

English Ski Council SNOWSPORT SCOTLAND

Freestyle

Artificial Slope Freestyle Ski Performance Coach (Aerials) Award

Artificial Slope Freestyle Ski Coach (Aerials)

Course Summary

Scope

This qualification applies to coaching Freestyle Aerials on artificial slopes (including indoor snow slopes). It includes upright Aerials as part of moguls skiing in its own right using ramps and rampettes.

It does not qualify the individual to act as a general ski instructor.

Pre requisites

Aspirant Aerials coaches must:-

- Hold the ESC / SNSC Water Ramp Supervisors Qualification
- Hold a current First Aid Certificate (2 day)
- Be a paid up member of the coaching scheme
- Attend a Moguls Judges training course (for level 1 Aerials Coaches) or Aerials Judges Course (for level 2 Aerials Coaches)
- Be over 18 years of age (those under 18 may attend the course but will not be licensed until attaining 18 years of age)
- In addition those wishing to become a level 2 Aerials Coach must hold a BTF 1 Trampoline Coaches qualification.

Coaching Levels

Level 1 Aerials Coaches are qualified to teach upright jumps only. Level 2 Aerials Coaches are qualified to teach upright and inverted jumps.

Course Content

- 1. Objectives of an aerials coach
- 2. Pre-Course Criteria
- 3. Qualification criteria
- 4. Duties of an aerials coach
- 5. Warming up and cooling down
- 6. Dry land preparation for jumping long term and short term
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- 10. Log book for aerialists
- 11. Supervisor's log book and Session Report
- 12. Progressions for learning uprights
- 13. Progressions for learning the front somersault
- 14. Progressions for learning the back somersault and full-twisting back somersault
- 15. Progressions for learning multiple backward somersaults
- 16. Practical demonstration and practice of coaching techniques
- 17. Practical assessment of coaching techniques and fault identification and correction
- 18. Written Assessment.

Introductory Talk

- Aims of the Course
- The course is aimed to qualify appropriate responsible adults to hold coaching sessions at the water ramp, for skiers who are performing new jumps or training jumps which they have already learnt.
- Whilst we are keen to develop the sport in this country and aim to qualify as many people as possible, safety will not be compromised and it is the absolute right of the Course Tutors to fail an applicant who is not deemed to be suitable.
- Safety is our paramount concern and all applicants should read carefully the ESC/SNSC Code of Use for Water Ramps.
- Holders of the qualification will be expected to provide proof (log book) that they have been coaching regularly. Anyone who fails to satisfy the Course Tutors that they are up to date with the latest developments and who have not used their qualification, may be asked to re-take the course at a future date.
- The coach has the responsibility to run the session, ensure the safety code is adhered to, and be prepared to act in case of an emergency.
- The coach needs to be aware of the potential danger of water ramping and to do everything they can to avoid these dangers.
- The supervisor must be prepared to jump into the pool to pull out an aerialist in need of assistance. Therefore they need to be a competent swimmer when fully clothed.

1. Objectives of an aerials coach

- Aerials coaches will be qualified to teach Freestyle Aerial manoeuvres up to a specific level which is appropriate for their knowledge and experience. This will be assessed by the Course Tutors and may be re-assessed at future dates.
- Only these qualified experts will have the authority to teach Water-rampers NEW MANOEUVRES.

2. Pre-Course Criteria

- Applicants must be registered with a Home Nation Governing Body SNSC or ESC This can be done on the day of the course.
- Applicants must be 18 years of age or over
- Applicants must be a holder of the ESC/SNSC Water Ramp Supervisor qualification.

3. Qualification Criteria

- Applicants must attend an appropriate judging course. For Level 1 Aerials Coaches this is the MOGULS Judges Course, At level 2 candidates must attend the Aerials Judges Course but will find attending the Moguls Judges course advantageous.
- Applicants must hold a current relevant First Aid Certificate The SNSC and ESC Freestyle's Policies on First Aid are: "There is a requirement for persons in charge of others that they owe each member of the group a duty of care. The technical and leadership elements of this are examined in the SNSC qualification courses. The first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid and safety element should be gained through attending appropriate first aid attending appropriate first attending approprise first attending appropri
- The first aid course must meet the requirements detailed below.
- The First Aid training must be: a minimum of 12 hours/2 days provided by an HSE approved centre delivered by a qualified first aid instructor who must be registered with the HSE & include content relevant to the outdoors and mountain environment renewed every three years
- There are a number of organisations that can meet these requirements. The SNSC recommend British Association of Ski Patrollers (BASP) courses as the most suitable training for ski leaders, instructors and coaches. For more details contact the BASP Office on 01855 811 443, or e-mail <u>skipatrol@basp.org.uk</u>.
- ESC Freestyle is now organising suitable courses through SPA Training & Skills Unlimited Training. Aspirant ASFSPC's will automatically be sent details as they become known.
- Applicants wishing to coach inverted manoeuvres must satisfy at least one of the following criteria:-
- Holder of the 4* Aerials Award This can be assessed on the day of the course. Appendix 2
- Grade 1 BTF Trampoline Coach
- *Be deemed to be a suitable applicant by the Course Tutors.*

4. Duties of an Aerials Coach

- To read, learn and apply the ESC/SNSC Code of Use for Water Ramps. *Appendix* 1
- To set up the facility for safe use by skiers and snowboarders who are already qualified to use it
- To check and list the jumping qualifications of those who will use the ramp.
- To prepare the jumpers to use the ramp safely

- To supervise (direct, control, and teach) the jumpers whilst they use the ramp to practise manoeuveres.
- To use the correct progressions for teaching moves, to identify and correct faults, and to teach at a level which is appropriate for both the skier and the coach.
- To restrict / remove unauthorised activities
- To close down the facility
- An aerials coach will enforce the following rules:
- Skiers wishing to water-ramp for the first time must produce a completed Permission to Jump form with the skiing section completed and signed by an instructor. *Appendix 3*
- Skiers wishing to attempt inverted aerials for the first time must have the relevant section completed and signed by a trampoline coach.

5. Warming up and cooling down

- This session will deal with the importance of warming up and cooling down, and relevant exercises and stretches –
- Because aerials requires the body to work dynamically, using fast, anaerobic moves, it is vital to carry out some warm up and stretching exercises
- Warm up should be carried out first with the objective of increasing the heart rate and ensuring that the muscles and ligaments have warmed ready for the increased rate of activity required in aerials.
- Stretching should be the next objective to gently stretch the muscles to their limit without discomfort
- In reality it is not possible to achieve a complete warm up and stretch without tiring out the participants and therefore the type of maneuvers chosen to start any session should be those not requiring high power and extreme flexibility. The higher power and flexibility maneuvers can wait until the skier warms up fully.
- In practice, an individual will carry out a mixture of warm up and stretches before skiing and will warm up through performing increasingly more demanding maneuvers. If the individual notices that they are not fully warmed up they will limit what they do until they are fully warmed up and stretched.
- The health and safety aspects revolve around the following:-
- Sufficient warm up followed by stretching. This reduces strains and sprains.
- Warning that if they have a problem with knees, backs, shoulders etc they should limit what they do to keep within their own limits, or not jump at all.
- Warning that if they do not have the flexibility or strength they should not force anything. There is no such thing as no pain no gain. If anything is painful it is being damaged and should be stopped.
- There is no equality among skiers some are much stronger and more flexible than others!

- Mentally assess each jumper and from their body types make a note of what they might achieve and what they will not be able to achieve because of their body type.
- Note that the skier will improve in training on a particular maneuver to a point and then get progressively worse as they tire. Stop the particular trick training as soon as the degradation point is reached.
- A typical warm-up may include:-
- A run (at jogging speed) or aerobic activity on the spot, to increase circulation and raise pulse.
- Stretching quadriceps, hamstrings, gastrocnemius, soleus, groin stretch, latissimus dorsi, trapezius, deltoids, pectorals, abdominals, triceps, biceps.
- Ballistic stretching of shoulders, arms and legs.
- *Plyometric exercises bounding and jumping.*

6. Dry land preparation for jumping – long term and short term

- This session will deal with the importance of fitness training off site, trampoline or dive training with qualified coaches, and the actual dry land preparation on the day eg riding the kicker, experiencing compression on the kicker, mental rehearsal etc
- Serious aerialists should participate in regular fitness sessions which are **SPECIFIC** to the sport developing **power**, **speed**, **strength**, **flexibility** and working **anaerobic** and aerobic energy systems.
- This may take the form of weight training, circuit training, plyometrics, mobility exercises and some form of stamina work. This should be performed at least 3 times a week as a minimum.
- Increasing the resistance will increase pure strength essential for bigger jumps as there is a great compression on hitting the kicker
- Decreasing the resistance will allow the development of speed.
- *Plyometrics is particularly effective in developing explosive power essential for aerialists*
- *Increasing the repetitions will increase the strength endurance.*
- In weight training the dgree of resistance is usually quoted as a percentage of the repetitions maximum (RM), that is the maximum load that can be moved correctly with 6 repetitions
- 12 X 80% RM for strength gain
- 20 X 50% RM for strength endurance gain.
- Both are essential fitness requirements for aerials strength endurance enables a skier to get the most out of a training session.

- Trampoline training is advisable for upright maneuvers and essential for somersaulting maneuvers. This should ONLY BE UNDERTAKEN IN THE PRESENCE OF A QUALIFIED BTF TRAMPOLINE COACH.
- Cross training this helps to make training fun and can take the form of springboard diving, trampolining, and other forms of rebound work.
- Dry land preparation on site.
- *After warm-up, the aerialist should practice turning round on the in-run at a low level,*
- *Riding the kicker,*
- *Experience the compression of the kicker coach stands behind the skier and pushes down on the skiers shoulders. The skier should be able to stand firm.*
- *Mental preparation- the skier should visualise the jump to be performed and perform a mental rehearsal of the jump using body movements.*

7. Site Preparation

- The coach shall open the site once he/she is satisfied that the facility is safe and ready for use
- Keep the area around the kickers clear. If a jumper catches an edge on the in run they may deviate and miss the jump completely so the entire area must be clear except the supervisor or coaches who must be ready to move quickly out of the way.
- Check the landing is completely clear before giving a clear signal to the one jumper waiting to set off.
- Check the in run, transition and jumps are wet enough. Any dry spots can cause jumpers to crash.
- Check there are no sharp objects or obstructions on the in run or transition.
- Check that the floater or kicker is stable
- Check that the pumps are working correctly.
- Check that there are no other obvious hazards.
- 8. Equipment and Equipment Checking
- The coach shall ensure that all aerialists are wearing suitable attire for jumping:-
- Wetsuit, helmet with covered ears, bouyancy aid/impact vest, boots, skis or snowboard, preferably attached to the skier by powder leash.

9. Safety Procedures

• The coach shall ensure that they are familiar with the accident procedures for the facility at which they are operating.

10.Log Book For Aerialists

• All aerialists should be in possession of a log book in which their jumps should be recorded at the end of a training session. This must be shown to the coach before the aerialist jumps, so that the coach is aware of the aerialist's ability, and so that

meaningful training can take place. This must be discussed and made clear at the start of the session. *Appendix 4*

- The coach may qualify aerialists to train categories of jumps. The categories are:
- *Basic upright jumps* Straight jump, spread eagle, twister, daffy, Cossack, Mule kick, Back scratcher.
- Multiple upright jumps and helicopters
- Forward Somersault single
- Backward Somersault single
- Double somersaults backwards without twist
- Double somersaults backwards with twist
- Triple somersaults

11. Supervisor's Log Book and Session Report

- All water ramp supervisors and coaches should complete a session report (*Appendix 5*) each time they supervise a session. This should be attached to their log book and should be available for future reference for coaches. Coaches should also complete a session report.
- A note should be made of names of aerialists, number of jumps trained, quality of jumps, safety factors, and any other relevant incidents.

12. Progressions for learning uprights

Upright Jumps – Progression

(To be accompanied by video and/or diagrams.)

1. Straight jump – a vertical jump with no rotation and a straight shape in the air.

To be performed:

- (i) with balanced straight-running position on in run (Feet hip-width apart, good ankle, knee and hip flexion, low centre of gravity, arms well forward). Eyes ahead throughout inrun (watch end of kicker) and throughout the jump (look for landing).
- (ii) Rising to a higher position in transition with hands lowered to sides in preparation.
- (iii) With strong, full leg extension on take-off.
- (iv) With strong use of arms on take-off powerful lift to 45% between eyelevel and vertical and hold. Hands stay within view.
- (iv) Hands well forward for landing.

(I guess position of skis on landing doesn't matter at this stage although we should state the ideal scenario. See judging manual)

N.B.

- Use kicker-riding to practice take-off movements.
- Practice transition position statically in the transition.
- Ensure skier understands how extreme the forces will be as they hit the kicker at full-speed!! (See dry-land training)

Coach will need to advise performer of speed requirements ie. Where to set off from. If skier will have to jump around into inrun, practice this at the bottom of the inrun, going into the transition. Obviously the skier must be able to do this confidently before attempting the real thing!

It is important that good take-off technique is practiced on straight-jumps before upright shapes are attempted, as follows:

- 1. Spreadeagle jump an upright jump with legs straight and apart, abducting from the mid-line in the frontal plane
- 2. Twister an upright jump where the body performs a twisted shape about the vertical axis in the air, so that upper and lower body are facing different directions for a period of time.
- 3. Any of the following, in any order.

Daffy – an upright jump where the legs remain straight, but separate in the air, with one leg forward and one backward. The legs abduct in the sagittal plane.

Cossack – an upright jump like a 'Straddle' jump where the body moves into a forward piked position in the air with legs apart. Arms reach forwards, between the legs.

Mule Kick – an upright jump where the knees bend and the skis come backwards and to one side of the body so that the skis are vertical. Hands held together above head.

Back Scratcher– an upright jump similar to the mule kick, except the legs are brought directly behind the body.

Zudnik – an upright jump which resembles a Cossack, except that the legs are together. etc et

4. **Helicopter** – an upright jump with a full twist. A double or triple heli would have the appropriate number of twists. Twist is rotation about the vertical axis.

Only to be attempted after 360 has been practiced on a trampoline. Take off as for straight jump but as arms are lifted on take off, push leading arm back, look over shoulder, rest of the body follows with no break in body tension. Too much rotation can be corrected by pushing feet apart and widening arms, too little can be corrected by pulling hands and feet together and wrapping arms into body. The initiation is exactly the same as the initiation for a full twist on the trampoline. It's important that the twist is not initiated too early ie. on the ramp and that the leading shoulder is not lowered as the twist is initiated.

13. Front Tuck

Crouched on the in run, ready to pounce. Extend with a forward jump halfway up the kicker using the arms to develop forward rotation. Be fully extended long enough to see the landing. Tuck and hold for long enough to get to feet. **Front Somersault.**

Introduction:

Front somersaults have the advantage of being easily performed at a wide range of speeds. That is to say that even with too much, or too little speed, you can still achieve an impressive 'flyaway front', or a quick front tuck. Their BIG disadvantage is that the landing is 'blind' in that the moments before the skier hits the landing zone, he/she is 'blind'.

Front flips are usually used as an 'introduction' to inverted jumps.

Version 1.1

Mechanics of the Maneouvre:

As with any somersault, rotation is initiated by the upper part of the body moving at a different speed to the lower part of the body. With the front flip, the skis slow on the ramp and the upper body is launched upwards whilst continuing forwards. It is a misconception that you have to hurl yourslef down towards the water to achieve it. That often simply results in leaving your skis on the ramp whilst you spin through the air like a badly thrown stick - with no control over what hits the water / snow first.

Speed:

Choose a speed that you are comfortable with, one that at least projects you off the end of the ramp. As a guide, start from a position on the in-run that you would use for a simple upright, and as you master the technique, increase your speed.

Technique: "Rabbit, Superman, Crucifix" Rabbit

Keep your weight on your toes as you approach the ramp. This may sound silly, but **"think Rabbit**" (Hold your hands near to you chin, as if you were pulling yourself up on a bar - a chin up). Wrinkling the nose is optional!! With your weight kept on your toes, as you hit the ramp, jump straight up (reach for the sky). The Rabbit stage is now complete.

Superman

As you leave the ramp, your body should be fully extended. Now's that Superman moment!!

Similar to a Trampolining crash dive, you need to see your landing area and judge your speed of rotation. As you reach the zenith of your flight path, pull your body into a tucked position to increase your speed of rotation. The time sent judging your speed of rotation at the superman moment is invaluable as it defines how long you remain in the tucked position.

Crucifix

Snap your body into a crucifix position. It will immediately slow your rotation and make it relatively simple to make sure your feet are the first thing to hit the water / snow.

Coaching the Maneouvre:

Watch the skier as they leave the ramp. As they pass the lip, the body should be fully extended. The time spend extended in the air should be commensurate with the launch speed. This is where a flyawat front differs from a quick 'snap' front. It is vital that the skier fully extends however as failure to do so can result in an uncontrolled jump (and uncontrolled landing). If the skier does not take the time to look at the landing zone, then they will not be able to judge the speed of rotation.

Failure to extend:

Can be caused by letting the hips drop back during take off. It is important to make sure the skier remains on their toes - even if it means they feel they are tripping up on the ramp. It can be accompanied by flapping of the arms - this is a natural response to realising that there is not sufficient body rotation to complete the jump.

Failure to look:

Smacks of a panicked jump. Without that judgement, the result is often over rotation WATCH FOR THIS!! - you may have to 'call' the jump. It means the skier goes in horizontally face down (eyes wide open). It is common for such a jump to result in pain from the testicles (if present) to the eyeballs.

Failure to open:

Unusual because if the initial parts of the jump have been completed correctly, the skier will have a good idea of where he/she is. i.e. good air sense. However, you should be prepared to 'call' the jump.

Calling the Jump:

Watch for take off. After a good extension - reaching the apex of the flight path, you should be calling 'Pull' This should result in a very quick snap tuck, at which point you should call 'Out' or 'Stretch'. To be frank, if the skier is relying on coaching calls (i.e. failing to achieve the jump without verbal input) then air sense needs to be developed. Often however, the developing skier will want the call - even though in reality they are ignoring it - as a means of reassurance.

Flyaway Front:

Maximum speed, maximum extension, maximum superman. It's an extremely impressive maneouvre but should only be attempted by skiers who are confident and accomplished front flippers. From here, twisting fronts, and double fronts (and beyond) can be developed.

14. Back layout

A very easy manoeuvre as the kicker is shaped to make the skier flip backwards. If a shop mannequin is pushed down the in-run at the right speed at the right speed it will do a perfect layout so there is very little the skier needs to do to achieve it.

Set off down the in-run looking at the transition. Once on the transition look at the end of the kicker and stand fully upright. Raise both arms up as high as they will go, biceps by the ears. Ride the kicker, keep tight and enjoy the ride.

The most important part of a back layout is the position when rising and leaving the kicker. Legs must be straight, arms must be straight above the head, body must be fully tensed and perpendicular to the kicker. How this position is achieved is a matter of preference. The old style is to do an arm swing whilst riding the kicker so the arms are fully up as the jumper reaches the end of the kicker. American technique is

putting arms fully up in the in-run or transition and keeping them there throughout the take off. Anywhere between these extremes will work.

At the moment of departure the hips and chest should push forward creating a slight arch in the body. Eyes and head are both raised seeing the sky. This arch from legs to head and arms is very subtle and it is a mistake to exaggerate it.

As the skier leaves the kicker and starts rotating the most important thing is for their arms to continue their backwards rotation ahead of the body. Immediately after take off the arms should be stretched straight behind the ears until their limit of stretch is achieved. Some aerialists hold this high position for the duration of the somersault, others split the arms wide and continue rotating them behind them until they arrive straight down either side of the body. Different variations of this technique are acceptable and even needed depending on the progression to doubles or twisting somersaults so it is advisable to be able to perform both versions.

The common mistake is for the arms to come back down in front during the manoeuvre, which tends to dissipate the rotation.

It is important that the jumper retains good tension throughout the flip to retain its power. To pike or tuck is an addition to the layout technique.

The eyes see the landing before the body has completed the full somersault. Retain tension in these last moments and do not pike to the landing unnecessarily early.

Back full

There is no one correct way to teach a back full. It is a complex manoeuvre and different aerialists will achieve it in different ways. The coach should know is worth it is worthwhile trying several different methods and developing the one that the aerialist has most success with.

The take off, as for all backwards rotating manoeuvres must be the same as for the layout. A common mistake it to twist before the skier has left the jump by dropping the leading arm. Aerialists should revert to back layout every time this happens to ensure a bad habit does not develop. It is important to generate enough rotation for a straight back somersault and the coach should ensure that this is always the case as it is very difficult to twist unless the skier is straight.

Firstly establish which direction a person twists. It should be the same way they would twist for helicopters & swivel hips.

Three possible styles.

a)Set a back layout and be totally upside down before attempting to twist. Aerialists can start with $\frac{1}{2}$ twist and build it up. This is the best technique for those without trampoline ability.

b)Push the leading arm further back and gently turn that way as the skis leaves the kicker. Bring the arms sharply to the sides keeping the leading arm ahead (watch out for the arm getting stuck in front of the body).

c)Split the trick into 2 parts, half in - barany down. Twist the first $\frac{1}{2}$ turn quickly and see the ground. Keep looking at the ground and do a half twisting front somersault to land.

Those who can already perform the move on trampoline or springboard will naturally be at an advantage and may be happy so simply try and replicate the move they know on skis.

15. Lay-Tuck

This is a double back somerault with the first somersault straight, and the second somersault tucked. The take-off is that of a Back layout, but with more speed and stronger legs. After the first somersault, the skier brings the legs in towards the body in the tucked position. This requires excellent abdominal strength.

16. Practical Introduction to Water Ramp and Jumping

17. Written Assessment

- All candidates will be assessed throughout the day on their competence to supervise adequately.
- All candidates will be given a written assessment at the end of the course. *Appendix 8*

Candidates will be qualified to coach up to a certain level - to be decided by the course tutors. Some coaches will be qualified to coach on snow, although most will be restricted to coaching on the water ramp.

Code of usage for water ramps Appendix 1

General

- All participants must be competent skiers or snowboarders. They must have a minimum ability to be able to do a 90 degree jump turn on a 30 degree slope. They must be able to turn and stop from the full speed they generate on the in run.
- All participants must be able to swim.
- Each session is run by the designated supervisor. The supervisor will hold an ESC/SNSC water ramp supervisors qualification administered by SNSC or ESC.
- Aerialists jump one at a time.
- All aerialists must have completed a Permission to Jump form and have been provided with a log book in which their jumps are to be recorded by the Supervisor/Coach. This can only be completed on the day of jumping.

Physical Structure

- It is recommended that the facility be securely fenced off to prevent access by unauthorised persons, especially when the facility is unsupervised (ie. At night).
- It is recommended that a "Danger Deep Water" warning notice be clearly displayed
- A Life Buoy should be easily available at all times.

Supervisor

- The supervisor has responsibility to run the session, ensure safety code is adhered to and be prepared to act in case of an emergency.
- The supervisor must be a qualified ESC or SNSC Water Ramp Supervisor.
- The supervisor needs to be aware of the potential danger of water ramping and do everything they can to avoid these dangers.
- The supervisor must be prepared to jump into the pool to pull out an aerialist in need of assistance. Therefore they need to be a competent swimmer when fully clothed.
- The supervisor must be prepared to enforce the safety code and be willing to stop anyone jumping who fails to comply with the rules and the authority of the supervisor.
- Keep the area around the kickers clear. If a jumper catches an edge on the in run they may deviate and miss the jump completely so the entire area must be clear except the supervisor or coaches who must be ready to move quickly out of the way.
- Check the landing is completely clear before giving a clear signal to the one jumper waiting to set off.
- Check the in run, transition and jumps are wet enough. Any dry spots can cause jumpers to crash. Ensure that the sprinkler system is working efficiently.
- Check there are no sharp objects or obstructions on the in run or transition.
- Check there are no hazards in the water
- Check the water quality.
- The supervisor has the absolute right to suspend operation of the facility if circumstances dictate and to prevent any person jumping if their lack of skill or other problems are suspected of being such that they are likely to compromise safety.

• Aerialists

- Must wear a helmet. Hard plastic exterior, high density foam padding.
- Ears should be covered to prevent bursting ear drums on a side impact.
- Must wear a flotation device like a water ski impact vest.
- Must wear a wet suit or a dry suit. This protects against enemas and bruising. A 'Shortie' wetsuit should only be worn with additional coverings on the arms and legs to prevent injury in the case of impact with the ramp or water. Gloves are recommended.
- Must only jump when cleared to do so by the supervisor.
- Must comply with instructions given by the supervisor.
- It is recommended that the skis or snowboard are attached to the jumper by a string or strap to prevent them becoming a danger should they release on the jump. This will also stop any equipment sinking if it releases on landing.
- Must be a capable skier or snowboarder as outlined above and be physically strong enough to handle to forces encountered. The aerialist's weight, speed, position and the type of kicker used will all effect the force exerted on the jumper.
- Must inform the supervisor of any physical ailments which may affect their jumping. Eg It is the duty of a deaf skier to inform the Water ramp supervisor of their deafness. A skier who feels unwell must notify the supervisor immediately and must cease jumping.
- A common mistake is hitting the kicker with back, hands or head when trying a backward somersault. This can be as a result of over rotating on the kicker or collapsing into it. It is important to keep firm body tension when performing aerials and to become airborne before any somersault is performed.
- Jumpers should try to keep dirt from entering the pool. Wash off any dirty boots before jumping.
- Jumpers should have any open cuts or wounds covered with waterproof plaster.
- Jumpers should notify the supervisor of any medical ailment which may affect their ability to jump eg deafness, asthma etc. Appropriate medication must be available for such individuals eg an asthmatic must not jump without the appropriate medication to hand. Glasses Should not be worn, although soft contact lenses may be worn if the jumper wishes although they are likely to get lost in the water! *It is not recommended that persons suffering from epilepsy participate in water ramping.*

• First Aid

- There must be quick access to a qualified first aider and following safety items.
- Telephone for emergency calls. Neck brace. Back board. Lifesaving flotation ring. General first aid kit. Blankets to keep a wet casualty warm.
- <u>If there is an accident the supervisor should call for immediate help.</u> This will be the first aid officer on site or an ambulance by telephoning 999. Whenever possible wait for qualified assistance.
- An injured person should not be moved unless in immediate danger. In the case of water ramping the obvious danger is drowning. If the person is unconscious in the water then fast action will be needed to bring them to safety.

- **Spinal injury** is very rare and only caused when someone has had a serious impact with a hard surface. This is not likely from a water landing. If there is any suspicion that the unconscious person has suffered any spinal injury then it is vital that any movement of that person is minimized. The back board can be used to remove an unconscious person from the pool but should be done so by someone with appropriate training.
- Any jumper experiencing symptoms which could be spinal cord related should be seen in <u>hospital</u>. These include bad neck or back pain, weakness tingling

 including shooting feeling down arms or legs or any odd altered sensation or loss of movement.
- If patient is **unconscious** check their airway is clear and patient is breathing. Do not move and keep warm with blankets.
- Concussion can occur after a blow to the head. It is possible to suffer concussion simply by hitting the water head first. If the jumper has hit his/her head on the kicker there is a danger of neck injury as well as head injury. The jumper may need rescue from the water. Mild concussion does not always manifest itself immediately so symptoms could be observed several hours after the crash. Symptoms of concussion are confusion and memory loss and can be very mild. Any jumper showing these symptoms should be seen by a <u>doctor</u>. Any jumper suffering a head injury causing Loss of Consciousness even only for a very short period of time should be seen in <u>Accident and Emergency</u>. Avoid alcohol after a concussion. In the hours after apparent recovery from a concussion any fitting, persistent vomiting, severe headache, dizziness, confusion strange behavior or loss of consciousness, difficulty seeing, walking or difficulty waking the patient, then call 999 for an ambulance.
- After a concussion it is advised that care is taken to avoid a repeated head injury for 2-3 weeks and so should not jump again during that time.
- A burst ear drum can occur when the ear impacts directly to the water without protection. Symptoms are acute pain and loss of balance. The person must stop jumping and protect the ear. A doctor should be seen that day.

ASFSPC (Aerials) Coaches Course

One Star Award	Two Star Award		Three Star Award
Manoeuvres	Manoeuvres		Manoeuvres
Water Ramp	Water Ramp	Snow or Plastic	Water Ramp
Straight Jump	Zudnick	Spread Eagle	Front Tuck – Must be Water qualified
Spread Eale	Back Scratcher	Twister	Back Tuck or
Twister	Helicopter	Daffy	Back Layout – Must be Water qualified A triple upright
Daffy	Front Tuck		A triple upright
Cossack	A double combination		
Mule Kick	upright		
Competition	Competition		Competition
No competition experience necessary for this award	No competition experience necessary for this award		Participate in a Water Ramp or Upright Air competition as a registered skier.
Awareness	Awareness		Awareness
Show awareness of safety equipment for Water Ramp training Read, learn, and be tested on the Water Ramp Rules of Use.	Show and display an understanding of good take- off technique and form in the air		Show an understanding of competition procedures
One Star Awarded on	Two Star Awarded on		Three Star Awarded on

ASFSPC (Aerials) Coaches Course

Four Star Award		Five St	ar Award	
Manoeuvres		Manoeuvres		Notes –
Water Ramp	Snow	Water Ramp	Snow	Allmanoeuvres should be performed consistently, at will, with correct technique, good form and safe landing.
Back Full - Water Qualified Lay Tuck - Water Qualified	Front Tuck – Snow Qualified Back Tuck or Back Layout – Snow Qualified	Any twisting double Somersault - Water Qualified	Back Full – Snow qualified Lay Tuck – Snow Qualified	To water qualify any somersault, it must be performed 50 times to feet. This move may then be performed on snow. To snow qualify any somersault, it should be performed on snow, 3 times in a row with good take-off, form and landing. It may then be competed on snow.
Competition		Competition		
Participate in aerials a registered skier	competition on snow as a	Participate in a C Level (Competition on snow	
Awareness		Awareness		
Show an awareness of competition	f scoring and tariff for aerials	Gain a Water Ramp Sup	ervisor Qualification	
Four Star Awarded	on	Five Star Awarded on		

PLEASE NOTE

INVERTED AERIAL MANOEUVRES SHOULD NEVER BE ATTEMPTED ON PLASTIC. ALL INVERTED MANOEUVRES SHOULD BE LEARNT ON A WATER RAMP, AND TRANSFERRED TO SNOW ONLY WHEN QUALIFIED TO DO SO BY AN ESC REGISTERED AERIALS COACH OF THE APPROPRIATE LEVEL.

PERMISSION TO JUMP FORM

TO BE COMPLETED BY ALL SKIERS/SNOWBOARDERS ATTENDING AN ESC/SNSC WATER-RAMP INSTRUCTION CLINIC FOR THE FIRST TIME

Name	Date of Birth
Addre	2SS
	fy that the skier named above can perform these manoeuvres competently:
1.	Schuss at speed with stability
2.	Perform linked snowplough turns
3.	Perform linked basic parallel turns
4.	Perform a 90 jump around into the fall line (BOARDERS USE EQUIVALENT)
	OR
	Has performed an upright aerials jump at an appropriate facility.
Signed	I
Ski In	structor/Coach qualification
ALL S	KIERS/BOARDERS WISHING TO PERFORM BACKWARD SOMERSAULTS
I certi tramp	fy that the skier/boarder named above can perform a back somersault competently on a oline
Signed	i
Tramj	poline coach qualification and BTF number
TO BE	E COMPLETED BY ALL SKIERS/BOARDERS
I certi by its	fy that I have read the ramp code of use, I understand its implications, and agree to abide rules.
	over 14 years of age or I am under 14 years of age and am a member of a Regional nowboard Squad
I am f	it and in good health
Signed	1

(To be signed by a Parent if skier / boarder is Under 18 years of age)

RAMP SESSION REPORT

Date	Nan	ne of Supervisor			
Weather			Wind	l speed	
Time Ramp O _l	pened				
Ramp Safet	y Checks	- before jum	ping		
Ramp Structur	re				
Condition of Ir Condition of L	1-Run (Sprin anding Area	nkler system and a (Sprinkler syste	matting) em and matting)		
Jump closed at	;				
AERIALISTS	5				
Name of Aerialist					
Log book checked					
Jump qualification level for training					
Jump					
1 2 3 4 5 6					
3					
4					
5 6					

Log booked signed

AERIALISTS

Name of Aerialist			
Log book checked			
Jump qualification level for training			
Jump 1			
2			
3			
4			
5			
6			
7		 	
8			
9		 	
10			
Log booked signed			

LOG BOOK FOR SKI AERIALISTS

N	ame
1.1	anne

Date of Birth

Manoeuvre	Date First Performed	Date Qualified to Train on Water Ramp	Date Qualified to Train on Snow (50 good jumps)	Date Qualified to Compete on Snow (3 in a row to feet)	Signature of Coach
Basic					
Uprights					
Straight jump			NA	NA	
Spread Eagle			NA	NA	
Twister			NA	NA	
Daffy			NA	NA	
Cossack			NA	NA	
Mule Kick			NA	NA	
Zudnik			NA	NA	
Back			NA	NA	
Scratcher					
Multiple uprights and Helicopters					
Helicopter			NA	NA	
Double			NA	NA	
upright					
Triple upright			NA	NA	
Forward					
Somersault					
Front tuck					
Backward					
Somersault					
Back tuck					
Back layout					
Double					
Somersaults					
without twist					
Lay tuck					
Double					
Somersaults					
with twist					
Lay Full					
Full Full					
Half half					
Triple Somersaults					

LOG OF TRAINING SESSIONS

Date	Place of Training	Jump trained	Number of Times	Signature of Supervisor

Written assessment for Aerials Coach – Appendix 8

Please answer all the following questions:

- 1) With a new, beginner aerialist, what information would you, as an aerials coach need to know about that skier?
- 2) Describe an on site warm-up
- 3) Describe the dry-land preparation procedures for new jumps
- 4) Explain how a Front tuck somersault is performed
- 5) What can be used to lubricate the jump?
- 6) Identify the possible faults with a skier who only just avoids hitting their head on the kicker whilst performing a back layout?
- 7) How could you correct these faults?
- 8) A skier arrives and complains of minor knee-pain before jumping. How would you deal with this situation?
- 9) Explain why a warm-up and cool-down are necessary.
- 10) Which jumps would you feel confident in coaching?