

# Flying Big Diamond Canopy Formations

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## 1 EQUIPMENT

In big formations it is necessary to have canopies with similar flight characteristics. The best way to have that is to use canopies of the same type and with the same trim and line length and the same brake setting. In full flight the steering lines should be slightly loose. Also the canopies should be modified to create as little noise as possible to make communication easier. You should have tight and baggy dresses with you because your position in the formation can require more or less air resistance. In the center of the formation tight suits are needed to make the formation fast. On the wings wide clothing is needed to keep the wings from coming around. A healthy formation is a flat formation!

## 2 WINGLOADING

It is required to have the same wing loading within the formation to give everybody the same forward speed and lift. In some key positions different wing loading can be useful. Especially in the diamond lockers can have a higher wing loading to put positive tension onto the formation to make it more stable. It is good to have weights to be able to adjust the wing loading if needed.

## 3 SETUP

Nobody should fly behind or below the formation at any time except the video person. All waiting positions are to the side and in front and higher than your docking point in the formation in a V-shape horizontally and slightly up.

## 4 APPROACH

After exit you are ready to control your canopy with the risers during the opening process for safety reasons. When the parachute is open you check and correct your heading and watch for other canopies to avoid collisions. When you are clear you adjust your level on the way to your first waiting position in the line up echelon sideways and in front of the formation on your side of the formation and higher than your docking position in the formation. Then you follow the line towards the formation reducing height and forward distance. Stay always close to your inside neighbour and be aware that you do not collide with any of your neighbours. The nearer you get to the formation the closer you should be to the person in front of you. Never fly radical manoeuvres with the toggles! Use risers cross control or rear riser stall to adjust your position in a tight area. If you are the lock up of a free wing you should be in close contact with your wing person to start your final approach when he does to make sure that you can dock right after him.

## 5 DOCKING

All docks on the formation are stair step docks! If you are a free wing that is logical. For lock up positions the dock is always onto the person in the center of the formation. Never dock on a free wing or try to dock on both persons at the same time! You start from a set up position about one and a half canopies to the side of the formation and a little higher than your final docking position. If you come from the left for instance you target your

right outer cell to the body in the center position and shout "coming in!". When you get there you present your right cell to the shoulder of the catcher and fly that position until you are picked up and the foot grip on your outside A-line is taken. If necessary you use outside riser trim to slow down the approach and keep your canopy from rising or coming around. Then you watch for the left line grip to be taken. When both grips are taken you may keep some front riser pressure if necessary to prevent you from floating up but only as little as possible. – Now you prepare for the next dock on you. Never take a grip before both grips on your canopy have been securely taken! Also be aware that you will not be taken if the person you dock on has not been taken above.

## 6 BODYPOSITION

If you dock in a free wing position you wait for the proper grip to be taken by flying your canopy in position and taking care that you do not come around. When the grip has been taken you stretch the outside leg and lift the inside leg and adjust the outside riser trim. It should be as little as possible but strong enough to keep your canopy back and down. Avoid be heavier as needed. As soon as you have take you grips below you get in an arched body position and twist your shoulders to the left if your left of center or right if you are right of center and look up. Your legs should be wide and you should have the required leg grips and additional hand grips on the top edge of the canopy you hold.

## 7 COMMUNICATION

All commands must be positive! Never say don't or do not. If you want the be held you shout "Hold me!" Never shout "Don't drop me". That can be misunderstood.

To signal to the person below there are two sings with the feet: If the canopy below tends to float up to much you shake that foot up and down to let the person below get heavier. If the tension is too strong you twist that foot left right to let the person below get lighter.

## 8 BREAKING UP

Usually formations up to 36 are split at break off altitude performing a STARBURST. At break off altitude the pilot of the formation shouts down "starburst-starburst!" Everybody repeats this shouting down to the people below. Then the pilot starts a count down from the calling: "OK, ten, nine... ....one, BREAK!". On break every body lets go of all grips at the same time and flies away from the center of the formation. The people in the center row (the widest row of the formation) fly out horizontally. The pilot goes up in breaks and the lockup on the bottom of the formation goes down with risers. The rows above the center fly up and the rows below fly down. Everybody follows the outside person and looks out to avoid collisions.

## 9 SAFETY

If something goes wrong in the formation never act before you now what the situation is and before you talked to the people involved. There will always be a good flying canopy on the top. The first thing is to hold the people who are entangled or wrapped below. The next thing is to break the formation in a starburst counting from 5 to "starburst!" to release the good flying canopies and get them out of the way. Then the entanglement is separated from the bottom the top. Nobody must be released if he does not call: "drop me". If someone is not ready to be dropped for some reason you have to fly him all the way to the ground.