CAMERA FLYING COACHING MANUAL

ANDY FORD

STAY SAFE

BRITISH SKYDIVING

CAMERA FLYING COACHING MANUAL

British Skydiving is the trading name of British Parachute Association Ltd.
A company limited by guarantee. Registered in England & Wales no 875429.
Registered office: 5 Wharf Way, Glen Parva, Leicester LE2 9TF.

The Camera Flying Coaching Manual is updated periodically. As British Skydiving rules are continually evolving, our primary operational document, the British Skydiving Operations Manual, is regularly updated at meetings of the Safety & Training Committee which are held every two months. Therefore, in the case of any conflict between rules or requirements set out in the Operations Manual and any other British Skydiving manual, the provisions in the Operations Manual shall always have primacy as the definitive statement of the current position.

Therefore, in the case of any conflict between rules or requirements set out in the British Skydiving Operations Manual and any other British Skydiving manual, the provisions in the British Skydiving Operations Manual shall always have primacy as the definitive statement of the current position.

STAY SAFE

BRITISH SKYDIVING

Published by British Skydiving, April 2017

Revised June 2023.

The latest version of this document is available in electronic format from the Training & Progression section of the British Skydiving Website.

Current amended paragraphs will be marked by a vertical line on the right-hand side of the page.

Credits

British Skydiving would like to extend its gratitude to the Australian Parachute Federation (APF), The United States Parachute Association (USPA) for allowing British Skydiving to reproduce their "Camera Flying Guidance" for the revision of this manual.

British Skydiving would also like to thank, Hibaldstow, Skydive Langar and Sky-High Skydiving for some of the photographs included within the manual.

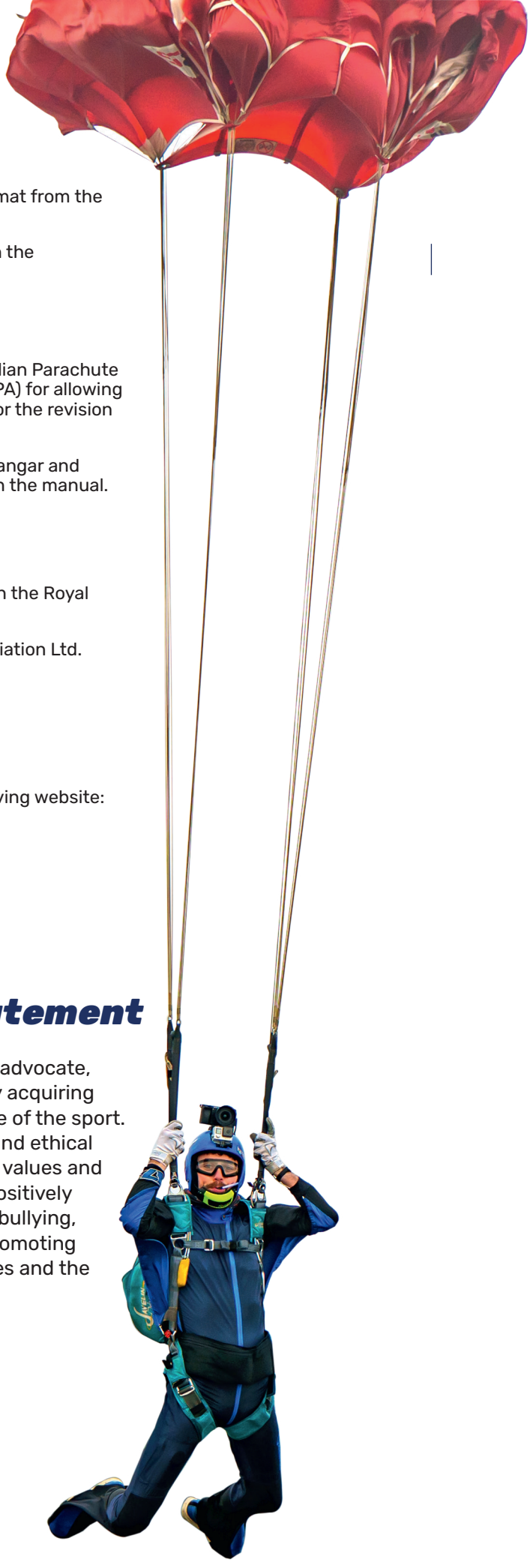
Patron: His Majesty King Charles III.

Affiliated to The Fédération Aéronautique Internationale through the Royal Aero Club of the United Kingdom.

British Skydiving is the trading name of British Parachute Association Ltd. A company limited by guarantee.

Registered in England & Wales no 875429. Registered office: 5 Wharf Way, Glen Parva, Leicester LE2 9TF.

A guide to useful Terminology can be found on the British Skydiving website: **britishskydiving.org/**



British Skydiving Values Statement

British Skydiving, its members, and officials, shall always, advocate, encourage and promote its commitment to excellence, by acquiring professional skills, to improve competence and knowledge of the sport. We encourage and promote our honesty, integrity, trust, and ethical behaviour, so we can aspire to create a community which values and celebrates the diversity of our membership, where they positively experience a safe, inclusive and fun environment, free of bullying, harassment, victimisation and unlawful discrimination, promoting dignity and respect for all, and where individual differences and the contributions of all people are recognised and valued.

CAMERA FLYING COACHING MANUAL

TABLE OF CONTENTS

Introduction

The Camera Flying Coaching Manual

The purpose of The Camera Coaching Manual is to teach skydivers how to reduce the risks when wearing a camera and attachments. It educates about safety and emergency procedures.
Note: The following information is aimed at already-competent skydivers. Serious consideration should be made before using cameras or attachments.
"Not everyone is ready to fly with cameras, even if you have performed hundreds of jumps".

British Skydiving Requirements to jump Camera

Operations Manual, Section 6 (Equipment), Paragraph 4 (Instruments), sub-para 4.4.

4.4 Skydivers jumping with camera equipment must be equipped with an audible altimeter. Tandem and AFF instructors must also be equipped with an audible altimeter when carrying out Tandem and /or AFF instructional descents.

Operations Manual, Section 6 (Equipment), Paragraph 6 (Cameras), sub-para 6.1, 6.2 & 6.3

6.1 Cameras may only be used by British Skydiving 'C' licence skydivers after inspection and approval of a CI. The Skydiver must have received an appropriate briefing, and this should be recorded in their logbook.

6.2. Cameras must be securely fitted. Only in cases of emergency should they be jettisoned.

6.3. Camera suit/jacket wings.

Before using camera suit/jacket wings, the skydiver must have received an appropriate briefing on the associated risks and have demonstrated their emergency procedures wearing camera suit/jacket wings, and these should be recorded in their logbook.

Operations Manual, Section 8 (Skydiving Limitations), Paragraph 4 (Opening Heights).

* The Height at which the parachute is to be fully inflated and be in a condition to be controlled by the user. See Appendix A (Camera Jumper record sheet).

Operations Manual, Section 10 (Safety), Paragraph 1 (Safety in the aircraft), sub-para 1.6.

1.6. All skydivers must fit helmets before take-off, except in the case of skydivers jumping with camera helmets, who may fit their helmets at the most suitable time prior to jumping. (Helmets not fitted for take-off should be securely located in the aircraft).

Who can teach Camera procedures?

Before using a camera suit with wings and before mounting or flying with cameras it is important to receive a proper briefing by a suitably qualified person and this Manual may be used as reference. Both camera suit and camera procedures must be taught with an in-depth approach ensuring that safety is the number one priory. These are two distinct briefs. Some jumpers may opt to use a camera without using a camera suit, others may want to jump a camera suit prior to later adding a camera.

A British Skydiving Chief Instructor (CI)/Advanced Instructor (AI), or an experienced camera flyer with extensive knowledge about cameras, skydiving, abnormal landings and who is familiar with the camera manual can be nominated to give briefings about camera safety.

Camera briefing objectives

1. To provide information before mounting a camera or attachments.

2. To develop basic knowledge and teach the skills laid down in this manual.

3. To practically show and explain possible mistakes to maximise learning emergency procedures.

4. To give a corrective training through the means of visual aids.

5. To provide a safety brief and the awareness required while flying with cameras and attachments.

6. To make a logbook entry(s) detailing that a camera briefing and/or use of a camera suit has been carried out. A separate logbook entry is required for both use of a camera and use of a camera suit.

SECTION 1: AWARENESS

Flying with cameras can be fun and a great training tool; but we can very easily get carried away with the camera and forget about everything else. It is of the utmost importance that the camera is the last priory when carrying out our gear checks.

It is recommended that you turn on the camera and record before running in, so you can mentally prepare for the jump ahead. Throughout the rest of the skydive, from free-fall to landing and back into the hangar - we must stay focused on our surroundings.

Many incidents have occurred from skydivers going low just to get that picture or make that dock for the video. There have also been incidents of canopy collisions and off landings due to tunnel vision with cameras. It is important to not develop tunnel vision for the footage! Serious consideration is required before adding cameras to an already-hazardous environment. Even if you have just obtained your British Skydiving 'C' Licence, you still might not be ready.

First, we are skydivers and second, we are camera flyers. It is important that we stay mindful of other skydivers, the jump spot, and our altitude awareness.

ANDY FORD

SECTION 2: HELMET

2.1 Helmet

Fully inspect the helmet, that is going to be used for flying with cameras. Consider the following when choosing a helmet for camera use.

2.2 Cutaway system

a) Does it have a cutaway system? How does it work? Physically cut away and reassemble to truly understand the system.

b) A cutaway should ideally be placed on the chin as it easy to locate and cannot be snagged by the risers on deployment.

c) A cutaway must be firmly fitted to prevent accidental release.

Note: *Check with your CI whether the Standard Operating Procedures (SOPs) state that all camera helmets should be fitted with a cutaway system.*

BRITSIH SKYDIVING

2.3 Release without cutaway system

It is recommended that all helmets with cameras and mounts attached should be fitted with a cutaway system.

a) If you do not have a cutaway on your helmet, ask yourself, can it be released quickly under tension without a cutaway?

b) Have a friend add pull force to your helmet and attempt to release it quickly.

2.4 Correct fitting

a) Does it fit correctly? Is the helmet a snug fit, or does it wobble a lot?

b) If the helmet is not securely fitted it can potentially cause neck/head injuries when mounted with heavy cameras.

2.5 Audible device

a) When flying with cameras it is mandatory to use an audible device (Section 6, para 4.4 British Skydiving Operations Manual). Cameras can be a distraction, so to aid height awareness an audible device is a must.

b) Most modern audible devices allow for several selectable warning altitudes which can be used during free fall and under canopy.

c) Consider when choosing a helmet how you will mount your audible device comfortably.

Below are several examples of audible altimeter or free fall computers for skydivers. For further information, you can visit their respective websites (L&B, Vog, Alti-2).

2.6 Shape/design of the helmet

a) Is it egg-shaped or square?

b) Egg-shaped helmet designs are more prone to risers etc. causing snagging due to their design. Where is a squared helmet will deflect risers etc.

c) To avoid snagging of lines and bridles. There should be no gap between the hard shell of the helmet and inline foam.

GARY WAINWRIGHT

SECTION 3: CAMERA

ANDY FORD

3.1 DSLR and other large cameras

When jumping larger cameras such as DSLRs, we should consider the proficiency of the camera person, before moving on to heavier cameras. Some DSLR cameras are mirrorless and can be smaller and lighter. A reasonable step could be that these types of cameras should only be jumped by skydivers with no fewer than 100 camera descents and when proficiency with a single camera has been achieved. A skydiver's first camera for free fall should be small and simple to operate. Check with your CI to establish their standard operating procedures.

3.2 Weight of the camera

a) What is the weight of the camera?

b) Heavy cameras can cause injuries on openings as well strain on the neck during use in the plane and under the canopy.

3.3 Size of the camera

a) What is the size of the camera?

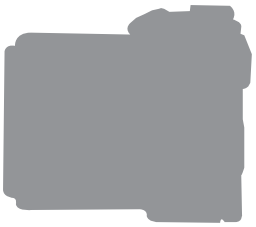
b) Wider cameras may protrude out from the helmet and cause a snagging point.

c) Tall cameras may get knocked during the climbing in and out of the plane. Cameras of any size may be knocked during the climbing in and out of the aircraft, larger or taller cameras would obviously be more prone to this so more care and awareness is required to prevent this.

DSLR

MIRRORLESS

DSLR



MIRRORLESS

3.4 Simplicity

a) Is the camera simple to use?

b) Operating cameras can be a serious distraction from our normal safety procedures. Use of a simple camera will greatly reduce the risks.

3.5 Intended use

a) Are you being realistic with what you plan to use it for?

b) Is it necessary to take a large production camera for a task that a small action camera can manage? For the everyday skydiver it is recommended to only use small action cameras.

3.6 Distraction

a) Will the camera create any distractions?

b) Is the camera positioned in such a way that the normal after opening procedures will not be affected by the camera?

c) Will the camera block vision in any way?

SECTION 4: MOUNTING

There are several safety factors to consider when mounting a camera to your helmet or any other part of your body. Several options must be considered to find the best and safest solution.

4.1 Location

a) Is this an appropriate place to mount? Is the location as snag proof as possible and is the camera angle suitable?

b) Will it create difficulty or discomfort with deployment? This is important when using hand mounts.

c) Do I have access to all my handles with ease?

d) Will it distort my visuals?

4.2 Snag hazards

a) Does the mount protect the camera and attachment from any snag hazards?

b) Running a piece of old canopy line along the side of the helmet or brushing the pilot bridle pass will help spot any snagging issues.

DAVE TITCOME

ROB LLOYD

DAVID PICTON

c) There are several snag-proof mounts on the market that should be considered.

d) Materials like sticky foam etc. Can be used to reduce snag hazards.

4.3 Security of the mount

a) Is the mount adequately secured to prevent an unexpected falling hazard to people and property below?

b)The mount should not be fragile enough to fall off after opening but still be able to break under tension if it is not snag free.

4.4 Breaking under tension

Will the mount breakaway if it succumbs to tension? If the mount or camera becomes entangled, it is advantageous if it breaks away under force. Solid mounts can be hazardous if they become entangled on canopy or pilot chute extraction.

4.5 Removing the mount

Can I remove the mount if the camera is not needed for a descent? When a camera is not in use, cameras and mounts should be removed from the helmet to reduce any risk of entanglement.
If the mount cannot be removed, then covering it with tape would also reduce the risk of entanglement.

CHRIS COOK

SECTION 5: ATTACHMENTS

5.1 Consideration

Attachments can be classed into a variety of items, and some can be very hazardous to skydivers. Any attachment must be seriously thought out and have approval from your CI before jumping. Your CI may seek advice from an experienced camera flyer.

5.2 Ring sight

a) As ring sights should only be used by experienced camera flyers, who are fully aware of the hazards.

b) Hazards include: entanglement with un stowed brake excess and visual impairment.

c) If the ring sight is attached to the pilot chute side, then there is a potential for entanglement with the pilot chute when looking back on deployment, as well as entanglement with lines under canopy.

d) A small round sticker on the goggles can be used as an alternate to a ring sight.

Note: *It is advised that all attachments must have a breaking point under tension.*

REBECCA PARKIN

SIMON BRENTFORD

SECTION 6: CAMERA WINGS

Using camera wings should not be attempted until appropriately briefed.

Issues to be considered include:
a) Greater burble affecting main deployment and reserve deployment.

b) Restricted on movement, potentially affecting climb out, deployment and emergency procedures.

c) Additional procedures went connecting / disconnecting.

ANDY FORD

Consideration should be given to:
a) Ensuring that the wing attachment point, and the seam of the wing is not large enough to pull your pilot chute through or to catch your emergency handles whilst wings are inverted (i.e. in a sit fly position or climbing out onto a forward step on exit).

b) Making sure that the movement of the pull arm stays well away from the gap between the wing attachment point and the seam of the wing.

c) That the wing is not large or slack enough to cover the pilot chute on deployment and the wings remain collapsed during the deployment phase (and until full line stretch).

d) The pull motion should be exaggerated so that the pull hand completely clears the camera wing.

e) Swoop cords are worn over the gloves so that they can be removed in the event of an emergency so that the risers can be reached without releasing the wings.

BRITISH SKYDIVING

Note: *Practice pulls, and emergency procedures must be observed on the ground to reinforce the above points.*

It would also be advantageous that the first camera wing jump be a solo jump, without camera, focusing solely on practice pulls. It should also be advised that this jump is from no less than 10,000ft and that hop and pops jumping camera wings for the first time be strongly discouraged.

Having been briefed and practised deployment and emergency procedures whilst wearing camera wings, you should be able to demonstrate the FS1 skill set, prior to using wings when filming others (without docking).
a) Control full rate turn in place.

b) Dive and approach a target.

c) Break off, turn and track away.

d) Maintain good altitude awareness throughout the skydive.

e) Control horizontal movement (forwards backwards and sideways).
When wearing camera wings, one method of collapsing the wings on deployment is to move the free arm as normal up to bring the elbow into the torso as the free arm is moved, so back the wing is collapsed, this would prevent one wing staying inflated and rotating you during the deployment phase.

JOE MANN

SECTION 7: DEPLOYMENT CONSIDERATION

7.1 Deployment altitude

Jumping with cameras adds extra burden to your skydives. It is recommended, when completing any form of camera jump with camera wings, that the minimum opening height of 3000ft AGL is observed. With the added extra weight in your head position, we are now more prone to neck injuries. It is recommended that you consider using the lightest equipment possible to reduce harm.

7.2 Camera wings

It is mandatory that when jumping camera wings for the first time, a briefing is obtained from an experienced camera flyer before use. In addition, practice pulls, and emergency procedures must be observed on the ground. See Appendix A at the end of this document.

MARTIN SKRBEL

7.3 Pilot chute and Bridle

The use of an extended bridle and larger pilot chute when flying with wings will reduce pilot chute hesitation and pilot chute entanglement.

7.4 Head Position During Deployment

The jumper should be looking at the horizon during deployment to ensure your head remains in line with the spine. Any position of the head that is not in line with the spine during deployment is likely to result in neck injury in the event of a hard opening. You should endeavour to maintain a heading using legs, collapse the wings, deploy forcefully into clean air and then return to a collapsed wing position, until line stretch has been established.

MARTIN SKRBEL

7.5 Canopy

a) Does your canopy have a tendency for hard or off-heading openings? Large docile canopies are recommended when flying with a heavy head set up.

b) Don't look up during opening, doing so will increase the chances of a line snagging on your helmet and may also result in neck injury.

c) Stow your brake line excess to reduce snagging, check your pins, closing loops and pilot chutes. Premature deployment whilst you are on the camera step can be a fatal incident.

MARTIN SKRBEL

SECTION 8: EMERGENCY PROCEDURES

It is important that we are confident with our normal emergency procedures before adding cameras and attachments to ourselves. With every situation there can be various factors at play.
It must therefore be considered that all emergency procedures will not be the same and must be assessed by the situation that is at hand. Below are some of the situations that may occur while using cameras and attachments.

Note: *Mental rehearsal and on-the-ground practical training is key.*
Doing so will give you a higher chance of success when the incident happens in real life.

When carrying out any emergency procedures you should always ensure that you have sufficient altitude to safely cut away.

It is vital to understand that camera wings can create a significant area of disturbed air behind you as you fall, this is often referred to as a burble. Both the main and reserve pilot chutes can become trapped in this burble. Your procedures should consider this and ensure that both the body / arm position used during the main parachute deployment and in particular the collapsing of any wings during emergency procedures is well rehearsed.

Adopting a 'Hard Arched spread position', as often taught to students, after a reserve deployment may be serious / fatally detrimental to the reserve deployment when wearing camera wings.
Other body positions to minimize or disturb this burble should be learnt and adopted when using camera or jumpsuits with wings.

8.1 Pilot chute / bridle line entanglement with camera / helmet

Attempting to clear an entanglement could easily consume altitude very quickly if not dealt with efficiently. Below are a few scenarios:

a) One attempt to clear entanglement, if unsuccessful, cut away the camera helmet, if main canopy deploys, check canopy. If main canopy malfunctions, initiate emergency procedures. If main parachute deploys correctly then ascertain if the canopy is controllable.

b) If the main parachute does not deploy i.e "pilot chute in tow", initiate emergency procedures.

c) Camera becomes entangled with another skydiver's bridle, (see scenario below) attempt to clear the entanglement, if unsuccessful, cut away the camera helmet.

8.2 Landing into water with cameras and attachments

When unintentionally landing into water it is recommended to release the headgear. This must be done prior to landing in the water, as it can become a dangerous hazard when trying to swim out of equipment (If the head gear has snagging points).

SECTION 9: TANDEM RELATIVE CAMERA WORK

If a jumper becomes interested in filming tandems, they should seek the advice of their CI and then may wish to start practicing jumping with tandems without a camera, to concentrate on the exit, matching free fall speeds and staying clear on deployment. These jumps should only take place following a safety brief from a TI. Only when the you have demonstrated competency should you be allowed to film these descents.

MARTIN SKRBEL

ELOY NAVARRO FISHER

9.1 Exit

a) Camera step: Before climbing out on to a step, the camera flyer should check the spot to ensure that the tandem pair is exiting at the correct exit point, which will allow them to land in the intended Parachute Landing Area (PLA). When exiting on the camera step consider where the step is and how you will you step out to it - being mindful of handles and pilot chutes. Once in position, keep a low profile and do not jump upon exit, to reduce the risk of contact with the tail of the aircraft. It is a good idea to rehearse this on the ground prior to attempting this at altitude for the first time.

b) Tandem Instructors count: Know the instructor's count (key) and signals. An instructors count is vital for the camera flyer to exit before the tandem pair creating a safe distance between the camera flyer and the tandem pair. Some Instructors may have various hand signals to assist the camera flyer during the exit phase.

c) Separation: On exit leave earlier than the tandem pair to provide good separation for clean drogue throw.

d) Drogue Inflation: Wait for drogue inflation before approaching tandem pair. An inflating drogue can cause serious harm to yourself and create an entanglement.

ELOY NAVARRO FISHER

BRITISH SKYDIVING

BRAD DIMMOCK

9.2 Free-fall

a) Drogue and Free-fall: Do not fly over or close to the drogue. Do not attempt to touch drogue or bridle.

b) Underneath tandem: Avoid flying directly underneath tandem pair at any time.

c) Docking with tandem: Avoid docking on Tandem student hands as they grab on and do not let go. Docking with tandem pair and turning them violently can damage shoulders.

d) Ideal flying position: Fly in front or on the side and a little down of the pair looking slightly up to them.

e) Safety cone: When flying up and around, imagine a cone around the tandem pair and the drogue. Fly around the outside of the cone.

9.3 Deployment

a) Trap door effect: Adequate separation is required as the tandem pair is deploying to be clear of the trap door effect.

b) Visibility for Tandem Instructor and camera flyer: The camera flyer must be visible to the tandem instructor when the tandem pair is deploying.

c) Jump spot consideration: "The tandem instructor should keep an eye on the spot and signal to the camera flyer in the event of a deep spot. The tandem pair may then deploy early to enable the camera flyer to also deploy at a higher altitude."

d) Separation from tandem pair: After the tandem pair deploys, it is a must to track clear of the tandem pair and deploy as high as possible.

BRITISH SKYDIVING

MARTIN SKRBEL

9.4 Landing

Awareness in the landing area: Once you have landed, it is easy to become fixated as a camera person, when filming your tandem pair landing. Stay alert of other skydivers landing around you.

SKYDIVE LANGAR

9.5 Emergency procedures

a) Tandem pair unstable on exit: If the tandem pair becomes unstable on exit, give them horizontal separation to avoid an expecting drogue or canopy coming out.

BRITISH SKYDIVING

BRITISH SKYDIVING

b) On top of tandem before drogue throw: If you find yourself on top of the tandem pair before drogue throw - move out of the way immediately by any means.

c) Tandem pair unconscious in free-fall: In the situation when the tandem instructor becomes unconscious in free-fall observe from a safe distance and deploy your own parachute at a safe altitude and distance.

d) Drogue entanglement with tandem pair: If drogue becomes entangled with tandem pair, do not attempt to help tandem pair. Observe from a safe distance and deploy with safe separation at a safe altitude.

MARTIN SKRBEL

e) Drogue entanglement with yourself: If the drogue becomes entangled with yourself, attempt to clear the entanglement and be aware that the tandem pair will most likely disconnect their RSL/ Skyhook, cutaway, pull drogue release and then track or backslide to clear to a safe distance and deploy their reserve. So, if you become entangled with the drogue - be prepared that you might get wrapped in a main parachute. Attempt to clear any entanglements and consider deploying either main or reserve parachute at an adequate altitude to resolve any issues with deployment.

SECTION 10: TANDEM HAND / WRIST MOUNTED CAMERA

A Hand / wrist camera jump is classed as camera jump. Considerations covered in other areas of this manual (e.g., briefing objectives, awareness, camera and mount suitability, snag hazards, managing emergencies) are equally as relevant to Hand / wrist camera, although specifics may be slightly different. These aspects should all be included in Hand / wrist camera training.

Tandem jumps are complex, and it takes many jumps before the "new" procedures become instinctive and automatic. It also requires regular practice and in-sequence handle, and equipment checks before emplaning, before exit and in freefall.

Hand / wrist camera adds a very real risk to interfere with this. The lower the experience of the TI, the higher the risk.

Hand / wrist camera also compromises the TI's ability and freedom to use the left hand. Technique and practice are required to overcome this.

10.1 Tandem Hand / wrist mounted camera requirements

British Skydiving Operations Manual Section 4.5.7 states the following:

5.7 **Requirements to use a hand/wrist mounted camera.**
Tandem Instructors wishing to jump with a hand/wrist mounted camera must have a minimum of 500 Tandem descents and have completed a minimum of 250 Tandem descents within the previous 12 months. Prior to jumping with a hand/wrist mounted camera with Tandem Students the Tandem Instructor must demonstrate the ability to perform 3 successful consecutive Tandem jumps with a 'A' Licence skydiver acting as a Tandem Student whilst using a hand/wrist mounted camera.

5.7.1. Only a TI approved by the CI may use a hand/wrist mounted camera and its mount must be inspected and approved by the CI.

5.7.2. TIs must be fully briefed by the CI or CI nominated TI on the requirements to use the camera. This will include emergency procedures.

DAVE TAYLOR

5.7.3. Prior to jumping with a 'A' Licence skydiver the TI must make a minimum of 2 descents with a hand/wrist mounted camera on Tandem equipment using a suitable container.

5.7.4. The Tandem Instructor must be able to carry out their systems checks, maintain heading and deploy in a stable position.
5.7.5. The 'A' Licence skydiver must be briefed on how to respond to Tandem emergencies.

5.7.6. Each 'A' Licence Tandem descent must be filmed by inside/outside camera person, and this must be included in the Tandem Instructor's debrief.

5.7.7. Hand/wrist mounted cameras are to be fitted to left hand/wrist only.
Who can teach hand / wrist mounted camera procedures? The CI has to approve the course of instruction and finally approve the TI to use Hand / wrist mounted camera, by signing and documenting this approval. The CI can nominate another experienced TI, who is familiar with and experienced in Hand / wrist camera, to provide the training.

SKY-HIGH SKYDIVING

10.2 Awareness, control, and distraction

Hand / wrist camera adds all the pressure and complexities of being a videographer to the already complex task of being a TI. This greatly increases the risk of distraction and lack of awareness.
You should never allow your external camera flyer or Hand / wrist camera procedures to distract or interfere with your tandem safety procedures and checks. If this should happen STOP and start over (e.g. during pre-exit equipment check). Only then start thinking about the camera again. You are a TI first (second and third), and only a camera person after that. A tandem is NOT just another skydive, and a Hand / camera jump is NOT just another tandem.

Some important aspects to note:
a) Do not sacrifice stability and control for a good shot, especially on exit.

b) An outstretched arm in from of a tandem student is an invitation to grab it.
Discuss with your student, include in your briefing, have a plan.

c) Be aware of the risk of hitting your student in the face with the camera (inside the aircraft, on exit or opening).

d) Do not compromise your freefall handle checks for good Hand /wrist camera footage.

e) Remain altitude aware at all stages of the skydive.

f) During opening: Deal with minor deployment issues quickly; Stop or prevent line twists before it becomes a problem, don't film it! Look at your parachute and recognise a malfunction early, don't focus on the video.

g) Remain aware of other parachutes and your position relative to DZ, don't get distracted.

h) If you struggle with anything, find yourself uncomfortable or things start going bad, forget about the camera and do your job as TI, especially during a malfunction.

i) Flare for a good safe landing, not a good video shot.

j) Maintain procedures and stay within your limits.

10.3 Hand / wrist mounted camera glove, mounts, and cameras

Some safety considerations to keep in mind (in addition to those previously mentioned in this manual):
a) Cameras with simple, easy operation will cause less distraction.

b) Commercially developed gloves and mounts specifically designed for tandem Hand / wrist camera are the best to use.

c) Ensure whatever you use has a low snag risk and the least possible interference with the hand and arm. Hand / wrist camera should always be positioned on the left hand only.

10.4 Recommended training jumps

Regulations require that after a TI has been trained in Hand / wrist camera use, they carry out a minimum of two Tandem Hand / wrist camera jumps with a suitable container and then three tandem Hand / wrist camera jumps with a licenced skydiver before using it with a student.

It is recommended that the first few Hand / wrist camera jumps with student skydivers are with those who do not actually require camera, to assist with reducing pressure and stress.

APPENDIX A

British Skydiving
5 Wharf Way, Glen Parva
Leicester, LE2 9TF
0116 278 5271
info@britishskydiving.org
britishskydiving.org

CAMERA JUMPER
TRAINING RECORD SHEET

First Name(s)	Last Name

British Skydiving Number	Licence Number	Jump numbers at date of safety brief	Date Signed off for live camera

Brief	Assessment	Date trained	Signature of trainee	Trained by	Signature of trainer	Remarks
Camera	Documentation C Licence, CI approval					
Camera	Camera Helmet Checked Cutaway etc meet SOP's					
Camera	Deployment Drills Entanglement prevention					
Camera	Emergency Drills Entanglement with camera					
Suit	Camera Suit Checked					
Suit	Deployment Drills Suit interference					
Suit	Emergency Drills Access to handles/wing interference					
Suit	Burble Clearance Drill					
Suit	Camera Suit Practice Jump 1 ***See second page***					
Suit	Camera Suit Practice Jump 2 ***See Second page***					

PRACTICE JUMP 1 & 2
ASESSMENT FORM

	Before exit		On Exit		In Free fall	
Practice jump 1	Check Pilot chute		Safe climb out		3 practice pulls	
	Check Pins		Safe fall away		Show correct deployment	
	Check Cut-away pad					
	Check reserve handle					
Name of assessor					Video footage of jump 1	
Comments						

	Before exit		On Exit		In Free fall	
Practice jump 2	Check Pilot chute		Safe climb out		3 practice pulls	
	Check Pins		Safe fall away		Show correct deployment	
	Check Cut-away pad					
	Check reserve handle					
Name of assessor					Video footage of jump 2	
Comments						
Cleared for Camera suit use	Assessor Signature: Date:					

Additional Comments
A camera brief and the use of a camera suit can be completed at the same time if required. Camera suit practice jumps should be assessed via direct observation of the climb out and exit or by video review. Each Camera Flyer must conduct personal reserve emergency drills prior to each jump with a camera suit/jacket. NOTE: Use of an audible altimeter is mandatory for all jumps where a camera is worn. The recommended minimum opening height when using camera wings is 3000ft AGL.

APPENDIX B

Possible label to affix to logbook or British Skydiving Licence, recording safety briefs.

SAFETY BRIEFS

CAMERA BRIEF _____ Adv. Insr. Sig. **Licence No**_____ **Date**_____	**CAMERA WINGS BRIEF** _____ Adv. Insr. Sig. **Licence No**_____ **Date**_____
SMOKE BRIEF _____ Adv. Insr. Sig. **Licence No**_____ **Date**_____	**FLAG BRIEF** _____ Adv. Insr. Sig. **Licence No**_____ **Date**_____
DISPLAY CLEARANCE _____ Team Leader. Sig. **Licence No**_____ **Date**_____	**OTHER**_____ _____ Adv. Insr. Sig. **Licence No**_____ **Date**_____

Safety & ancillary equipment brief and initial clearance.
(On-going currency recorded in Logbook)