What's its purpose?

Lines What are these called?

Risers What are these?

Toggles What are these? How do you use them, show me? (R, L, flare, half brakes) 

RSL What's this? What's its purpose? (show them cutaway and RSL function if having problems, they would have already seen a video of this tho)

AAD What's this? How does it work? Show me how to turn it on. Do we ever need to turn it off?

Reserve Pack What's in here? **For advanced students** How often must it be inspected and repacked? Who can do this? How do I check that it has been?

Main Pack What goes in here? **For advanced students** How often must it be repacked? Who can do this?

BOC pouch what goes in here?

Show me again how you would deploy your main. Now if you have a malfunction? 

This is primacy/recency for EP.

airplane

Walk to real airplane if possible. If not, use a mockup.

E First we'll go over **Routine** procedures, what we expect to happen every jump, then we'll go over **Emergency** Airplane procedures.

D As we walk to the plane, what precautions do we take? (use loaded gun analogy)
When are we required to wear seatbelts?

Show me where you would sit in the airplane on this next jump. Now show me how you would exit.

show me

P Depending on level of student: for AFF, let Jen do this part. For coached, practice climbout & exit several times, including arch

As you exit, where is the "wind" coming from? (relative wind)

D Now, in case of **Emergency**, who is in charge of the aircraft? (pilot in command)
Since the pilot will likely be busy flying the plane and talking on the radio, who else can we look to for advice?

P Have them sit in the airplane. **show me**

Now show me what you would do, if the door was closed and you saw a rig open or canopy material in the plane.

Now, what if the door was open?

Now show me what you would do, if we were flying and I say, "We are going to have an emergency landing."

Show me how best you would protect yourself from injury.

Now, what if I say, "We have an emergency, follow me out, use your reserve."

Now if I say, "We have an emergency, follow me out, use your main."

If you have to choose for yourself which parachute to use, how do you determine this? (altitude)

At what altitude would you get out of the plane? (seatbelt off)

At what altitude would you use your main instead of reserve? (decision altitude) Why?

What if we are like at 7,000 feet and we have to leave the plane, exit early. How does that affect your skydive?

Are we likely to land on the airport if we have an emergency exit?

exit & freefall

E First we'll go over **Routine** procedures, what we expect to happen every jump, then we'll go over **Emergency** procedures for freefall.

D Since we communicate in freefall with **hand signals**, let's review those first. First we have "reminder" hand signals.

COA What's this?

Practice Touch What's this? Or move elbow

Altimeter tap What if I tap on your altimeter or my altimeter?

How often do you check your altimeter? 1. every 5 seconds, 2. after every maneuver, or 3. whenever something unexpected happens

Wave What if I wave like this, what does that mean for you?

Pull What does this mean? Show me what you would do.

What if you saw me open my canopy, what does that signal for you to do?

P Now we'll review body position signals. Have them on HT. 

Thumbs up What does this mean? (good job) It can also mean "your turn"

Relax What does this mean? How do you relax? (sigh, slow breath, blink slowly, release tension in extremities)

Hips down What's this? Show me.

Legs out What's this? Show me. As you extend your legs feel how your arch wants to degrade. So what should you also do? (hips down)

Legs in What's this? Show me. How far do you move your legs? (6 inches at a time, or until signal goes away, or thumbs up)

Check arms What's this? Where should your arms be? Show me.



What are we doing on this next jump? Have them say **dive flow**. (OPTIONAL!)

Break out specific skills and demonstrate them, then have student practice.

Put the whole dive together with the realtime altimeter. Achieve at least 3 times uninterrupted without talking.

Now we'll review **Problems & Emergencies**. How do you solve problems in Freefall?

D RAN technique Relax (how do you relax?) Arch (with what part of your body do you arch?) Neutral (what does neutral feel like? LEGS first then arms, symmetrical)

How long do you try to "fix" a problem? (5 seconds)

If you can't fix it, what action do you take? (wave off & pull main)

What are the Freefall Priorities? 1. pull 2. pull on time 3. pull stable

So let's say you reach to pull and start to roll or go unstable: what do you do? Pull anyway


P Go ahead and show me neutral arch. Say it's 5,000 / 4,000 feet, time to wave off and pull.. simulate can't find main handle - Practice proper procedure for this: "one more shot at it" while moving hand to middle of back, find container, work wide spread hand towards the right to find handle.

If you can't find it that time, what do you do? Either answer here is appropriate, but prefer cutaway then pull reserve If they say just reserve, ask about pros & cons.

Let's do the pull again. Simulate hard pull. Again, "one more shot at it." Same answers.

What's a burble? How could this be an issue at pull time? Show me how you would clear a burble.

E Now we'll review **Routine** canopy opening procedures, then we'll go over Problems and **Emergency** procedures.

D How do you know if you have a **good canopy**? Does it have to be perfectly square? What does stable mean? Show me how you check to see if it's steerable. 
What's the difference between a **problem** and a malfunction?
How long do you try to solve a problem? (Decision Altitude 2,000 feet)
So, if you have a malfunction do you wait until 2,000 feet to cutaway?

P Go over Problems with the photographs in order:
line twists, tears, pc in front, end cell closure, slider up, tension knots/toggle unstowed on opening, broken lines, premature brake release
slow opening: how long does a canopy take to open? What if it looks like this, somewhat organized, but slow? (Give 2 more seconds)

E So those were problems, now we'll deal with **malfunctions**.

P What is the SINGLE correct answer for every malfunction?

Cutaway/Pull Reserve:

streamer, bag lock, pc in tow, line over
horseshoe (one more shot at clearing it, point up)

Two Canopies Out:

(If they are touching, keep them, if they are clearly separated, cutaway)
biplane, side by side, downplane
entanglement (if possible or appropriate, pull in least inflated and put nose between legs)
How to avoid 2 out!
canopy collision (steer to the right, big X if collision is imminent)

So now that you're under your reserve, how do you solve problems, such as line twists?

What is stalling? (Might mention our reserves might be subject to stalling, but our main won't normally be because they've been test jumped.)

How should you react to stalling?

Why is it dangerous to cutaway below 1,000 feet?

If you find yourself without a landable main canopy below 1,000 feet, what action *can* you take?

landing

E Now, we cannot say for sure when or even IF you'll experience a malfunction, although we need to prepare for that. HOWEVER, I can guarantee you WILL have a LANDING! So we'll review **Routine** landing procedures, then we'll go over **Emergency** landing procedures.




On the aerial map, draw a circle. If this is the **playground**, what direction would you expect the surface winds to be coming from? So, which way will you face for landing? Draw for me your **canopy pattern**, and mention altitudes. If they are not competent to do this, demonstrate one first, then have them practice at least 3 times with different playgrounds correctly. leave playground 1,200 feet to start *Downwind* | *Base leg* or *Turnaround* at the numbers or by 500 feet whichever comes first | *Final Approach* by 300 feet

Now, let's say you are here on **final approach**. How can you tell where you are going to land? What if you see your target move away from you? What if it's staying still? What if the target is moving toward you? How do you bleed off altitude?

For advanced students reviewing adjustable downwind/base leg:

Let's say you are here on downwind and you check your altitude and see you are higher than you were expecting or hoping. How can you extend your base leg? Now, turning onto base, seeing you're still too high, how can you adjust where you enter on final? What if you are lower than you expected, what angle do you take so your final is at a good entry point?

At what altitude do you **flare**? How can you tell what 15 feet is? Show me how you flare?  Let's say you're starting your flare, at your shoulders you see you've flared too high... what do you do? Show me. Let's do that again, now say at your shoulders you've seen you've flared too late... what do you do? Show me.

What if at your shoulders your flare looks good... show me what you'd do.


On a hot day, would you expect that you should flare higher or lower?


What about on cold day?

What about on a no wind day?

What about on a windy day?

On a windy day, if after you land, you find yourself being dragged by the wind, how can you collapse your canopy? Show me.

What technique for landing can you use to minimize injury potential? PLF 

 If they have been through Ground before, have them show you just ONE PLF. If this is the first time they've been through ground school, practice PLFs several times: start by demonstrating on your knees, have them practice right and left. Then demonstrate from standing, have them practice right and left. Then demonstrate by jumping, have them practice right and left.

When do you expect to do a PLF landing? Every jump!

Now for the **unexpected** landings:

What's a SOFA? Show me some on the map.

If you have to land off the airport, how do you determine which way you will face for landing?

At what altitude should you decide where you are landing? (1,000 feet, or wherever you start downwind "pattern" altitude)

Look out at the landing area: at what altitude above the ground are there obstacles? If you see an obstacle late, how much time do you have to react to it? How do you avoid an obstacle?

What is a brake turn? Show me.  How is it useful?

(Do this for each obstacle category: water, trees, buildings, power lines)

On this map, show me an obstacle you would want to avoid.


What do you do if you THINK you're going to hit that [tree]? Look away, steer away

How far do you have to turn to avoid it? Show me.

How far do you pull down on a toggle to turn when avoiding?

If you KNOW you're going to hit that obstacle, what do you do? PLF, then whatever answer is specific to that obstacle.

emergencies

 Now we'll summarize here in a short review in the Hanging Harness, where you will show me how you would react to certain situations.



1. routine exit, freefall, canopy, landing
2. routine exit, emergency freefall, routine canopy & landing
3. routine exit & freefall, emergency canopy, routine landing
4. routine exit & freefall, emergency canopy & landing

Make sure to follow up by signing logbook that they did the Ground School Review, then check on their USPA A license Proficiency Card to see if you can mark anything off towards those requirements.