ARTISTIC EVENTS

CONTENTS

1 GENERAL

Artistic Events (AE) incorporates freeflying and freestyle and is set to absorb emerging disciplines, should this become necessary.

The category system, will take the student through a fun and natural progression of basic VRW (Vertical Relative Work) skills, before allowing them to progress naturally into an experienced jumper. Each new skill must be successfully completed before the student is permitted to progress, as each dive adds more information and a new skill, or tests an existing one. Once a skydiver has a D licence in AE one can be sure that they can safely fly in large Head Down or Head Up formations. Each prescribed jump must therefore be completed in order to progress.

The logical progression of skills is:
1 mastering the new body positions,
2 maintaining freefly speeds,
3 falling straight down the tube,
4 adjusting speeds,
5 horizontal movement,
6 vertical movement,
7 rotating around one of the three axes in one place,
8 transitions into the various body positions.

The category system teaches the student the basic positions of AE flight, before testing the skills accumulated over time in the C and D Licence jumps.

It is recommended that students do as many solo jumps as possible, with the correct briefing beforehand from an AE Head Up (HU) coach or AE coach, to practise the test jumps in this section.

1.1 THE CATEGORY TEST JUMPS ARE DESIGNED FOR

The student who has obtained Category I status through the successful completion of the Intermediate Skills Programme.

1.2 ARTISTIC EVENTS COACHES

The AE category system is instruction based. In order for students to progress safely and without learning bad habits, it is essential that coaches participate actively. Current and competent PASA rated AE Coaches, who need not be PASA instructors, can teach the entire progression. Current and competent PASA rated AE Head Up Coaches can teach the AE Head Up progression jumps, i.e. up to the end of the C Licence jumps. Provided that the teaching is standardised (taken directly from the manual) the student should be able to visit any drop zone in the country and receive the same coaching and information. The holder of a current AE Head Up Coach rating can sign off Category II and Category III progression jumps, as well as C Licence qualifying jumps. The holder of a current AE Coach rating can sign off Category II and Category III progression jumps, as well as C and D Licence qualifying jumps. Note that only AE Coaches are permitted to progress or instruct students on Head Down / D Licence qualifying jumps. All coached jumps should be recorded in the student's log book. All successful progression jumps must be recorded in the student's log book and signed off by the AE or AE Head Up Coach who jumped with the student.

1.3 CATEGORY SYSTEM COACH'S OBJECTIVES

- To provide information before, during and after the skydive.
- To provide students with appropriate footage of the correct way to perform a progression jump.
- To provide students with footage of their own jump in order to comment and correct.
- To teach basic AE and further discipline skills, as laid down in this section.
- To teach SAFE AE flying in any one of the disciplines in a way that both the coach and student never lose sight of having fun.
- To communicate in the air by using "in air" signals.
- To teach and remedy mistakes as they happen in order that the student may carry on learning throughout the skydive.
- To give the student a good deal.

NOTE: Acknowledge if you have made a mistake – the student will appreciate an honest coach.

1.4 TEACHING FORMAT

Before the jump:

- Check student's logbook - look for indication of a student's ability.
- Talk through student's objectives - applicable to the skydive.
- Talk through the jump sequence and show a video if possible.
- Teach each new skill in turn - applicable to the skydive.
- Dirt dive the jump sequence as best as possible from exit to pull (talking the student through).
- Confirm in air signals (practice these with student).
- Confirm emergency procedures.
- Check equipment and dirt dive more.

In the Aircraft:

- During the climb (approximately 5000ft AGL) ask the student to talk you through the skydive from exit to pull.
- Suggest that the student mentally dirt dives periodically until run-in.
- On run-in and before exit check pins and puffs.
- Take student to the door and observe the spot.

After the Jump:

- Debrief – first the student's version then the coach's.
- Debriefing should happen before the next coached jump takes place.
- Corrective training – establish the student's weak points and give corrective training. Advise the student what to practice on the next jump.
- Logbook – student to fill in the logbook making comments on each part of the jump sequence. Coaches must write in their recommendation for a repeat or pass on the skydive.

NOTE: It is essential that the coach jump with a camera. Video is one of the best training tools and the only method of the student linking their feeling of the jump with the reality of their execution.

NOTE: The next coach can obtain valuable information if the logbook has been filled in correctly.

2 EQUIPMENT

Every AE skydiver's nightmare is a premature opening. Firstly, the jumper may be transitioning and become entangled. Secondly, they will be going faster than the recommended canopy opening speed; potentially fast enough to hurt or seriously injure themselves or even damage the canopy.

2.1 CONTAINER

Containers must be tight fitting and should never allow for exposure of risers, pins and, most importantly, the bridle and pilot chute. Exposed risers are not recommended. Ensure that all pin protection flaps and riser covers are secure so that they will not move during the higher speeds of AE flight.

2.2 DEPLOYMENT SYSTEM

Bottom of container (BOC) throwout or a pullout deployment are vital as the pilot chute and bridle must be stowed tightly away from the airflow. NO leg strap throwouts allowed. Keep your closure loop tight and in good condition, inspect it for wear on a regular basis (every pack job) and check Velcro for wear.

2.3 ALTIMETERS

It is mandatory for every participant to wear both a visual and audible altimeter on any AE skydive. The reason for this is that, unlike in FS, one loses sight of the ground and, with this, comes the danger of losing altitude awareness.

2.4 CLOTHING

It is important that clothing does not restrict movement and that it does not cover handles. In Head Up flying, it is recommended that drag about the lower body is minimised, as too much drag (i.e. heavy material, baggy pants) can make keeping your feet down that much more difficult. Conversely, drag about the lower body can assist the Head Down skydiver tremendously.

2.5 AAD (AUTOMATIC ACTIVATION DEVICE)

An AAD is highly recommended. The potential for high-speed collisions exists.

2.6 RESERVE HANDLES

Ensure that Velcro is in a good condition. One can also decide to change the metal D – handle to a puff the same as the cutaway puff. However if you prefer to jump with your alti on your palm the D – handle is the preferred option.

2.7 GOGGLES

Should not limit visibility and should be securely tightened, as the varying body positions and higher speeds easily dislodge them.

2.8 HELMET

A hard shell helmet is compulsory for all AE skydivers during the category jumps and highly recommended thereafter.

3 PROCEDURES AND RULES OF THE SKY

3.1 DEFINITIONS

Student refers to the person performing the test.

Coach refers to the coach of the test, as well as the reference point or base for the student. It is the responsibility of the student to appoint a capable coach / cameraperson and confirm it with the CI.

Base refers to the person in the sky toward whom the student or the rest of the formation is working.

Basic Sit Position (BSP) refers to a position where the feet are oriented toward the relative wind and 90-degree bends are maintained at the knees, hips, and shoulders.

Back Down Stable refers to the recovery position used in order not to ‘cork’. It is a back to earth position - like an inverted ‘box man’ in FS - which allows the flyer to maintain freefly speeds.

Ball Down Stable (BDS) refers to the recovery position used in order not to ‘cork’. It is a bum to earth position - like a human shuttlecock - which allows the flyer to maintain freefly speeds.

Head Up Flying is flying with your feet lower than your head; i.e. sit flying, stand ups and knee flying.

Head Down Flying is a position when your head is lower than your feet, with legs either in a split or a “daffy”.

VRW stands for Vertical Relative Work.

Barrel Roll refers to tracking and turning on the axis running through the head and feet to look if there is clear sky above you prior to opening. It is essential that the student learns this at an early stage and make it part of every skydive, to ensure safe deployment.

Break Off separation in the sky prior to opening altitude. It is recommended that the break off altitude is 4500ft AGL to allow for good separation and time to slow down.

Layout refers to a back or front loop with the body in a fully stretched position to be recovered in an alternative body position.

Freefly Track is a track that includes a full barrel roll. All AE students are to perform a freefly track on every test jump in order to pass the jump.

Sit Stand refers to a stable Head Up position where the knees are not locked into position, but ready to compensate for vertical separation at all times.

Corking is when a jumper falls flat out of a faster body position and thereby slowing down rapidly whilst the other jumpers continue falling at the increased speeds of AE flight. This is extremely dangerous and is the primary lesson taught in AE jumps.

Hand Dock is when a jumper uses his hand to dock onto another jumper's hand. This can be attained by holding in a grip or by just touching hands.

Foot Dock is when a jumper uses his feet to dock onto another jumper's feet. This can be attained only by inter-locking feet and holding it securely. Touching of feet only is not classified as a dock.

Freefly Exit refers to an unlinked exit.

3.2 RULES AND PROCEDURES

- Recommended minimum break off altitude 4500ft AGL.
- Due to the nature of the jumps prescribed in this section and for C and D Licence qualifying jumps it is highly recommended that these jumps be done from a minimum of 11000ft AGL.
- All jumpers participating in any AE discipline and the progression have to wear both a visible and audible altimeter.
- Jumpers must successfully complete all C Licence progression jumps in AE before attempting Head Down with anyone other than an AE Coach.
- Skysurfing may not be attempted until the jumper has obtained their C Licence in AE.
- Tests and instructional dives are to be done with an appropriately qualified AE Coach or AE Head Up Coach.
- Fun and safety are the key words.
- Students should be encouraged to practice all the set jumps with at least 5 – 10 solo attempts first, as this will raise confidence levels and ensure a more relaxed frame of mind.
- Until such time as a Cat III is obtained in AE, intermediates are not permitted to participate in formations larger than 3 ways.

3.3 GENERAL AND SAFETY TIPS

- Smaller groups and slower speeds.
- Planned procedures should be followed as closely as possible throughout a skydive. A sudden change of plans just prior to exit or in mid-air can create confusion and turn the jump into a hazardous situation.
- Check pins and puffs before boarding, in the plane and again before exit.
- Emphasise the importance of relaxing and breathing during the skydive.
- AE involves many different flying positions, and relates to many different speeds ranging from 180 to 400km per hour. A logical progression is to learn how to fly your body in the slower positions first, before moving to faster ones. Learning to control speed, direction and proximity at slow speeds increases awareness and reactions.
- Furthermore, it is important to remember that one-on-one flying is the safest way to experience flight with someone else. It allows flyers to maintain visual contact with each other at all times.
- It is important that the basic rules of AE are maintained, as laid down in this section.
- Never link exits on progression jumps. Try to ensure that eye contact remains the means of staying together on exits. This is so that the student develops the art of flying his body to remain relative to the base.
- It is usually easier for students to begin exiting with their backs to the prop. The student must be encouraged to just drop away from the plane, rather than launching off it.
- Students must be taught to fly as the Base for all Category II and Category III Jumps. This means that it is the AE Head Up Coach or AE Coach who will close any gaps after exit, to avoid 'zooming'. From the First C Licence jump, students will be using the vertical and horizontal movement skills they have been taught in order to fly in proximity to the base.

4 TRAINING PROGRAMME – BASIC STUDENT EXERCISES

4.1 CATEGORY II

Your Cat II in AE should be attainable by 15 - 30 AE free falls, and enables one to jump in a BSP with one other Category II jumper. On completion of these tests jumps, the coach should be satisfied that the student can maintain the speed required for safety in AE jump, without corking.

These jumps must be recorded in the student's log book and signed off as 'passed' by a current AE Coach or AE Head Up Coach. The briefing for this jump is of extreme importance, as it forms the basis of the student's understanding of the safety, theory and practice of Head Up skydiving.

The objective is to prove that the student is going down the tube and will not cork into anyone else. Note that, by passing this jump, the student is permitted to freefly with other skydivers who may be fairly junior. Make sure the student is able to always recover in a fast position if they 'lose it 'on their feet before passing their Category II jumps.

FIRST AE JUMP BRIEFING:

- Reiterate additional safety concerns when Head Up as opposed to flat.
- Encourage student to always exit back to prop even when doing practice solo jumps.
- Entire body out of aircraft before exit.
- Don't launch, drop off / let go (avoid going into the skydive with a rotation or too much energy).
- Exit with feet to prop (explain relative wind) with upper body drag and anchored legs.
- Allow time for position to take effect.
- Try to show the exact position you are aiming for: open chest, chin up, chin back, back in the wind, anchored feet (toes up).
- Encourage student to hold the position and familiarise themselves with a new sensation – a bit of a turn is no problem initially.
- Spinning / instability is always due to asymmetry (one foot not pressing down enough, one arm too much).
- Explain the symmetry, 90 degree angle in knees, arms, hips, elbows.
- Explain the difference in leaning too far forward or too far back.
- Explain that the student will act as the 'base' and must not try to alter their position to follow the coach.
- Stress the importance of a BDS recovery position. This will allow the student to maintain the fall rate whilst being in a stable position.
- We teach Ball Down Stable initially in the air for the following reasons:
  Ball Down Stable
  - Easier position to get right up front.
  - Easier to maintain fall rate.
  - Ideally a combination Back Down and Ball Down is necessary to effectively get back into a vertical orientation.

  Back Down Stable (Once the Ball Down position is learnt)
  - Can be very slow (like corking on your back).
  - Harder to control as more surface areas is in the airflow.
- Regular alti checks due to increased fall rate.
- No more work from 4,500ft by waving off.

Jump 1: Basic Sit Position (BSP) / Ball-Down Stable (BDS)

Objectives
- To introduce the student to the speed of freefly and the BSP.
- To introduce the BDS as the new recovery position.
- Ensure altitude awareness.
- Introduce the freefly track.
- Safe method of recovery back onto belly for deployment.

Jump Sequence
- Student to give the exit count and initiate exit.
- After exit the student adopts the BSP. Student to use BDS position each time he falls out of the BSP.

- Student to complete 3 altitude checks during the dive.
- At 5000ft AGL the student shakes his head indicating 'no more work'.
- At 4500ft AGL the student performs a freefly track on his back before performing a barrel role and deploying.

Jump 2: Maintaining Vertical Speeds

Objectives
- To refine the BSP.
- Ensure altitude awareness.
- Ensure that 'corking' does not occur.
- Ensure that the student is acting as the 'base' and not trying to move to the coach.
- Refine the freefly track.

Jump Sequence:
- Student to give the exit count and initiate exit.
- Student to exit with his back to the prop in the BSP. Altitude check.
- If the student falls off the BSP position at any stage he must adopt the BDS Position. Reiterate the dangers and meaning of 'corking'.
- The coach is to sit in front of the student, showing a good picture to reciprocate giving 'in-air' signals all the time.
- Student completes a minimum of 3 altitude checks during the dive.
- At 5000ft AGL the student shakes his head indicating 'no more work'.
- At 4500ft AGL the student performs a freefly track on his back before a barrel roll onto his belly for deployment.

4.2 CATEGORY III

Your Cat III in AE should be attainable by 75 – 100 AE free falls, and enables jumpers to receive their B Licence. On completion of these test jumps, the coach should be satisfied that the student is in control of both vertical and horizontal movement, and can maintain a heading on exit.

These jumps must be recorded in the student's log book and signed off as 'passed' by a current AE Coach or current AE Head Up Coach.

It is important to stress that the reason fall rate is taught first is that all separation must be closed, first in the vertical, and then in the horizontal plane, in order to avoid collision with the formation / group one is approaching.

Jump 1: Fall Rate Control

Objective
- To teach and evaluate the student's ability to move vertically in the Head Up flying body position.
- To refine the BSP.
- Ensure altitude awareness.
- Create heading awareness.
- To refine the freefly track.
- Student to act as base and fall 'down the tube' only,

Jump Sequence:
- Student to give the exit count and initiate exit.
- Freefly exit in sit-stand position with back to the prop.
- Student to attempt to maintain heading on exit.
- Once settled, the student must perform an altitude check.
- Coach to go below the student (approximately 5m) by standing / adopting a faster falling position.
- On signal from the coach, the student to adopt a faster falling position and stop on level with coach.
- Student performs altitude check.
- Coach will prompt a repeat if necessary. Otherwise coach to initiate a fall slow manoeuvre, stopping about 5m above the student.

- On signal from the coach, the student to initiate a fall slow manoeuvre, and stop on level with coach.
- Student performs an altitude check.
- At 5000ft AGL the student shakes his head indicating 'no more work'.
- At 4500ft AGL the student performs a freefly track on his back before a barrel roll onto his belly for deployment.

Jump 2: Horizontal Movement

Objective:
- Maintain heading awareness on exit.
- Forward and backward movement.
- Ensure altitude awareness.
- Proximity flying.
- Perfect the freefly track.

Jump Sequence:
- Student initiates exit count and exit.
- Student preferably maintains heading on exit, from a 'back to prop' exit where possible.
- Student completes an altitude check once settled.
- Coach to move backward, about 5m away, from student.
- On signal from the coach, the student is to move forward and close the gap.
- Student performs altitude check.
- On signal from coach, student to initiate backward movement and stop approximately 5m away from the coach.
- At 5000ft AGL the student shakes his head indicating 'no more work'.
- At 4500ft AGL the student performs a freefly track on his back before a barrel roll onto his belly for deployment.

5 LICENCE REQUIREMENTS

A Licence:
As per Section 2 of the PASA MOPs.

B Licence:
As per Section 2 of the PASA MOPs.

Note: Category II and Category III test jumps must be done in accordance with paragraph 4 of this section.

C Licence:
As per Section 2 of the PASA MOPs.

Must have completed all jumps in the C Licence progression as per this section.

Your C Licence in AE should be attainable by 200 – 300 AE jumps and enables one to jump in Head Up with large groups of Head Up flyers. On completion of these C Licence jumps, the coach should be satisfied that the student can maintain a heading on exit, perform turns, transitions and basic docks on level and in proximity. Once a C Licence is achieved, a student can safely participate in Head Down jumps with one other freeflyer who holds a C Licence.

From the First C Licence jump, students must be taught to use the vertical and horizontal movement skills they have been taught in their progression in order to fly in proximity to the base. The coach can help to close any separation after exit, but must remain in one place when the student performs turns and transitions. In this way the student will notice any level or separation problems in performing these manoeuvres.

These jumps must be recorded in the student's log book and signed off as 'passed' by a current AE Coach or current AE Head Up Coach.

Jump 1: Proximity

This is a three-way HU jump with a student, a HU/AE Coach and one other skydiver.

Objectives:
- To test the student's ability to perform 180° turns.
- To utilise the skills learned in Category III jumps to fly in proximity with the base.
- Perfect heading awareness using turning ability.

Jump Sequence:
- Exit is unlinked and in Head Up position.
- Student to give the exit count.
- The 3-way to fly in proximity in an unlinked round formation.
- Student performs alti check
- Student to fly through the space between the two other jumpers and perform a 180 degree turn in the process, thereby creating a new unlinked round formation (swopping slots).
- Student to maintain levels and proximity throughout.
- Alti check.
- The other jumper and coach each have a turn to do this too.
- Student to break-off the formation by 4 500ft.

Jump 2: Docking

This is a three-way HU jump with a student, a HU/AE Coach and one other skydiver.

Objective
- To utilise the skills learned in Category III jumps to fly in proximity with the base.
- To test the student's ability to join a formation.
- Formation is not specified but stair-step is recommended as the easiest.

Jump Sequence
- Student gives the exit count.
- Student may not be linked to the base on exit.
- Coach and other jumper to form a base by docking.
- Student performs alti check.
- Student docks the formation and the formation continues to fly for 3 seconds.

D Licence:
As per Section 2 of the PASA MOPs.

Must have completed the D Licence requirements of this section.

Your D Licence in AE should be attainable by 500 AE jumps and enables one to jump in Head Down with large groups of Head Down flyers. On completion of these D Licence jumps, the coach should be satisfied that the student can perform turns, transitions and basic docks on level and in proximity and that a safe method of tracking away from a larger Head Down group is developed.

These jumps must be recorded in the student's log book and signed off as 'passed' by a current AE Coach. Only current AE Coaches are permitted to pass D Licence progression jumps and footage of this must be available should the SSA AE Committee or PASA require it before awarding the licence.

Jump 1 : Tracking

This is an angled flight jump in which the student adopts a back flying position, and where the student has taken a dock on the 'leader' of the skydive, who should be in a more earth facing position.

Objectives
- To test the student's ability to fly in unusual orientations.
- To display docking skills.

Jump Sequence
- Student to exit in a 'floating' slot from outside of the aircraft.
- After exit student is to fly in an angled position, with back facing down.
- Student to fly to the earth facing leader of the skydive.
- Student to dock the leader.

Jump 2 : Proximity

This is a three-way Head Down jump. One jumper must be an AE Coach. The student exits unlinked and docks last on the two-way formation formed by the other two jumpers.

Objectives
- Forward and backward movement.
- Proximity flying.

Jump Sequence
- Student to initiate exit count and launch.
- The other two skydivers exit a linked Head Down two way formation, but the student may not be linked to the formation on exit.
- Student to fly to the round formation and open it to form a 3-way round Head Down formation.
- Student breaks the formation off, and performs a 180 degree turn before tracking away on their back.

Jump 3 : Formation Work

This is a three-way Head Down jump. One jumper must be an AE Coach.

Objectives
- Testing the ability to exit in a linked formation.
- Testing the ability to make small rotations and take docks.
- Tests fall rate control.

Jump Sequence
- Student to initiate exit count.
- Grips are changed to form a 'Round'.
- Jumper 1 & 2 form an accordion off jumper 3.
- Grips are changed to form a 'Round'.
- Then Jumper 2 & 3 form an accordion off jumper 1.
- Grips are changed to form a 'Round'.
- Then Jumper 3 & 1 form an accordion off jumper 2.
- Student breaks the formation off, and performs a 180 degree turn before tracking away on their back.

6 COACHES

6.1 AE Coach

The AE Coach rating is designed to give a formal qualification to those who teach AE jumpers up to and including D Licence level. All applicants for AE Coach ratings must be recommended by a CI and an AE coach and endorsed by the AE committee of the SSA (see Form 19).

An applicant for an AE Coach Rating must:
- Have a minimum of 500 jumps.
- Hold a PASA AE D Licence.
- Have successfully completed a PASA approved Jumpmaster, Static Line Instructor or AFF Instructor Course.
- Have been recommended to the AE committee of the SSA as competent to coach by a current AE Coach.
- Have attended an AE sanctioned coaching seminar, approved by the SSA.

To remain current as an AE Coach the rating holder must:

- Have performed at least 50 jumps in the previous 12 months of which 25 must be AE coaching jumps.
- Attendance of an AE sanctioned coaching seminar in the previous 12 months is highly recommended.

6.2 AE Head Up Coach

The AE Head Up Coach rating is designed to give a formal qualification to those who teach AE jumpers up to and including C-Licence progression jumps. All applicants for AE Head Up Coach ratings must be recommended by a CI and an AE coach and endorsed by the AE committee of the SSA (see Form 19.

An applicant for an AE Head Up Coach Rating must:

- Have a minimum of 300 jumps.
- Hold a PASA AE C Licence.
- Have successfully completed a PASA approved Jumpmaster, Static Line Instructor or AFF Instructor Course.
- Have passed two check out jumps with two separate AE Coaches, where the AE Coach takes the student's slot. At least one of these jumps should be a first AE jump briefing and simulation.
- Have attended an AE sanctioned coaching seminar, approved by the SSA.

To remain current as an AE Head Up Coach the rating holder must:

- Have performed at least 50 jumps in the previous 12 months of which 25 must be AE coaching jumps.
- Attendance of an AE sanctioned coaching seminar in the previous 12 months is highly recommended.