

### Three Main Inspections

1. Before putting your equipment on, perform a "Top to Bottom" pre-flight check.
2. While you are wearing your equipment, have it checked by another jumper.
3. Before exiting the aircraft, have another jumper check you pins, cable movement, bridle routing, and perform a "check of threes".

### Check of Threes (jumper self check)

1. Three-ring assembly (and reserve static line)
2. Three points of harness attachment for snap assembly and correct routing and adjustment
3. Three operation handles—main, cutaway, and reserve

### Top to Bottom Pre-flight Check (Back)

1. Reserve pin in place and straight
2. Reserve closing loop worn no more than ten percent reserve ripcord cable movement in housing
3. Reserve packing data card and seal (especially on an unfamiliar or rental rig)
4. AAD turned on and/or calibrated
5. Main cable or pin in place, free of nicks or kinks
6. Main closing loop worn no more than ten percent
7. Pilot chute bridle routing or ripcord cable movement
8. Main activation handle in place

### Top to Bottom Pre-flight Check (Front)

1. Overview operation of three-ring release—pulling the cable releases the rings
2. RSL connection, routing, and basic function
3. Chest strap and hardware intact
4. Cutaway handle in position
5. Reserve handle in position
6. Leg straps and hardware operational and correctly threaded

### Three-Ring Release System

Checking assembly of the three-ring release system:

- a. Each ring passes through only one other ring.
- b. The white retaining loop passes through only the topmost, smallest ring.
- c. The white retaining loop passes through the cable housing terminal end.
- d. The release cable passes through the loop.
- e. The retaining loop is undamaged.
- f. The release cable is free of nicks, kinks, and burrs (especially on the end)

### Eight Step Cutaway & Reserve Pull

Use this rhythm to pull your emergency handles. It is not good practice to pull both handles simultaneously.

1. Maintain eye contact with emergency handles and ARCH.
2. LOOK at the cutaway handle.
3. GRAB the cutaway handle with both hands.
4. LOOK at the reserve handle.
5. PULL the cutaway handle all the way out.
6. GRAB the reserve handle with both hands.
7. PULL the reserve handle all the way out.
8. ARCH!



# Skydiving Review Sheet

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### Priorities

1. PULL
2. PULL at the correct altitude
3. PULL while stable

### Key Altitudes

3000' minimum pull altitude for students and A license holders  
2500' remedy partial malfunction (minimum opening altitude for B license holders)  
2000' minimum reserve altitude, and ID alternate landing area  
1000' no turns greater than 180°  
500' no turns greater than 90°  
<500' only "s" turns

### Jump Time

- calculate your jump time, and count seconds while during rehearsals
- 10 seconds for the 1<sup>st</sup> 1000'
- 5.5 seconds for each additional 1000' (round to 5 sec for a safety margin)
- canopy descends 1000' per minute

### Cloud Safety

	<u>Below 10,000' MSL</u>	<u>10,000' MSL or above</u>
Maintain horizontal distance from cloud	2,000'	One mile
Maintain minimum visibility	Three miles	Five miles

### Malfunctions

There are two types of malfunctions (1) high speed (total malfunction), and (2) low. The following is a malfunction summary (try to identify each malfunction's type):

<u>Situation</u>	<u>Correct Procedure</u>
Horseshoe (chute caught on jumper or equipment)	Disable RSL, cutaway, attempt to clear caught chute, and pull reserve.
Streamer (AKA ball of shit)	Cutaway and pull reserve.
Bag lock	Cutaway and pull reserve.
Container lock (AKA pilot chute in tow)	Cutaway and pull reserve.
Stall	Smoothly raise controls.
Closed end cells	Canopy control check (flare, flare, left turn, right turn).
Pilot chute over nose	Canopy control check. Compensate up to ½ way to make canopy fly straight.
Stuck slider	Flare, check altitude, flare again if needed.
Spinning stuck slider	Flare only once.
Any spinning canopy	Check brake line, flare only once. If spin is disorienting, cutaway and pull reserve.
Broken lines	Canopy control check.
Broken brake lines	Fly with rear risers.
Line over	Flare only once (if at all).
Line twists	Spread risers.
Bi-plane	Steer dominant and prepare for a no flare PLF, OR cutaway if not entangled.
Side-by-side	Steer dominant and prepare for a no flare PLF, OR cutaway if not entangled.
Downplane (AKA pinwheel)	Release RSL and cutaway main
Two jumper canopy entanglement <1000'	Both pull reserves

### Canopy Drills

1. Drill #1: Riser Turns (above 2,500 feet)
  - Once you're open, leave your toggles stowed. Practice turning with your rear and front risers. Try to see whether you can control the canopy simply by shifting your weight in the harness. Practice flaring with your rear risers with the toggles still stowed. Do this same series of exercises with one brake released, simulating a broken steering line.
2. Drill #2: Flares (above 2,500 feet)
  - Once again, leave your brakes stowed. Pull down on the rear risers as quickly and as far as you can until the canopy starts to stall. Next, pull down on the rear risers smoothly and evenly, inches at a time. The canopy will eventually stall, but much more gently. Find the stall point by seeing how far you can pull before the canopy begins to stall.
  - Repeat the riser drills with both brakes unstowed. Then repeat the drills with the toggles.
3. Drill #3: Finding Your Handles
  - If clear below you and all around, start spiraling down. Turn carefully but quickly in either direction. Now try to find both of your emergency handles. Can you get to them easily?

# Skydiving Survival Quiz

1. Describe how to avoid the propeller(s) when approaching an aircraft.  
*Approach fixed-wing aircraft from the rear or side.*
2. When must seat belts be fastened  
*Movement on the surface (taxi), takeoff, and landing.*
3. Name two purposes for wearing seat belts in an aircraft.  
*To maintain the correct balance; protection in a crash.*
4. Describe the technique for determining the point straight below the aircraft during jump run.  
*Determine two lines from the horizon, one ahead and one abreast, and find the intersection of those two lines.*
5. What extra consideration is required when wearing an AAD near the open door of an aircraft or when climbing out?  
*AAD activation near the open door of an aircraft presents a dangerous situation.*
6. In an aircraft with the exit door near the back, what must jumpers do to maintain the balance during exit procedures?  
*Remain forward until it is time for their group to exit.*
7. What is your most important task when in freefall?  
*Altitude awareness to act at the assigned pull altitude.*
8. In flat and stable freefall at terminal velocity, how long does it take an average jumper to fall 1,000 feet?  
*5.5 seconds*
9. What are the landing priorities?
  - a. Land with the wing level and flying in a straight line.
  - b. Land in a clear and open area, avoiding obstacles.
  - c. Flare to at least the half-brake position.
  - d. Perform a parachute landing fall.
10. What are the max winds in which any student may jump?  
*Ten mph for a round reserve canopy; 14 mph for a ram-air reserve, waivable by an S&TA.*
11. How would you clear a pilot chute hesitation?  
*Change body position to modify the air flow over my back.*
12. In the event of a canopy problem, students should decide and act about executing emergency procedures by what altitude?  
*2,500 feet*
13. What is the appropriate action if below 1,000 feet without a landable parachute?  
*Immediately deploy the reserve parachute, but not below 1,000 feet with an SOS system.*
14. How does the three-ring main canopy release system disconnect the main parachute from the harness?  
*Pull the cables to release the cloth loop.*
15. How does the three-ring main canopy release system disconnect the main parachute from the harness?  
*Pull the cables to release the cloth loop.*
16. How often do the main and reserve parachute need to be packed?  
*every 120 days*
17. How does the RSL work?  
*Forms a separable link between the main riser and reserve ripcord so that cutting away the main activates the reserve, if the RSL is hooked up.*
18. How can you tell if the RSL is routed correctly?  
*Clear path from snap shackle to guide ring.*
19. When should you disconnect your RSL?  
*Before a camera jump, after an entanglement from a canopy collision, if landing in water, trees, power lines, rooftop, or extremely high winds.*
20. What is the most critical aspect of closing the main container Equipped with a hand-deployed pilot chute?  
*bridle routing and placement.*
21. Why is it a bad idea to drag the harness and container system when stowing the lines?  
*Unnecessary wear on the three-ring release webbing and loops.*
22. What is the min break-off altitude for groups <5?  
*1,500 feet above planned deployment altitude.*
23. When velcro is used on the brake system, why is it a good idea to place your toggles back on the Velcro after you land?  
*Covers the hook velcro, which can damage other components, prevents tangles.*
24. What damage could occur from storing a parachute for prolonged periods in a car during the summer?  
*Shorter life for AAD batteries, stow band degradation.*
25. Why is it bad to leave a parachute in the sun?  
*Ultraviolet rays degrade nylon.*
26. Name one way to prevent a dual deployment.  
*Any of the following:  
-Deploy the main parachute at the correct altitude to avoid AAD activation.  
-Initiate malfunction procedures high enough to cut away safely and avoid AAD activation.  
-Maintain and correctly operate hand-deployed pilot chutes, especially collapsibles.  
-Protect equipment before exit to prevent pins or handles from being knocked loose.  
-Maneuver gently below the AAD's firing range.*
27. Describe your procedure for landing in high winds.  
*Stay well downwind of any obstacle, face into the wind early, disconnect the RSL, land with a PLF, pull one toggle down completely, and after landing, cut away if necessary.*
28. What is the best procedure to use when flying your canopy in turbulent conditions?  
*Keep the canopy flying in a straight line at full flight (or as directed by the owner's manual).*
29. Describe your procedure for landing on a building?  
*Disconnect the RSL (if time), contact the building feet first, PLF, cut away after landing on top of a building, wait for competent help.*
30. Describe your procedure for landing in power lines.  
*Avoid the area early during the descent, minimum braked turn necessary to avoid lines, land parallel to the wires, braked landing, prepare for PLF, try to touch only one line at a time, wait for help and confirmation that the power has been turned off and will remain off until recovery operations are complete.*
31. Describe your procedure for landing in trees.  
*Face into the wind, prepare for PLF, flare to half brakes, protect face and under arms, wait for help.*
32. Describe your procedure for landing in water.  
*Inflate flotation device, disconnect chest strap and RSL, prepare for PLF, face into wind, flare, hold breath, cut away once feet are wet, remove leg straps, swim upwind; if under the canopy, dive deep and swim away or follow one seam until out from underneath.*
33. What is the correct response to a canopy entanglement with another jumper below 1,000 feet if it appears the two canopies cannot be separated in time for a safe landing?  
*Deploy the reserve (may not be a safe option with an SOS system).*
34. What are the first things to do in the event of a collision and entanglement with another jumper?  
*Check altitude, establish communication.*
35. What is the quickest and safest way to change heading immediately after opening?  
*Back riser turn with the brakes still set.*
36. What effect does pulling on the front risers have on the canopy?  
*Dramatic increase in rate of descent.*
37. When performing front riser maneuvers, what should you do with the toggles?  
*Keep them in your hands.*
38. What is the fastest way to slow down from a freefall swoop approach?  
*Slow fall position with arms forward and knees down*

