# **Kansas State University Parachute Club**

Jump number: ~14 (Category E)

Maneuver: 45 sec delay Altitude: 10,000ft

Price: \$34 (+Packer fee if needed)

Objectives: Poised exit, Front Loop, Back Loop, Winds

On this jump you will continue to be put in positions that may cause you some instability. You will exit the aircraft from a poised position. This position is similar to hanging on the strut, but you will have one foot on the step and one hand on the strut. Upon exiting, present your chest to the relative wind and arch. Once you become stable, you will complete a front loop (front flip), this is done by tucking your chin to your chest and bringing your knees in. Next comes the back loop (back flip), once you have gained stability, arch hard while tucking your knees in. The right time to return to the arch position after these maneuvers is different for everyone, but a good rule of thumb on the back flip is, once you can see the ground again go back to your arch.

Altitude awareness: you must check your altimeter every 3-5 seconds or between maneuvers, which ever is sooner.

Visual altimeters, especially when chest-mounted, may be unreliable during inverted positions.

All maneuvers should be completed by 5,500ft. At this altitude you will turn 180 degrees and "Track Away".

First locate a point on the horizon. Smoothly extend both legs fully to initiate forward motion. Slowly extend your torso by stretching your shoulders toward your ears and flatten your arch. Fully extend your arms to the side This is known as the Jesus Track. (insert picture here)

Ensure you wave off by 4,500 and pull.

## **Canopy Control** - Flaring

Proper flare technique:

- a. Keep your feet and knees together to maintain heading during the landing flare (level harness).
  - b. Flare with the hands in front to provide visual feedback for level control.

Discovering the best landing flare ("sweet spot") for the canopy being jumped (nine practice flares): Note: Complete all maneuvers above 1,000 feet.

- a. From full glide, flare to a mid-point in the toggle range.
  - (1) approximately the bottom of the rib cage
  - (2) at a medium rate of flare
- b. Feel the amount and duration of lift before the stall.
- c. Return gently to full flight for at least ten seconds.
- d. Repeat to the same depth.
  - (1) Once at a faster rate
  - (2) Once at a slower rate
- e. Compare the strength and duration of the lift before the stall.
- f. Flare at three different speeds to a point deeper in the toggle stroke, approximately at the hips.
- g. Flares at three different speeds to a higher point in the toggle stroke, the shoulders.
- h. Compare the flares to determine the stroke rate and depth that produces the maximum combined strength and duration of lift for that canopy.

Review of traffic avoidance procedures:

- a. Watch for other traffic, especially upon entering the landing pattern.
- b. The most dangerous point of the pattern occurs when two jumpers on opposite base-leg approaches turn to final approach.
- c. The lower canopy has the right of way, but one jumper should not maneuver to assert right of way over another.
  - d. It takes two people to have a collision, but only one to avoid it.

## **Emergency procedure review**

Procedures for high-wind landings

- a. Before landing, disconnect the RSL as a precaution in case a cutaway becomes necessary to prevent being dragged.
  - b. Choose a point to the side or well downwind of any obstacle that may generate turbulence.
  - c. Land using a PLF and pull one toggle in as quickly as possible until the canopy collapses.
- d. After landing, cut away if necessary (with an SOS, cutting away may open the reserve container, but only the reserve pilot chute will likely deploy).

#### Rules and recommendations

- 1. Winds.
  - a. Students are limited to 14 mph (ten mph for round reserves).
- b. A USPA Safety & Training Advisor may file a waiver for students to jump in higher winds (see the SIM Section 2-2 on waivers to the BSRs, for the procedure).
  - c. Licensed jumpers must exercise judgment.
- 2. The FAA publishes rules for the periodic inspection and repacking of the main and reserve parachute system, found in FAR 105.43.a and b, Section 9-1 of this manual.

## **Aircraft and Spotting**

Observe and ask jumpers on a previous load about the wind conditions and spot.

Jumper procedures during jump run

- a. The pilot determines when the door may be opened and may prefer to operate the door.
- b. Look below to--
  - (1) check for clouds
  - (2) check for aircraft
  - (3) verify the jump run is correct
- c. When the pilot gives the OK to jump, verify that the aircraft is the desired distance from the drop zone and begin exit procedures.

Be sure to establish communications for spotting corrections with the pilot prior to flight.

#### **Completion of Category E**

Once you have successfully completed these dives you are ready to complete category E and move on to Category F. To do so you must have your jumpmaster check off all requirements on your A License card, and complete the Category E quiz.