CSPA COACH 3 Freefly Reference Manual

C.S.P.A.

Canadian Sport Parachuting Assoc.

C.P.S.

Canadian Sport Parachuting Association (C.S.P.A.) 204 - 1468 Laurier Street Rockland, ON Canada K4K 1C7 <u>http://www.cspa.ca/</u>

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FORWARD

This 2022 version of Coach 3: Freefly is the inaugural release. Please, send in your suggestions, updates, new ideas, and technical advancements that will help keep all of our manuals on the cutting edge. Submission of graphics is welcomed. This is a living document; it will only grow with your input.

This document is intended for electronic reading in PDF/online format. Click on resource links located throughout the document for additional information.



Please, print only as necessary.

If you have questions, suggestions, corrections or additional material relevant to this or any CSPA manual, please forward them to cwc@cspa.ca so that your ideas can be considered.

The Canadian Sport Parachuting Association (CSPA) provides these manuals to our Members and Registered Participants to ensure that standards and proven methods of training and skydiving are being followed across Canada. The sport of parachuting continues to grow around the world, and as the sport enlarges, so does our knowledge of the technical and training complexities. As new ideas and systems introduced to our sport are proven sound, they are adopted by the CSPA and new information is distributed. To ensure that the best available techniques are being utilised, it is your responsibility to keep abreast of them by participating in Coaching and Instructor programmes and seminars offered by both local organizations and the CSPA.

This manual will not answer all the questions regarding our sport. It is to be used as a guide only, and in conjunction with the CSPA coaching programme and CSPA qualified coaches and instructors. To guarantee the most enjoyment, remember to always...

THINK SAFETY - JUMP SAFELY - STAY CURRENT

Skydiving questions not answered in this manual, or in other CSPA publications, may be directed to CSPA's Coaching Working Committee <u>cwc@cspa.ca</u> or the National Office <u>office@cspa.ca</u>

DISCLAIMER AND COPYRIGHT

The Canadian Sport Parachuting Association (CSPA) wishes to note that this publication has been prepared for general information only. Readers are advised that the information printed herein should not be relied upon unless competent advice has been obtained with respect to its suitability for a particular use. Failure to follow the Rules and Recommendations can result in injury or death.

This is a controlled document. The only official version of this document is the version on the CSPA website. All printed versions are not official versions.

LIST OF UPDATES

2022 – first release

CONTENTS

FORWARD	2
DISCLAIMER AND COPYRIGHT	2
LIST OF UPDATES	2
SECTION 1: INTRODUCTION	4
Role of the Coach 3	
Candidate Previous Experience	5
Tasks/Requirements	7
SECTION 2: Equipment	9
SECTION 3: Safety	10
Briefing	10
SECTION 4: Skills Grid	
Evaluation of new C3 – FF	
Freefly Skills Grid	12
Summary	13

SECTION 1: INTRODUCTION

This guidebook is designed as a reference for the Freefly Coach 3's to use when coaching new and intermediate freeflyers.

With the popularity of freeflying growing exponentially, it is more important than ever to ensure that new freeflyers are developing the skills required to fly safely. With proper instruction and monitored progression from a Freefly Coach 3, new freeflyers will learn in a systematic and safe manner.

Just as in any sport, the right amount of concentrated time and effort in a controlled environment will always be the most efficient way to learn a new skill. Hence, with the availability of wind tunnels, we recommend a combination of wind tunnel and sky training when beginning to learn freeflying.

Please use this guidebook in conjunction with other references, such as the IBA website and other experienced Freefly Coach 3's as a guide for the development of new freeflyers.

ROLE OF THE COACH 3

The role of the coach 3 is more important today than ever before. With the rapidly evolving discipline of freeflying, it is can difficult for new freeflyers to know where to start or how to progress.

You, as a Coach 3 freefly will be the new freeflyers best resource. You will help them and mentor them through the progression of 3-dimensional flying.

The coach 3 role is to help the novice navigate the new safety considerations of freeflying and ensure their progression is guided and monitored so safety is not forgotten.

Another important role of the coach 3 is to mentor and evaluate new or aspiring Coach 3's. The process to become a coach 3 and how to evaluate new coach 3's is laid out further in this guide.

CANDIDATE PREVIOUS EXPERIENCE

State your previous parachuting and/or coaching experience.

Detail your educational background.

List any freefly camps you have attended:

List any parachuting or other relevant athletic experience you may have:

List any certifications you have achieved, include where/from whom, and when you received them:

List any other achievements:

TASKS/REQUIREMENTS

Below you will find the skills required and the process to become a Freefly Coach 3.

The two evaluation jumps must be completed and signed by a Freefly Coach 3 or on video and submitted to the CWC for sign-off.

Print and complete the Freefly Coach 3 portfolio and submit to the CSPA office.

Roles a	nd Tasks
٠	Coach freefly skills and supervise skydiver progression through the freefly skills grid
٠	Mentor aspiring Coach 3s
٠	Be recognized within CSPA (and on website) as a subject matter expert
•	Administer the B CoP Freefly Ground Briefing
Prereq	uisites
٠	SSE verification that the candidate is a subject matter expert in freefly with a safety orientated
•	DZO or DZSO verification that the candidate is a subject matter expert in freefly with a safety orientated attitude.
•	Submission of Technical Assessment Jump #1 and Jump #2 as per C3 – FF Portfolio or this manual
٠	Coach 2 certified
•	400 documented freefly jumps (50 of which are 4-way or larger) OR
٠	300 documented freefly jumps (50 of which are 4-way or larger) plus an IBA Static Pro tunnel
•	Complete the Coach 3 Common Exam (open book)
Curren	cy Requirements
٠	Coach at least 5 candidates (1:1 or in seminars)
٠	25 freefly jumps in previous 12 months

TECHINCAL JUMPS

- Jumps are with a C3 FF for sign-off, or with a qualified freeflyer (minimum C CoP) with camera for video to be sent to CWC@cspa
- The "OK" coach hand signal referenced below is to be held for a minimum of 1 second, while maintaining complete body flight control, heading and levels

TECHINCAL JUMP #1 SEQUENCE

- Unlinked HU exit as Rear Float, facing C3
- Maintain heading with C3 FF, approach on level, and give "OK" hand signal
- Perform 360 turn, "OK", front flip, "OK"
- Perform right hand dock (fly for 1 sec), then left hand dock (fly for 1 sec)
- Perform transition to HD, "OK", transition back to HU, "OK"
- Levels: float up approx. 20 feet, "OK", then stand up to drill down and regain levels, "OK"
- HU break-off: signal wave-off, half back flip to HD and track away forward, transition into back track and then belly track (keeping heading away from C3 FF)

TECHNICAL JUMP #2 SEQUENCE

- HD dive out exit 2 seconds after C3 FF HD exit (facing each other)
- Maintain heading with C3 FF, approach on level, and give "OK" hand signal
- Perform 360 turn, "OK", front flip, "OK"
- Perform right hands dock (fly for 1 sec), then left hands dock (fly for 1 sec)
- Perform transition to HU, "OK", transition back to HD, "OK"
- Carve 360 complete circle around C3 FF and return in front/on level, "OK"
- HD break-off: signal wave-off, turn 180 and track away forward, transition into back track and then belly track (keeping heading away from C3 FF)

SECTION 2: EQUIPMENT

Before commencing freefly jumps please ensure that your candidate has appropriate gear. This is to include:

- Properly fitting harness, ensure shoulder straps will not slip off and leg straps are sufficiently snug.
- A container with tight closing pin and riser flaps, proper pilot chute bridle protection and a snug BOC. Preferably a pilot chute handle with a tuck tab.
- Ensure the cutaway and reserve handle velcro is secure.
- If the container has articulated hip rings, it is highly recommended to have a bungee strap between the leg straps to prevent the leg straps from sliding down the legs during head up flying.
- A reserve mounted automatic activation device is highly recommended.
- A one piece freefly suit is best, not too baggy and not too tight. Avoid wearing shirts that can cover handles when in a head up orientation.
- A hard-shell helmet is highly recommended.
- A visual altimeter is a must.
- AN audible altimeter is a must, we highly recommend 2 audible altimeters.
- A new freeflyer should avoid wearing any type of camera as this is only a distraction at this point.

SECTION 3: SAFETY

The role of the Coach 3 is to ensure that new freeflyers are learning in a safe manner. It is highly recommended that no jumper starts to learn to freefly until they have at least a B-cop.

To ensure that new skills are being learnt safely it is highly recommended that jumpers do not freefly solo until they have the ability to fly static and not move around the sky. This will ensure the new freeflyer does not accidentally drift up or down the jump run into another jumpers/groups air space.

Once a jumper has proven the ability to be fly stable, can track appropriately and is "cork-proof", you can then recommend they start to jump in small groups, 2-ways and 3-ways with other experienced freeflyers.

BRIEFING

A pre jump briefing is required before every jump.

This briefing should include the following;

- Safety considerations unique to freeflying
- Exit order
- Break-off and opening altitudes
- Slowing down before opening
- Hand Signals
- "Corking"
- Equipment selection

SECTION 4: SKILLS GRID

This progression is designed to have the skills completed in the order in which they are presented. Following this progression will help the novice freeflyer learn in a safe and progressive manner. Each new skill builds on the last. Freeflying is about being able to fly the body in all 3 dimensions.

Although the new freeflyer does not need to be perfect at each skill to progress on to the next, they do require a certain level of proficiency before moving on. Some skills will be noted as very important before moving on to maintain safety in their progression.

The new freeflyers path thru this skills grid should be monitored by a Coach 3 Freefly to ensure safety. Some skills should not be attempted in freefall without a Coach 3's supervision.

The skills learned in belly flying are of utmost importance to the progression of a freeflyer. The new freeflyer must be able to control their body in a belly to earth orientation before beginning any sort of freeflying. The following is a standard skills development grid we recommend you follow.

Remember, safety is our number one priority.

EVALUATION OF NEW C3 - FF

As a certified Coach 3 freefly, you have the privilege of evaluating and signing off, new Freefly Coach 3's.

When a jumper would like to apply for a freefly coach 3 rating, have them print the portfolio from the CSPA website.

Have the jumper complete the personal information. You will complete 2 evaluation jumps with the jumper as set out in the evaluation criteria.

FREEFLY SKILLS GRID

Belly Flying Skills

- Forwards and Backwards movement
- Up and Down movement
- Side Slides
- 2-way FS
- 2-way FS Verticals
- Break off and Tracking
- 3-way and 4-way FS

Back Flying Skills

- Back to belly roll
- Neutral stable back fly
- Belly to back roll
- Back tracking
- Back fly 360 turns left/right
- Back fly side slides
- Back to belly front flip
- · Back flv exits

Head-up Flying (sit flying)

- Neutral HU position
- Back to HU
- HU to back
- HU exits, front & back facing
- HU Break off and track
- HU Levels
- HU Turns left/right
- HU front flip / back flip
- Side slides
- Docking
- 2-wau HU VFS

Angle Flying Belly

- · Exits exits belly into relative wind
- Maintain flying position to leader
- Changes of direction / heading
- Break off and Tracking

Angle Flying Back

- · Exits back to relative wind
- · Maintain position to leader
- Change of direction / heading
- Break off and track

Head-down Flying

- HD in tunnel (recommended)
- HD exits
- HD to back fly
- HU HD back flip transition
- HD Neutral stable position
- HD to HU front flip
- HD Forwards and Backwards
- HD Levels
- HD turns left/right
- HD Break off and track
- HD Docks
- HU HD Front flip
- HU HD Cartwheel
- 2-way HD VFS
- Dynamic Flying
- Hu and HD carving

SUMMARY

The discipline of freeflying is continuing to grow and evolve. As a Coach 3 freefly you are expected to stay current with your skills and with the evolving methods of teaching and progression.

The Coaching Working Committee attempts to stay on top of the evolving sport of skydiving, but at times may not be aware of new techniques. If you have any questions or comments about the C3 Freefly program, please feel to reach out to the CWC at any time.