

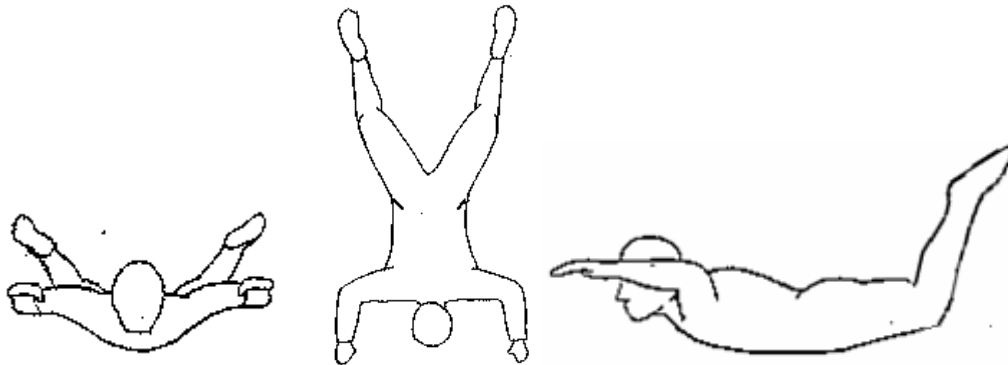
Kansas State University Parachute Club

Jump number: ~9 (Category D)
Maneuver: 1st 15sec delay
Altitude: 6,500ft
Price: \$26 (+Packer fee if needed)

Objectives: Altitude awareness, boxman position, 90 degree turns, wave-off, Rear Riser Turns

As we increase of length of a delay we reach what we call terminal velocity. The average terminal velocity for a skydiver is +/- 120mph. This will vary though depending on weight, clothing and body position. To calculate freefall time assume that the first 1,000ft takes 10 seconds and then for every 1,000ft after that 5.5 seconds. From 5,500ft with a deployment altitude of 4,000ft this gives us our 15 second delay.

Terminal velocity also allows skydivers better control in freefall and we transition into what we call the neutral position, or “box man” position. The box man position is the neutral skydiving position that allows for the most control and maneuverability in freefall. This position is achieved by keeping 90 degree angles with your arms and legs. Your arms come off your body and form an "L" shape. Your legs go out behind you with your knees bent 90 degrees. In this position you will still arch, but the hard arch, "X" position, will return you belly to earth in the event of instability.



First start by exiting the strut in a hard arch and then slowly bring your arms and legs into the box man position then check your altitude and pick a point on the horizon.

Turning

Before performing aerial acrobatics, you must obtain freefall stability and recovery. A total of 8 turns are to be performed during the progression. On the 15 second delays, we're going to focus on stable 90 degree turns.

It is always important that before making ANY turns that you check your altitude. All turns should be completed by 5,000ft.

To perform turns in freefall we use the air to our advantage. By moving our arms and legs we can deflect air and cause more/less drag in areas which as a result causes you to turn.

To start a turn, first check your altitude, then look the direction you want to turn and slightly bring in that arm and shoulder and dip that side of your body. Keeping all else equal, by closing the

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distance on one side of your body and then tilting, it is forcing the air over more surface area on one side.



To stop the turn, return to your neutral body position. Before performing any more turns, check your altitude to assure that there is still time to perform the turn. If you find yourself continuing to spin after making a turn, try tapping your feet together to assure one leg isn't sticking out further than the other. If you lose stability follow these steps altitude, arch, legs, relax..

Canopy Control

1. Rear riser steering

- a. Steer using the back risers with the brakes still set to change heading quickly after opening.
 - (1) With the brakes set, the canopy has less forward momentum to overcome for a turn
 - (2) The back risers operate more than the entire back quarter of canopy.
- b. On this jump you will perform 2 x 90 degree turns with your rear risers prior to releasing your brakes, as well as 2 x 90 degree turns after you have un-stowed your brakes.