

BRITISH PARACHUTE ASSOCIATION

Wharf Way, Glen Parva, Leicester, LE2 9TF

Tele: 0116 278 5271, Fax: 0116 247 7662, e-mail: skydive@bpa.org.uk

CANOPY FORMATION SAFETY BRIEF - GUIDELINES

1. Have a plan and practice it.
2. Use proper equipment;
 - (a) Do not use mismatched canopies.
 - (b) Have two readily available knives.
 - (c) A serviceable altimeter.
 - (d) Wear proper clothing.
3. Be sure that everyone on the jump has been thoroughly briefed and checked.
4. Inform the pilot of the aircraft that you are doing CF and you intend to open high.
5. Stay out of freefall airspace.
6. Do not fly your canopy in front of a formation.
7. If a formation is out of sight above you, do not use brakes; instead, make a diving front riser turn.
8. Do not dock below these altitudes:
 - (a) Less than four-person formation: 2000ft.
 - (b) Four or more person formations: 2500ft.
 - (c) Transition from one formation to another: 2500ft.
9. Do not dock with sideways motion relative to the formation. Do not dock too fast and too high. Do not dock on a formation that is oscillating, or that contains a collapsed canopy.
10. Do not drop a person with a collapsed canopy, unless it is safe to do so.
11. If you are wrapped, or you wrap someone:
 - (a) Protect your reserve ripcord handle.
 - (b) Establish communication.
 - (c) If you have to cut-away do it above 1000ft, unless you have no alternative.
12. Do not attempt to fly formations in turbulent air.
13. Break formations above 1500ft: unless you intend to land them.
14. Check pilot chutes before breakoff.
15. Never land formations unless conditions are suitable.
16. Do not build 'offset' formations unless you are aware of their special flying characteristics.
17. The problems with the use of Reserve Static Lines and Automatic Activating Devices should be carefully considered.

Form 186a (i)

(Issue 2, Feb 2000)

COLLAPSE (WRAPS) AND ENTANGLEMENT DRILLS

Appendix A (ii)

The hidden fears of CF becomes magnified when a collapse occurs or parachutists become

entangled, in either situation stay calm and communicate. You have a practiced plan; now you have to do it. A few pointers that you might like to consider are shown below.

1. Collapse Drills:

A wrap involves two parachutists; the top canopy usually remains open. The general rule for wraps is that the bottom person cuts away first. In all cases the bottom person makes the decision. Whether they can re-inflate or would prefer to be dropped or they have to cut-away. A wrap becomes more hazardous when there are other canopies close by, either in the stack or approaching to dock, turn off and stay clear until the problem has been sorted out.

If you are holding a collapsed or wrapped canopy:

- (a) Do not drop it, the parachutist may fall into another canopy below.
- (b) Do not cut-away first; you could find yourself in freefall entangled.
- (c) Remember it's the low person who makes the decision.
- (d) If the low person asks to be dropped, drop them immediately.
- (e) If you are told to hold on, then grit your teeth.
- (f) If you are wrapped try to extract yourself from it.
- (g) If you can't clear it inform the other person and wait for their decision.

If your canopy collapses or wraps:

- (a) Stay calm and try to re-inflate (pump) it out, the stroke is from ¼ brakes to full brakes to ¼ brakes and down again. Most collapses can be pumped out this way. Communicate; wave off others and check altitude.
- (b) If your canopy will not re-inflate, first check below, if there are other canopies in the stack, inform them of your problem, make sure that they have control of their own canopy, then drop them. Regardless of the amount of canopies below they should move away as a group, and they should not approach the formation again until the problem has been sorted out.
- (c) Once clear below, check your height, apply full brakes and inform the person above to drop you. However bad your collapse, providing you are on full brakes you should only drop about 30ft. If you are dropped in full flight configuration, you are risking a malfunction or flying into someone behind and below you, and having a bigger problem or wrap.
- (d) Once you are back in full control, carry out all round observation.

If your canopy is wrapped around:

- (a) Stay calm; apply some light toggle, as the top jumper may be able to free themselves suddenly. You need to stay in control!
- (b) As in (b) above.
- (c) Once clear below; check your altitude; locate both handles; (do not remove the reserve handle, keep an eye on it, as you may need both hands to operate the canopy release.) cut-away; get clear of the group, and pull the reserve handle. (If it is a multiple entanglement and cut-away you may have to stagger the reserve pulls, height permitting).
- (d) Once you are under your reserve, all round observation and keep clear of other canopies, an entanglement now could ruin the rest of your day.

Form 186a (ii)

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2. Entanglement Drills: (iii)

Appendix A

An entanglement usually results in one parachutist passing through the lines of another canopy. This situation almost always requires both jumpers to cut-away. Usually one person is suspended higher than the other. The general rules for entanglements is that the top person cuts-away first. Often the top parachute will pull itself out of the mess after they have cut-away, freeing the bottom persons canopy. Sometimes the entanglement will start spinning, with one parachutist hanging down and the other orbiting the entanglement. In this situation the orbiter should cut-away first, flinging them clear of the entanglement. This should not change the other person's orientation, resulting in a cleaner cut-away drill for them.

Entanglements can occur on exit; when a stack stalls; a formation funnels or a collapsed canopy is dropped into the canopy below. Remember 'Don't let go'. If you have a pilot chute around you, use a knife and cut the bridle line. If you have any other type of entanglement you can have a major problem and you may have to cut-away, but first:

- (a) Check your height, if you can't see your altimeter ask others.
- (b) Check your problem; are you the entangled, are you the orbiter, are you the higher, is your canopy still inflated? You may find yourself set free from the problem, as quick as you became entangled. Be ready to get in control.
- (c) Before you decide to cut-away:
 - i). Make sure that you are not attached by any other part of your body, or equipment.
 - ii). Ensure that there are no slack lines around your reserve handle or cut-away pad.
 - iii). Communicate and listen; make sure that others are aware of your intentions and you are aware of theirs.
 - iv) Make sure that you are clear below, a reserve entanglement after all this excitement could really spoil the rest of your day.
- (d) Most entanglements can be avoided by: not taking fast bad docks; not grabbing a canopy going past you or adopting a big spread position, thus preventing the canopy wrapping around you or you going through the lines.

Larger type formation funnels (5+) can result in any or all of the combinations of the above, and therefore need a thorough brief; dirt dive; practice and build up, before attempting them. Do not get lured into the trap of getting invited on larger loads, before you understand the potential problems and risks of them.

Summary; use the right equipment, learn from the experts, get a proper brief, do a dirt dive, do lots of CF, and always respect for your altitude. Knowledge dispels fear.

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