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# FREEFLY COACHING MANUAL

## **FREEFLY PROGRESSION and HOW TO TEACH IT**

#### **INTRODUCTION**

The Freefly Coaching Manual is designed to teach skydivers the art of freeflying and 3-Dimensional flight. It is designed to educate the jumper in flying skills and promote 'in-air' safety, and prepare them for jumping with others.

When taught correctly, the student will learn all the skills required to become a competent freeflyer in very few jumps.

Before moving onto another skill, each should be taught and learned to the satisfaction of both the student and coach. If, however the student constantly has difficulty in one aspect it may be possible for that particular skill to be left until later in the syllabus, but this may only be so if the safety level is not broken. Basic skills must be taught before moving onto more difficult aspects. This should be at the discretion of the coach.

The student must have gained aerial awareness and basic Formation Skydiving (FS) skills, BPA Operations Manual, Section 2, Paragraph 6.4.1(a-e):

- a) Control fall rate.
- b) Control horizontal movement, (forwards, backwards and sideways).
- c) Achieve 'docking' techniques.
- d) Turn in place.
- e) Dive and approach a target.

FF1 or FF2 may only be awarded, after the student has reached required standards as set out under BPA Operations Manual, Section 2, Paragraph 6.7. (1-4) **Freestyle/Freefly (FF).** 

#### THE FREEFLY COACHING MANUAL IS DESIGNED FOR:

The student who, on the Ram Air Progression System (RAPS) or Traditional system, has successfully completed the final Category 8 jump and has obtained an FAI 'A' Certificate (Red).

The Accelerated Free Fall (AFF) student who successfully completed the AFF course (8 Levels) and the 10 consolidations jumps to gain Category 8 and has obtained an FAI 'A' Certificate (Red).

Any skydiver who wants to be in control.

Note: Once a jumper has gained Category 8, he/she must obtain an FAI 'A' Certificate (Red) – See Operations Manual, Section 2, Paragraph 3. The parachutist, ideally, would also have obtained Canopy Handling grades 1 and 2 (CH1 and CH2) before starting FREEFLY COACHING.

#### WHO CAN TEACH FREEFLY?

Unlike mass teaching, Freefly requires a much more personal approach with an emphasis on having fun but at the same time ensuring safety is never compromised. This can be taught by CCI/Advanced Instructor nominated FF2 grade parachutist or equivalent (of proven FF instructional ability) who may not necessarily be qualified coaches, though BPA FF Coaches are likely to be more sought after by those wishing to learn. With the Freefly Coaching Syllabus, the student should be able to receive the same information and level of tuition at any BPA Club or affiliated centre.

#### FREEFLY COACHES OBJECTIVES

- 1. To provide the student with information before, during and after the skydive.
- 2. To develop the student's basic freefall skills already attained and teach the skills laid down in this manual
- 3. To communicate in freefall using 'in-air' signals, or 'in-air' radio link. To teach and remedy any mistakes the student may have as they happen in order to maximise the students learning throughout the skydive.
- 4. To give the student corrective training after the skydive, by means of video format where possible. This is the most accurate way to debrief; it also brings on the coach, as he/she can call upon more experienced Freefly Coaches to also give advice. (Remember, we are never too good to learn from others, they may spot a problem or potential problem that you may have overseen, never be too proud)
- 5. To provide the student with full safety brief/information and awareness required while flying in different orientations and related speed changes.
- 6 To give the student a good deal.

## THE COACHES TEACHING FORMAT

#### **BEFORE THE JUMP**

Check logbook- ensure they are suitably qualified to perform the jump.

Check FAI Certificate – Ensure they are at least FAI A licence.

Give full safety check and brief, including kit and clothing check.

Talk through the objectives – applicable to the skydive.

Talk through the jump sequence.

Teach the new skill – Use video where available.

Dirt dive the jump - From exit to deployment.

Confirm in-air signals - students' confirmation required.

Confirm emergency procedures - Use harness where necessary

MANIFEST

Confirm flight plan – show aircraft run-in and spot include intended release point.

Check equipment and re-dirt dive.

DRESS FOR SUCCESS- Wear the best suited items of clothing for each jump, if a full suit is more suited then wear one, you don't have to look 'cool' to be a coach, but dress incorrectly and you could get caught out, and therefore look very silly in front of your student. Not only this but their tuition will be greatly affected and most certainly their video debrief.

#### **IN THE AIRCRAFT**

Let the student think about the dive.

Talk through the dive – Re-confirm objectives.

Re-Affirm that the student is aware of the 'Safe Break off procedure, Break-Off height and Deployment height', (especially in the early stages of the syllabus).

Check equipment again – At a suitable time prior to exit.

Check spot - allow student to do so also to develop spotting skills.

#### EXIT AND SKYDIVE

Exit – Linked or otherwise.

Give constant in-air signals (if 'in-air' radio link is not used) – Allow the student to make the most of the dive.

Break off – At the designated 'break' off altitude (where possible) observe the students perform relevant agreed safe 'break off' technique, track and pull.

Observe the student's canopy handling and correct where necessary. Meet student on landing area and walk back together.

#### AFTER THE JUMP

Pack first – Allow the student to think about the dive, make sure the student knows to think through the dive so as to not surprise them, give them the best opportunity to reflect upon the dive.

Debrief – Allow the student to recall the events first

## If you have made an error or influenced the dive in a negative way, own up, nobody is perfect all of the time. The student will appreciate the honesty

Corrective training – Give the student things to work on, include things on the ground to improve upon in the air

Logbook – annotate in the student's logbook exactly what went on, include as much detail as possible, and remember you may be handing over to another coach. Recommend exactly what you want the student to do; he/she either remains on the same exercise or progress onto another.

#### Sign – make sure your name is clearly annotated in the logbook

#### **COACHES NOTES**

#### 1. Clothing

Gauge the fall rate of your student very carefully. Remember that with Freeflying the student will travel in ALL axis and their fall rate will change frequently throughout the early stages of the syllabus. Wear clothing that will give you this range.

#### 2. <u>Equipment</u>

Take a close look at the students' gear; ensure that it is completely Freefly Friendly. Ensure any Velcro is in good working order (Velcro less rigs are preferred) all closure loops are in good condition and anything that can be tucked away is tucked away securely. Educate the student so they know what it is they are looking for when inspecting a rig, either for themselves or if they are asked to complete a 'flight-line' check. Educating them will broaden everyone's knowledge.

Use of audible altimeter and AAD is highly recommended for both coach and student.

#### 3. **During the Launch**

Brief the student on the importance to relax during this phase, remind them that they WILL feel the air on different parts of the body to that which they may be used to. Let them know that any verbal communication from you during the exit phase means for them to breath and relax, this will give the best start to the skydive.

#### 4. In-Air Signals

Brief the student on YOUR in air signals as these will differ from coach to coach, keep them simplistic and easy to remember. Ensure that the student reacts to the given signal and that after the dive it is documented in their logbook as to their ability to react to signals to aid future instructors if it is not you. As with AFF, many instructors use different signals, whichever work for you will suffice, however emergency signals such as alti checks and pull should never be altered... confirm on board the aircraft these signals throughout the FF1 and FF2 syllabus. If 'in-air' radio link is used, the student still needs to know the 'in-air' signals. This is in case of radio failure, or if the student subsequently jumps with coaches who do not use 'in-air' radio links.

#### 5. Let them do the Work

The student will be briefed on the use of forward and backward movement etc, so once this has been taught, don't do too much work for them on that, they will achieve much more if you let them work at it, but only compensate for them, keep moving with them so as to give corrective signals, but leave the last few feet of movement to them, let them know if they were moving after the dive or they may slip into bad habits for the future

#### 6. <u>Altitude Awareness</u>

Brief the student to 'check their altitude' on completion of every exercise or after every couple of seconds. This is vitally important in the early stages of the syllabus as they will not be used to the increased fall rate and freefall times will be greatly reduced. On the ground, confirm the student's altitude awareness by asking them to recollect what heights they were at on each examination

#### 7. Corking/Safety/Break off techniques.

Explain to definition of 'corking' and its dangers, make sure the student knows what to do if instability occurs or if they fall off and position or transition, they MUST adopt a back down stable position or ball to maintain the fall rate to reduce the possibility of colliding with other jumpers. Also clearly explain safety implications of flying new body positions, their speed implications and the importance of use of correct safe break off techniques.

#### 8. <u>Is the Student always wrong?</u>

If the student fails to reach the required standard after the dive:

- He/she may have been progressed too quickly
- The ground training will not have been comprehensive enough
- The in –air signals may not have been adequate

Hopefully you will have the dive on video, if so, get another FF Coach to take a look at it before you de-brief the student, and remember, don't be embarrassed to pass on your student to another coach.

#### **IN SUMMARY**

Once the student presents themselves to you, the coach, make them feel welcome, remember we are not here for monetary gain, make them feel as though you want to jump with them or you will quickly loose respect and their interest.

Ground training is essential; all types of jumping require timely tuition on the ground to enhance the performance in the air. Remember, you will only have 35-45 seconds in the air to get your message across, try to explain everything on the ground and rehearse it constantly until the student is familiar with the training objective. This will ensure that there is no confusion as to what the student must do, and therefore he/she will know exactly what they must achieve before even donning the parachute.

KISS: Keep – It – Simple - Stupid

Start from a point that is reflected in the students' logbook. If the student has done very little or no freeflying till now, then remember to set the standard at a level that is achievable, don't try to have them do too much at once, let them progress; this will give them a great sense of achievement. Also give them a path to work along, tell them exactly what is planned for future jumps, so that they have things to work toward. If they progress quicker than at first thought, it will fill them with enormous well-being and satisfaction. But if they do worse than expected, at least they know the guidelines as to what they must do, and therefore won't feel cheated, they will know what they must achieve to progress onto each subsequent stage.

#### FREEFLY COACHING INTRODUCTION LESSON

(To be completed at the beginning of the FF Coaching syllabus)

- 1. Allow the student to read the coaches notes, so they know how things work
- 2. Brief the student on an exit, this one will be used for all of the early stages, until they have mastered the Basic Sit Position (BSP) Agree upon a common term for the exit count, this will depend upon how much FF the student has done, if any, or whether they have learned the 'Ready Set Go' or 'Up Down Arch' techniques in their Conventional WARP/FS Coaching Programme.
- 3. Explain the importance of a good exit count, so that the student and coach leave together (be it linked or otherwise).
- 4. Introduce a common agreement before starting the exit count, such as *student*... OK! *coach*...OK! Then the count. This will confirm both parties are ready to skydive
- 5. Explain the most common mistakes in Freeflying and show the student the corrective hand signals for this to correct it early on in their syllabus. *Remember emergency signals should never change! Such as alti checks and pull!!!!!*
- 6. Explain and emphasise the safety implications introduced from flying their bodies FF orientations, speed /freefall time implications and the requirement to adopt safe corking (recovery position) control together with safe break off techniques.
- 7. Explain the importance of Altitude awareness. It is easy to become so involved in the skydive and forget the passing time.....

The student <u>must</u> complete the FREEFLY COACHING INTRODUCTION LESSON (page 7) before this brief.

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 1

#### 1. **Talk through Objectives**

- a. Back-Down stable position (introduce the student to the new recovery position)
- b. Basic Sit Position (BSP)
- c. Altitude Awareness (see coaches notes on pages 5 & 6)
- d. Good exit count
- e. Safe method of recovery back onto belly for deployment
- f. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Basic Sit Position (BSP), student uses back down stable position each time he/she 'falls' off the BSP Explain 'Corking' (coaches notes, pages 5 & 6)
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. At 5,000ft the coach shakes his head indicating 'no more work'
- g. At 5,000ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone in an ideal BSP)
- b. Teach the skill, repeat this thoroughly, emphasise the angle of the legs and straightness of the back
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

*NB The coach should compensate for fall rate differences and backward/forward movement on this dive, the emphasis is on the BSP* 

- 4. a. General questions on emergencies (a/c and canopy) b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. **Corrective Training**

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 2

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Continue with the Basic Sit Position, refine where necessary
- c. Introduce Turns
- d. Altitude Awareness (see coaches notes on pages 5 & 6)
- e. Safe method of recovery back onto belly for deployment
- f. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Basic Sit Position (BSP), student uses back down stable position each time he/she 'falls' off the BSP, re-iterate the meaning of 'corking' (coaches notes, pages 5 & 6)
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. Student initiates a 360 degree turn on a level axis
- g. Student completes an altitude check
- h. Coach to demonstrate turn if unsuccessful, if successful coach to signal for a turn in opposite direction.
- i. At 5,000ft the **student** shakes his head indicating 'no more work'
- j. At 5,000ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone in an ideal BSP)
- b. Teach the skill, repeat this thoroughly, emphasise the angle of the legs and straightness of the back
- c. Explain the different methods involved in making any turn, let the student decide which one they will try, but ensure it is decided before you kit up
- d. Dirt dive standing up, using **altitude checks also**
- e. Introduce the 'in-air' signals for the dive
- f. Dirt dive the whole thing, until fluent

NB The coach should compensate for fall rate differences and backward/forward movement on this dive, the emphasis is on the BSP

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest

- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 3

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Continue with the Basic Sit Position and introduce Stand Position.
- c. Use of fall rate control measures (fast / slow fall using both positions)
- d. Maintain heading awareness.
- e. Altitude Awareness (see coaches notes on pages 5 & 6)
- f. Safe method of recovery back onto belly for deployment
- g. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Basic Sit Position (BSP), student uses back down stable position each time he/she 'falls' off the BSP
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. Coach instigates a fast fall demonstrating the stand position, stopping approximately 10ft below student.
- g. Student, upon coach's signal initiates the stand position until level with coach, then stops, maintains heading and awaits any signals.
- h. Student completes an **altitude check**
- i. Coach to prompt a repeat if necessary or coach initiates a slow fall manoeuvre again stopping approximately 10ft above student.
- j. Student, upon coach's signal initiates the slow fall position until level with coach, then stops, maintains heading and awaits any signals.
- k. Student completes an **altitude check**
- 1. If necessary coach prompts student to repeat the exercise, or if time permits fast/slow fall exercise from start
- m. At 5,000ft the **student** shakes his head indicating 'no more work'
- n. At 5,000ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone completing the dive as you want the student to perform it.)
- b. Teach the skill, repeat this thoroughly, emphasise the position of legs and straightness of the back
- c. Explain the differences in fall rate between the two positions, emphasise the need for constant altitude checks.

- d. Dirt dive standing up, using **altitude checks also**
- e. Introduce the 'in-air' signals for the dive
- f. Dirt dive the whole thing, until fluent
- g. The coach should compensate for fall rate on this dive,
- 4. a. General questions on emergencies (a/c and canopy) b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 4

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Student to perform on heading exit, back to airflow.
- c. Maintain heading awareness using turning skills
- d. Introduce the method of forward and backward motion for docking techniques
- e. Altitude Awareness (see coaches notes on pages 5 & 6)
- f. Safe method of recovery back onto belly for deployment
- g. Spot from the aircraft using PLA/DZ photograph

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Basic Sit Position (BSP)
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Coach initiates a slight backward motion, approximately 10ft from student
- f. Student completes an altitude check
- g. Student, upon coach's signal initiates the forward motion position until approximately 4ft from coach, then stops, maintains heading and awaits any signals.
- h. Student completes an altitude check
- i. Coach to prompt a repeat if necessary or coach indicates to the student to perform the backward motion.
- j. Student, upon coach's signal initiates the backward motion position until they are about 10ft away. They should maintain heading control all the time, keeping eye contact throughout.
- k. Student completes an **altitude check**
- 1. If necessary coach prompts student to repeat the exercise, or if time permits forward/backward exercise from start
- m. At 5,000ft the **student** shakes his head indicating 'no more work'
- n. At 5,000ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone completing the dive as you want the student to perform it.)
- b. Teach the skill, repeat this thoroughly
- c. Emphasise to the student the importance of making small alterations to the body's flying surface to create the motion, they must maintain heading awareness and they can also now control the fall rate.
- d. Dirt dive standing up, using altitude checks also
- e. Introduce the 'in-air' signals for the dive
- f. Dirt dive the whole thing, until fluent

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 5

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Student to perform an on heading exit with back front to airflow
- c. Introduce Stand turns and continue with Sit turns.
- d. Maintain heading awareness using turning ability
- e. Altitude Awareness (see coaches notes on pages 5 & 6)
- f. Safe method of recovery back onto belly for deployment
- g. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. Student exits the aircraft maintaining a heading throughout. Turns to face off with coach once settled
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. Coach initiates a  $360^{\circ}$  transition Stand turn to the left or right.
- g. Student, upon coach's signal initiates the same stand turn, returning to basic sit position.
- h. Student completes an **altitude check**
- i. Coach to prompt a repeat if necessary or coach initiates another manoeuvre, this time to the opposite direction.
- j. Student, upon coach's signal initiates the turn then stops, maintains heading and awaits any signals.
- k. Student completes an **altitude check**
- 1. If necessary coach prompts student to repeat the exercise, and/or repeat sit turns.
- m. At 5,000ft the **student** shakes his head indicating 'no more work'
- n. At 4,500ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone completing the dive as you want the student to perform it.)
- b. Teach the skill, repeat this thoroughly, emphasise the angle of the body throughout the transition to best achieve the result
- c. Explain the differences in fall rate between positions and emphasise the need for constant altitude checks, and to maintain heading awareness.
- d. Dirt dive standing up, using altitude checks also
- e. Introduce the 'in-air' signals for the dive
- f. Dirt dive the whole thing, until fluent

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 6

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Introduce student to front looping exit (2 /3 rotations)
- c. Introduce the techniques of transitioning. (front/back loop etc.)
- d. Maintain heading awareness using turning ability
- e. Altitude Awareness (see coaches notes on pages 5 & 6)
- f. Safe method of recovery back onto belly for deployment
- g. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. Student exits the aircraft maintaining a heading throughout. Turns to face off with coach once settled
- c. Student completes an **altitude check**
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. Coach initiates a  $360^{\circ}$  transition to the front, stops in front of the student
- g. Student, upon coach's signal initiates the same transition, then stops, maintains heading and awaits any signals.
- h. Student completes an altitude check
- i. Coach to initiate 360 back loop.
- j. Student, upon coach's signal initiates the transition then stops, maintains heading and awaits any signals.
- k. Student completes an altitude check
- .l. Altitude permitting coach to initiate Cartwheel style transition in either direction.
- m. Student completes an **altitude check**
- n. Student, upon coach's signal, initiates the same transition in direction of students' choice.
- o. At 5,000ft the **student** shakes his head indicating 'no more work'
- p. At 4,500ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone completing the dive as you want the student to perform it.)
- b. Teach the skill, repeat this thoroughly, emphasise the angle of the body to best achieve the results

- c. Explain the differences in fall rate between the transitions, emphasise the need for constant altitude checks.
- d. Dirt dive standing up, using **altitude checks also**
- e. Introduce the 'in-air' signals for the dive
- f. Dirt dive the whole thing, until fluent
- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 1 (FF1) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL) (check student meets pre qualifying requirements)</u>

## FREEFLY COACHING – FF1 QUALIFYING DIVE

#### 1. **Talk through Objectives**

- a. Good exit count
- b. Student to perform an on heading exit with, with either chest or back to airflow. (must decide and brief coach before dive) maintaining a solid heading throughout
- c. Student to initiate 360 degree sit turns in both left and right direction. (must start and stop turn on heading with maximum control)
- d. Student to initiate a  $360^{\circ}$  stand turns in both left and right directions. (must start and stop the turn on heading with maximum control)
- e. Student to perform forward movement (on heading and in control)
- f. Student to perform backward movement (on heading and in control)
- g. Student to maintain fall rate/relative awareness throughout and correct where required.
- h. Safe method of recovery back onto belly for deployment at pre determined height
- i. Spot from the aircraft using PLA/DZ photograph (only if not competent)
- j. Student to demonstrate the ability to maintain control whilst checking his/her visual altimeter
- k. Student to demonstrate the ability to fend off a collision whilst maintaining freefall control

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. Student exits the aircraft maintaining a heading throughout. The student must then face off with coach once settled
- c. Student completes an **altitude check**
- d. Coach sits in front of the student observing the dive (Capture the dive on video where possible)
- e. Student initiates a  $360^{\circ}$  sit turn to both left and right in any order, observing altitude awareness throughout
- f. Student to initiate 360 stand turn both left and right, in any order, observing altitude awareness throughout.
- g. Student completes an **altitude check**
- h Student demonstrate controlled forward movement (coach as base).
- i. Student to demonstrate controlled backward movement (coach as base)
- j. Student completes an **altitude check**
- k. Student demonstrates ability to fly relative to coach, maintaining heading and height using fast/slow fall. (Coach as base).
- 1. At 5,000ft the **student** shakes his head indicating 'no more work'
- m. At 4,500ft the student rotates onto his/her belly, tracks off and deploys at a predetermined height, no lower than 3,500ft AGL (coach to observe)

#### 3. **Method of Instruction**

a. The student must talk through the whole dive (this is to simulate that they are going to make a dive with another FF1 grade parachutist)

- b. Coach is to advise where necessary on safety tips etc.
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent
- 4. a. General questions on emergencies (a/c and canopy)b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

- a. Student should complete the logbook in the relevant space, they must include as thorough debrief as possible. The coach is to add any further points relevant to the students' progress. Must recommend **PASS OR FAIL FOR FF1 GRADE**, sign and print name.
- NB All drills required to obtain FF1 (see BPA ops manual 6.7.2 a to e) should be performed on the same qualifying dive. Specific attention should be paid to control and demonstration of ability to adopt safe recovery position, and safe break off to avoid corking as once FF1 has been awarded the jumper will be allowed (with CCI approval) to make group descents.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	FF1 Qualifier *
Jump numbers	As required	As required	As required	As required	As required	As required	As required
Drill	Standard Exit, students count	Standard Exit, students count	Standard Exit, students count	Stable Exit, Back to airflow	Stable Exit Front to airflow	Front looping exit (recovery control)	Students choice of Exit
Drill	Basic Sit position, Corking control	Basic Sit position, 360 <sup>0</sup> Turns	Fast / Slow fall Techniques (fall rate control using Sit/Stand)	Intro to Docking Techniques Using Forward and Backward Movement	Left and Right Turn in Stand 360	Front and Back and Side Transitions	360 <sup>0</sup> Turns left and right, in Sit and Stand. Forward and backward movement. Fly relative to Coach. (Control, heading and fall rate maintained.)

\* or as per current FF1 BPA requirements per Operations Manual section 6.7.2 a - e.

### FF1 AWARDED, FURTHER TRAINING AND OUTSIDE DISCIPLINES

On Completion of Freefly Grade 1 (FF1) the student may make descents with other FF1 graded parachutists with CCI approval and initially in small groups. They may NOT fly in body attitudes other than that of a head up position. To further qualify for FF2, the student must undergo the FF2 syllabus, taught by a suitably qualified coach or FF2 or equivalent. jumper who has the CCI's endorsement.

Disciplines such as those of Atmanauti and tracking do not directly come under the guise of Freeflying in terms of FF1 and FF2. However, the CCI may allow jumpers who he/she deems to be of a suitable standard to carry out these types of descents. Ideally, FF1 should be attained before attempting any form of Atmanouti or Tracking in large groups.

The student <u>must</u> complete the FREEFLY COACHING INTRODUCTION LESSON (page 7) before this brief, and have obtained FF1 and full safety brief before embarking on any head down flight.

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 1

#### 1. **Talk through Objectives**

- a. Basic Head down flight position
- b. Altitude Awareness (see coaches notes on pages 5 & 6)
- c. Good exit count
- d. Safe Method of recovery for track off and deployment on belly.
- e. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Basic Head Down Position, either coach assisted or solo (coaches discretion) student uses sit position each time he/she 'falls' off the Head Down flight. Reiterate the importance of 'Corking' (coaches notes, pages 5 & 6)
- c. Student completes an altitude check
- d. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- e. Student completes an altitude check
- f. At 5,000ft the coach shakes his head indicating 'no more work'
- g. At 5,000ft the student initiates agreed safe break off technique to track off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. **Method of Instruction**

- a. Demonstrate the whole thing (show video of someone in an ideal Head Down Flight Position/s)
- b. Teach the skill, repeat this thoroughly, emphasise the angle of the legs and straightness of the back
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

NB The coach should compensate for fall rate differences and backward/forward movement on this dive; the emphasis is on the Head Down Flight

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 2

#### 1. **Talk through Objectives**

- a. Forward / Backward movement
- b. Altitude Awareness (see coaches notes on pages 5 & 6)
- c. Good exit count
- d. Safe method of recovery for track off and deployment on belly
- e. Spot from the aircraft using PLA/DZ photograph

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the newly acquired Head down position. Student completes an **altitude check**
- c. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- d. Coach then initials a backward movement, then stops, the student, upon the signal from the coach makes forward movement until approximately 6 ft away then stops
- e. Student completes an altitude check
- f. The coach then signals for the student to make backward motion until directed to stop from the coach. The coach may then make up the distance until 6 ft or signals for the student to move forward again.
- g. At 5,000ft the coach shakes his head indicating 'no more work'
- h. At 5,000ft the student initiates safe agreed recovery technique to track off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. **Method of Instruction**

- a. Demonstrate the whole thing (show video of someone making good forward and backward movement)
- b. Teach the skill, repeat this thoroughly, emphasise the body position throughout
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

NB The coach should compensate for fall rate differences at this stage

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 3

#### 1. **Talk through Objectives**

- a. Fast and Slow Fall
- b. Forward and backward motion (re-cap)
- c. Altitude Awareness (see coaches notes on pages 5 & 6)
- d. Good exit count
- e. Safe method of recovery for track off and deployment on belly.
- f. Spot from the aircraft using PLA/DZ photograph

#### 2. **Jump Sequence**

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the newly acquired Head down position. Student completes an **altitude check**
- c. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- d. Coach then initials a fast fall position, and then stops; approximately 6ft below the student, upon the signal from the coach makes fast fall motion until he/she is back on the 'level' with the coach
- e. Student completes an **altitude check**
- f. The coach then initiates a slow falling position until he is 6ft above the student, the student initiates a slow fall position to compensate this until on the level with the coach. The method for doing this is at the discretion of the coach, depending on the frame of the student
- g. At 5,000ft the coach shakes his head indicating 'no more work'
- h. At 5,000ft the student initiates safe agreed break off technique to track off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone making good fast and slow fall manoeuvres)
- b. Teach the skill, repeat this thoroughly, emphasise the body position throughout
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

NB The coach should not compensate for fall rate differences at this stage

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 4

#### 1. **Talk through Objectives**

- a. 360 turns
- b. Altitude Awareness (see coaches notes on pages 5 & 6)
- c. Good exit count
- d. Safe method of recovery for track off and deployment on belly
- e. Spot from the aircraft using PLA/DZ photograph

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Head down position. Student completes an **altitude check**
- c. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- d. Coach then signals for the student to make a 360 turn to either direction, then to the other, maintaining altitude awareness throughout.
- e. Student completes an altitude check
- f. The student must compensate for any height loss after the turn and also the distance between him and the coach. Thus proving the skill already learnt.
- g. At 5,000ft the coach shakes his head indicating 'no more work'
- h. At 5,000ft the student initiates safe agreed break off technique to track off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone making good 360 degree turns)
- b. Teach the skill, repeat this thoroughly, emphasise the body position throughout
- c. Dirt dive standing up, using **altitude checks also**
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent
- *NB* The student must compensate for fall rate differences and separation differences at this stage, this will show he has learnt skill up to this point
- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 5

#### 1. **Talk through Objectives**

- a. Transitions on varying axis
- b. Fall rate and distance control and maintenance
- c. Altitude Awareness (see coaches notes on pages 5 & 6)
- d. Good exit count
- e. Safe method of recovery for track off and deployment on belly.
- f. Spot from the aircraft using PLA/DZ photograph

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Head down position. Student completes an **altitude check**
- c. Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)
- d. Coach then gives the signal for the student to initiate the transition as briefed by the coach
- e. Student completes an **altitude check**
- f. The coach then directs the student to complete further transitions if time permits.
- g. At 5,000ft the coach shakes his head indicating 'no more work'
- h. At 5,000ft the student initiates safe agreed break off technique to track off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone making good transitions)
- b. Teach the skill, repeat this thoroughly, emphasise the body position throughout
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

NB The coach should not compensate for fall rate differences at this stage

- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

#### 6. **Debrief**

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. **Corrective Training**

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – LEVEL 6

#### 1. **Talk through Objectives**

- a. Independent Hand Movement Gripping Technique and Docking Control.
- b. Fall rate and distance control and maintenance
- c. Altitude Awareness (see coaches notes on pages 5 & 6)
- d. Good exit count
- e. Safe method of recovery for track off and deployment on belly
- f. Spot from the aircraft using PLA/DZ photograph

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. After exit student adopts the Head down position. Student completes an **altitude check**

Coach sits in front of the student showing a good picture to reciprocate giving 'in-air' signals all the time if required (Capture the dive on video where possible)

- c. Coach demonstrates hand clap.
- b. Student demonstrates hand clap. (on heading and in control)
- e. Coach then offers the student his open hand, the student, using all the acquired skills makes forward movement toward the coach, stops at a suitable distance and then takes his hand and attempts make a traditional hand dock with the coach
- f. Student completes an **altitude check**
- g. The coach then directs the student to complete further grips/hand claps if time permits.
- h. At 5,000ft the coach shakes his head indicating 'no more work'
- i. At 5,000ft the student initiates safe agreed break off technique to tracks off and deploys at a pre-determined height, no lower than 3,000ft AGL (coach to observe)

#### 3. Method of Instruction

- a. Demonstrate the whole thing (show video of someone making gripping and docking techniques)
- b. Teach the skill, repeat this thoroughly, emphasise the body position throughout
- c. Dirt dive standing up, using altitude checks also
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent

NB The coach should not compensate for fall rate differences at this stage

- 4. a. General questions on emergencies (a/c and canopy) b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

#### <u>QUALIFYING JUMPS FOR FREEFLYING GRADE 2 (FF2) – ONE STUDENT PER</u> <u>COACH (OTHERS OPTIONAL)</u>

## FREEFLY COACHING – FF2 QUALIFYING DIVE

## 1. Talk through Objectives (manoeuvres must be completed in head down body attitude)

- a. Good exit count
- b. Student to perform an on heading exit with, with either chest or back to airflow. (must decide and brief coach before dive) maintaining a solid heading throughout
- c. Student to initiate a  $360^{\circ}$  turn in both left and right directions (must start and stop the turn on heading with maximum control)
- d. Student to demonstrate fall rate control (fast/slow fall)
- d. Student to demonstrate forward and back movement.
- f. Student to demonstrate independent hand movement (agree dock or hand clap)
- f. Safe method of recovery for track of and deployment on belly.
- g. Spot from the aircraft using PLA/DZ photograph (only if not competent)

#### 2. Jump Sequence

- a. Check coach 'OK', exit count, exit (student to initiate exit count and launch)
- b. Student exits the aircraft maintaining a heading throughout. The student must then face off with coach once settled
- c. Student completes an **altitude check**
- d. Coach flies in front of the student observing the dive (Capture the dive on video where possible)
- c. Student initiates a  $360^{\circ}$  turn to both left and right in any order, in control.
- d. Student demonstrate fall (coach to follow)
- e. Student demonstrates slow fall (coach to follow)
- f. Student completes an altitude check
- g. Student demonstrates controlled forward movement
- h. Student demonstrates controlled backward movement
- i. Student completes an altitude check
- j. Student to demonstrate controlled independent hand movement (method as agreed)
- m. Coach to maintain a controlled fall rate and act as a 'base' for the student to work toward as necessary, the student must correct any fall rate issues
  Coach can instruct the student to repeat any of the above if time permits if a repeat would better the chances of achieving the level of FF2
- n. Student completes altitude checks until 'break-off height
- o. At 5,000ft the student shakes his head indicating 'no more work'
- p. At 4,500ft initiates safe agreed break off technique track off and deploys at a predetermined height, no lower than 3,000ft AGL (coach to observe)

#### 3. **Method of Instruction**

- a. The student must talk through the whole dive (this is to simulate that they are going to make a dive with another FF2 or FF1 grade parachutist)
- b. Coach is to advise where necessary on safety tips etc.
- c. Dirt dive standing up, using **altitude checks also**
- d. Introduce the 'in-air' signals for the dive
- e. Dirt dive the whole thing, until fluent
- 4. a. General questions on emergencies (a/c and canopy)
  - b. Manifest
- 5. a. 20-Minute Call, Kit On
  - b. Dirt Dive
  - c. Kit Check and sign
  - d. FREEFLY

#### 6. **Debrief**

- a. Student's version of dive
- b. Coach's version of dive
- c. Video of dive

#### 7. Corrective Training

a. Tips on how to correct any problems from the dive to prevent bad habits

#### 8. Logbook

- a. Student should complete the logbook in the relevant space, they must include as thorough debrief as possible. The coach is to add any further points relevant to the students' progress. Must recommend **PASS OR FAIL FOR FF2 GRADE**, sign and print name.
- NB. All drills required to obtain FF2 (see BPA Ops Manual 6.7.4 a e.) should be demonstrated on the same qualifying dive.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	FF2 Qualifier *
Jump numbers	As required	As required	As required	As required	As required	As required	As required
Drill	Standard Exit, students count Basic Head down Position, either held in position or free flown (coach discretion)	Standard Exit, students count Forward and Backward Movement	Standard Exit, students count Fast / Slow fall Techniques (fall rate control)	Exit - Coaches discretion 360 Turns Fall rate correction and proximity Control	Exit - Coaches discretion Axis transitions (coaches discretion)	Exit - Coaches discretion Gripping Technique s and Docking Control (Independent hand movement)	Students choice of Exit 360 <sup>0</sup> Turns left and right Fall rate control (fast/slow fall) Forward /Backward movement Independen t Hand movement (all showing, altitude awareness control, heading maintenanc e and ability to
							fly relative to coach.)

\* or as per current FF2 requirements (See BPA Operations Manual 6.7.4 a-e)