

Book 5

Miscellaneous Archery Rounds and Ski-Archery

Chapter 33

Miscellaneous Rounds

33.1. Club Rounds

A Club Round permits the athlete to shoot matches without direct elimination. Several variations are possible which are implemented in the respective bylaws, one of which is set out below.

33.1.1. 50m Match Round.

The competition:

The 50m Match Round consists of a Ranking Round of 27 arrows at 50m on the 122 cm target face for all. The results of this ranking round shall be used to divide athletes into groups of eight in each division, regardless of their class.

The athletes in each group shall shoot against each other in a 'round robin' series of matches. This shall determine the top three athletes in each group.

Explanatory notes:

- *Divisions: Recurve, Compound, Barebow, Standard;*
- *Classes: All classes regardless of gender or age shall compete together in the same divisions;*
- *Number of arrows in the Ranking Round: nine ends of three arrows each; total 27 arrows;*
- *Number of arrows in the matches: seven matches of nine arrows each; total 63 arrows;*
- *Total number of arrows in the competition: 90 arrows, for total maximum score 900 points;*
- *Ranking procedure: athletes are ranked in each division by total, hits, 10's, X's;*
- *Athletes are then repositioned on butts as follows: athletes ranked #1 - #4 to target 1 of that division, athletes #5 - #8 to target 2 and so on throughout that division. The pattern is repeated in all other divisions;*
- *In case of ties in the Ranking Round for the athletes ranked #8 - #9, #16 - #17 etc. in each division, they shall be ranked by the organisers (suggestion: in alphabetical order by surname and then by given name);*
- *Assignment to groups and butts: There should be a minimum of two athletes per butt and a minimum of four athletes in one group. That means that divisions with fewer than four athletes shall not be eligible to compete. Organisers shall arrange at their discretion the last two or more groups in the ranking of each division in order to comply with this minimum;*
- *In each group, each athlete shall shoot seven matches, each of which shall be three ends of three arrows;*
- *Matches shall be shot in the following sequence (considering Targets 1 and 2 as of the same group):*
 - *First series of matches (matches one to four):*
 - *A1-A2 B1-B2 C1-C2 D1-D2;*
 - *A1-B2 B1-C2 C1-D2 D1-A2;*
 - *A1-C2 B1-D2 C1-A2 D1-B2;*
 - *A1-D2 B1-A2 C1-B2 D1-C2.*
 - *Second series of matches (matches five to seven):*
 - *A1-D1 B1-C1 A2-D2 B2-C2;*
 - *A1-C1 B1-D1 A2-C2 B2-D2;*
 - *A1-B1 C1-D1 A2-B2 C2-D2.*

- *The result of the matches shall be decided by score as follows: Matches won shall score two points, ties one point and a match lost shall score no points. If there are byes for matches without opponents, the athlete shall shoot, but shall score no points;*
- *Athletes winning the maximum of seven matches shall gain 14 points in total;*
- *The winner in each group shall be determined by the total of the match points. In the case of a tie, the total accumulated score including the ranking round (then hits, 10's and X's) shall break the tie. In case of a final perfect tie, the two or more athletes shall be ranked in the same position;*
- *Each athlete shall shoot 90 arrows at 50m on 122 cm faces, thus getting a grand total score comparable to that of a 900 Round. Organisers at their discretion may also reward the top three grand total scores of each division, as well as the top teams per division (the top three ranked athletes make up a team);*
- *Scorecards for the 27 ranking arrows should be the standard cards used in any World Archery Outdoor or Indoor competition;*
- *The scorecard for the groups could be organised as follows: scorecards 1-1 and 1-2 shall be used for target 1 in each group, and scorecards 2-1 and 2-2 shall be used for target 2 in each group.*

33.1.2. Recommendations: How to run the competition.

It is suggested to start the competition at around 10:30 a.m. with two ends of three practice arrows, and then the 27 arrows of the Ranking Round.

Athletes should be distributed on the targets from left to the right, having already separated them into division, for instance first the Recurve Division, followed by the Barebow Division and then Compound Division.

There should be a sufficient number of butts available to allow all athletes of a division to shoot on their own butts. In addition, at least one empty target per division should be made available.

Athletes should wear athlete numbers.

After shooting the 27 ranking arrows, athletes should be asked to leave their athlete numbers on the shooting line.

During a lunch break of approximately 45 minutes to one hour, the organisers shall prepare the result of the Ranking Round and the re-positioning of the athletes on to the butts.

Athletes shall then be called by the organisers onto the shooting line butt by butt to make sure that they understand their new target assignment and allow them to pick up and wear their new athlete numbers.

The scorecards for the two groups of matches should be prepared by the organisers including target number and the names of opposing athletes to make it easier for the athletes to compare each other's scores at the end of each match.

The first group of four matches shall then be shot, followed by the second group of three matches.

Organisers may arrange a short interval of about 10 minutes, between the two groups of matches, in order to collect the related scorecards used to prepare a temporary results list.

The Awards ceremony should take place as soon as possible after the end of the second group of matches.

A special computer programme to handle all the phases of the competition is available without charge from World Archery and can be used to run the competition properly. The programme only requires a low-end computer (386 / 4 MB RAM) with MS DOS, but it can be run with Windows 95/98, too. A printer compatible with MS-DOS commands is needed.

Other Club Rounds shall be published as they are developed.

33.2. The Duel Match Round

The Duel Match Round is shot at 18m on 40cm vertical triple faces or at 70m on 122cm faces. (See Article 4.5.1.10. (page 80 in Book 2) and Article 4.5.2.6. (page 81 in Book 2).)

In addition to the rules as laid down in Book 2-Events (page 65 in Book 2) the following rules apply to the Duel Match Round.

33.2.1. The Round

33.2.1.1. *The Duel Match Round, shot at 18m on 40cm vertical triple faces or at 70m on 122cm faces consists of a first Qualification Round, a second Qualification Round, an Elimination Round, a Semi-Finals Round and a Finals Round.*

33.2.1.1.1. *It is composed as follows:*

- *The first Qualification Round (60 arrows - 5x12) in which all athletes are seeded by drawing lots in groups of six athletes (max. of eight groups per division and class), if possible there shall be no more than one member of the same team per group. To avoid top athletes from meeting in the first round they shall be seeded in different groups based on their scores in the previous World Championships. Each athlete of a group shall shoot a series of individual matches against each of the other five athletes of his group; each match consists of four ends of three arrows shot in 90 seconds. The athletes shall shoot at the same time;*
- *The second Qualification Round (60 arrows - 5x12) in which the best 24 athletes (eight winners, eight second best and the eight athletes with the best total scores of all groups) of each division and class are seeded by drawing lots into four groups of six athletes. Each group shall consist of an equal number of winners, second best and best total score athletes. The shooting programme is the same as in the first Qualification Round;*
- *The Elimination Round (60 arrows - 5x12) in which the best 12 athletes (four winners, four second best and the four athletes with the best total score of all groups) of each division and class are seeded by drawing lots into two groups of six athletes, procedure as above. The shooting programme remains the same;*
- *The Semi-Finals, in which the winners and the second best athletes of the third Qualification Round shall meet, the winner of one group shall shoot against the second best of the other group. Each athlete shall shoot a series of sets (ends) of three arrows in 90 seconds. A tie in score shall be broken by a shoot-off after each set. The athlete who wins four sets out of seven shall win the match. The athletes shall shoot alternately. The Judge shall decide by drawing lots which athlete shall start shooting the first set. The athlete who starts shooting the first set shall shoot second in the second set. The athletes shall go on rotating after each set;*
- *The Finals. The winners of the Semi-Finals shall proceed to the Finals; the two losers shall be ranked third. The shooting programme shall be the same as in the Semi-Finals.*

33.2.2. Range Layout

33.2.2.1. *For the Indoor Duel Match Round the 40cm vertical triple faces shall be set in pairs on each buttress.*

33.2.3. Target Faces

33.2.3.1. *For the Duel Match Round the 40cm vertical triple face shall be used for indoor, the 122cm face shall be used for outdoor.*

33.2.4. Shooting

- 33.2.4.1. *The maximum time permitted for an athlete to shoot an end of three arrows shall be 90 seconds in the Duel Match Round.*
- 33.2.4.2. *In the Elimination and Finals Rounds of the Duel Match Round no extra time shall be allowed for equipment failure, but the athlete with equipment failure may leave the shooting line to repair or replace the same and return to shoot any remaining arrow(s) if the time limit permits.*
- 33.2.4.3. *For the Duel Match Round the procedure shall be as follows:*
- *First Qualification Round, 24 athletes shall shoot at the same time on 12 buttresses, two athletes per buttress. The 12 buttresses are arranged in groups of three, so that four groups can shoot at the same time;*
 - *In case of incomplete groups the athletes without opponents shall get a bye but they shall shoot their matches alone for score (see total score). The shooting positions on the line (left-right) and the shooting lanes shall change after each match;*
 - *Second Qualification Round, the round shall be shot as above;*
 - *Elimination Round, each division and class shall shoot separately, 12 athletes shall shoot on the six centre buttresses;*
 - *Semi-Finals, each match shall be shot separately, one match after the other, two athletes per buttress which shall be placed in the centre;*
 - *Finals, same procedure as for the Semi-Finals.*

33.2.5. Order of Shooting - Timing Control

- 33.2.5.1. *In the Duel Match Round there shall be two athletes per buttress, each athlete shall shoot on his own set of vertical triple faces.*
- 33.2.5.2. *In the Duel Match Round the time limit for an end of three arrows shall be 90 seconds. The yellow light shall go on when only 30 seconds are left.*

33.2.6. Scoring

- 33.2.6.1. *In the first and second Qualification Rounds of the Duel Match Round the athletes score themselves.*
- 33.2.6.2. *In the Elimination Round the scores are witnessed by a Judge.*
- 33.2.6.3. *In the Semi-Finals and Finals Rounds of the Duel Match Round the athletes remain behind the shooting line, the arrows are called, scored by Judges and pulled by athletes agents.*
- 33.2.6.4. *The running scores of each match are displayed on the lane after each end or set.*
- 33.2.6.5. *For the Duel Match Round the results shall be determined as follows:*
- *In the Qualification and Elimination Rounds the winner of each match shall get two competition points, the loser shall get no point and in case of a tie both athletes shall get one point each;*
 - *The athlete with the most points after five matches is the winner of his group and advances to the next round;*
 - *The athlete with the second most points is second best and advances to the next round;*
 - *The eight (four) athletes with the highest scores of their class and division advance to the second Qualification round or Elimination Round;*
 - *In the Finals Rounds the athletes shall shoot up to seven sets (ends), the athlete who first wins four sets (best of seven) wins the match;*
 - *Both athletes who lose the Semi-Finals match shall be ranked third place.*
- 33.2.6.6. *In the event of a tie for points or score to determine group ranking there shall be a shoot-off.*

Both athletes shall simultaneously shoot one end of three arrows on their own set of target faces on the same buttress.

If there is still a tie each athlete shall shoot one more arrow (40 seconds) on the middle face of his set of target faces. The athletes shall shoot alternately. The arrow closest to the centre shall resolve the tie.

If necessary successive closest-to-centre single arrow shoot-offs on the middle face shall break the tie.

In the Finals Rounds single arrow closest-to-centre shoot-offs on the middle face shall determine the winner of each set.

33.3. The Forest Round

The Forest Round is an unmarked field round shot on any number of target faces consisting of pictures of animals.

33.3.1. Classes

33.3.1.1. *For the Forest Round, World Archery recognises the following classes:*

- *Women;*
- *Men.*

33.3.2. Divisions

33.3.2.1. *For the Forest Round with equipment as specified in 22. Chapter 22-Athletes Equipment (page 177 in Book 4):*

- *Recurve;*
- *Compound;*
- *Barebow;*
- *Longbow;*
- *Instinctive Bow.*

33.3.3. The Forest Round

33.3.3.1. *The Forest Round consists of any number of targets between 12 and 24 which is divisible by four, with up to three arrows per target. The Round is normally shot on unmarked courses but may be shot on marked courses provided the distances are kept within the limits as set forth in Article 33.3.3.2. (page 215 in).*

33.3.3.2. *Unit for the Forest Round.*

Number of targets	Diameter of inner rings in cm	Distances in metres	
		Blue peg Barebow, Longbow, Instinctive bow	Red peg Recurve and Compound
3	Ø 7.5 / 5	5 - 10	5 - 15
3	Ø 15 / 10	5 - 20	5 - 25
3	Ø 22.5 / 15	5 - 30	5 - 35
3	Ø 30 / 20	5 - 45	5 - 55

Whenever possible the pegs may be combined.

The distances of the targets of the same size shall vary between long, middle and short distances.

In the Forest Round only the first arrow hitting the scoring area shall be scored in accordance with the following:

Arrow hit	1st arrow	2nd arrow	3rd arrow
inner ring	15 points	10 points	5 points

outer ring	12 points	7 points	2 points
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33.3.4. Range Layout

33.3.4.1. *The course shall be arranged so that the shooting pegs and the targets can be reached without undue difficulty, hazard or waste of time.*

33.3.4.1.1. *The targets as described in 33.3.5. Venue Equipment (page 216 in) shall be laid out in such order as to allow maximum variety and best use of the terrain.*

33.3.4.1.2. *At all targets, one peg or mark shall be placed in such a way as to allow at least two athletes to shoot at the same time from either side of the peg.*

33.3.4.1.3. *All pegs shall be numbered with the number of the corresponding target and the distance when marked distances are to be shot. The pegs shall have different colours, corresponding to each division as follows:*

- *Blue for Barebow, Instinctive Bow and Longbow Divisions;*
- *Red for Recurve and Compound Divisions.*

33.3.4.1.4. *Faces with 7.5cm inner ring, shall be placed four per buttress in the form of a square.*

33.3.4.1.5. *The tolerance on the distance from peg to target shall not exceed ± 25 cm on distances of 15m or less, and shall not exceed ± 1 m on distances between 15-60m. The distance should be measured in the air approximately 1.5-2m above the ground. All kinds of measuring equipment can be used as long as it satisfies the tolerances.*

33.3.4.1.6. *The buttresses shall provide for a margin of at least 5cm outside the lowest scoring zone(s) of the face(s) placed upon it. At no point may any target face be less than 15cm from the ground. In all instances, regardless of the terrain, the buttress should be placed reasonably perpendicular to the athlete's line of sight from the peg in order to present the target face's full size, as much as is practically possible to the athlete.*

33.3.4.1.7. *All targets shall be numbered in succession. The numbers shall be no less than 20cm tall and shall be black on yellow or yellow on black and shall be placed within the approach to the pegs for that target and shall also function as the stop area for those athletes waiting for their turn to shoot.*

33.3.4.1.8. *Faces shall not be placed over any larger face, nor shall there be any marks on the buttress or in the foreground that could be used as points of aim.*

33.3.4.1.9. *Clearly visible directional signs indicating the route from target to target shall be placed at adequate intervals to ensure safe and easy movement along the course.*

33.3.4.1.10. *Suitable barriers shall be placed around the course, wherever necessary, to keep spectators at a safe distance while still giving them the best possible view of the competition. Only those persons having the proper accreditation shall be allowed on the course inside of the barriers.*

33.3.5. Venue Equipment

33.3.5.1. *In the Forest Round, picture faces may be used as set forth below:*

Diameter of inner rings			
Ø 7.5 / 5cm	Ø 15 / 10cm	Ø 22.5 / 15cm	Ø 30 / 20cm
Typical animals, such as:			
squirrel	hare	roe deer	bear
rabbit	fox	wolverine	deer
marten	raccoon	wolf	wild boar
woodcock	wood grouse		

33.3.5.2. *The Forest Round target faces consist of pictures (photograph/drawing/painting) of animals (see chart) with such colours and contrast that people with normal eyesight can see them clearly under normal daylight conditions at the relevant distances. The pictures should be printed on a white background. The picture faces have two concentric inner rings and an outer ring or line. The smaller inner ring is marked X, the larger inner ring is the higher scoring zone. The outer ring corresponds to the animal's body contour if this is clear, otherwise there shall be a clear line closely following the body contour. Organisers may use 3D animal figures instead of or in addition to animal faces.*

33.3.6. **Athletes Equipment**

(See 22. Chapter 22-Athletes Equipment (page 177 in Book 4).)

33.3.7. **Shooting**

(See 23. Chapter 23-Shooting (page 185 in Book 4).)

33.3.7.1. *In the Forest Round all arrows shall be numerically marked and shot in ascending order.*

33.3.8. **Order of Shooting**

(See 25. Chapter 25-Order of Shooting and Timing Control - Field Rounds (page 189 in Book 4).)

33.3.9. **Scoring**

(See 27. Chapter 27-Scoring (page 193 in Book 4).)

33.3.9.1. *The Forest Round may be scored as in 3D, using the single arrow principle, at the organiser's discretion – in which case the smallest ring (X-ring) becomes the 15p ring, the inner ring becomes the 12p ring and the outer contour of the animal target face becomes the 7p ring.*

33.3.10. **Shooting Control and Safety**

(See 28. Chapter 28-Shooting Control and Safety (page 197 in Book 4).)

33.3.11. **Consequences of Breaking Rules**

(See 29. Chapter 29-Consequences of Breaking Rules (page 199 in Book 4).)

33.3.12. **Judging**

(See 3.12. Roles and Responsibilities of Judges (page 47 in Book 2).)

33.3.13. **Questions and Disputes**

(See 31. Chapter 31-Questions and Disputes (page 203 in Book 4).)

33.3.14. **Appeals**

(See 32. Chapter 32-Appeals (page 205 in Book 4).)

33.4. **The Clout Round**

The Clout Round is a long distance shoot at a target laid out on the ground with a central flag-pole called "The Clout".

33.4.1. **Classes**

33.4.1.1. *World Archery recognises the following classes:*

- *Women;*
- *Men.*

33.4.2. Divisions

- 33.4.2.1. *For Clout Archery:*
- *Recurve Division;*
 - *Compound Division.*

33.4.3. The Clout Round

- 33.4.3.1. *The Clout Round consists of 36 arrows shot from the following distances:*
- *165m for Men Recurve;*
 - *125m for Women Recurve;*
 - *185m for Men Compound;*
 - *165m for Women Compound.*
- 33.4.3.2. *Shooting shall be from one direction only.*
- 33.4.3.3. *Six sighter arrows (two ends of three arrows) are permitted preceding the commencement of shooting. These shall be shot under the control of a Director of Shooting and shall not be scored.*

33.4.4. Venue Equipment (Clout)

- 33.4.4.1. *The Clout target shall be circular, 15m in diameter and shall be divided into five concentric scoring zones arranged from the centre outwards and each measuring 1.5m in width. Each dividing line shall be entirely within the higher scoring zone.*
- 33.4.4.2. *The Clout target may be marked out on the ground, or the scoring lines may be determined by a steel tape or non-stretch cord marked off at the dividing lines.*
- 33.4.4.3. *The centre of the Clout target shall be marked by a brightly coloured distinctive triangular flag: the Clout. This flag shall not measure more than 80cm in length and 30cm in width. The flag is to be affixed to a round pole of soft wood, firmly fixed vertically in the ground, so that the lower edge of the flag shall not be more than 50cm from the ground.*
- 33.4.4.4. *The values of each scoring zone of the Clout target from the centre outwards, are: 5 - 4 - 3 - 2 - 1.*

33.4.5. Athletes Equipment (Clout)

See athletes equipment described in 11. Chapter 11-Athletes Equipment (page 133 in Book 3) as applicable.

33.4.6. Shooting (Clout)

- 33.4.6.1. *Each athlete shall shoot his arrows in ends of three or six arrows each.*
- 33.4.6.2. *The maximum time permitted for an athlete to shoot an end of three arrows shall be two minutes. The maximum time permitted for an athlete to shoot an end of six arrows shall be four minutes.*
- *Athletes may not raise the bow arm until the signal is given starting the time limit;*
 - *An arrow shot before or after the allotted time shall cause the athlete to lose the highest scoring arrow of that end;*
 - *In the event of an equipment failure the athlete shall raise the red flag on the shooting line. Extra time may be given to make the necessary repairs or changes to the damaged equipment. The athlete shall make up the appropriate number of arrows at the earliest opportunity under the supervision of a Judge.*
- 33.4.6.3. *Except for persons who are disabled, athletes shall shoot from a standing position and without support, with their body above the shooting line.*
- 33.4.6.4. *Under no circumstances may an arrow be reshot. An arrow may be considered to have not been shot if:*

The athlete can touch it with his bow without moving his feet from their position in relation to the shooting line, provided the arrow has not rebounded.

33.4.6.5. *While an athlete is on the shooting line, he shall receive no coaching assistance.*

33.4.6.6. *Shooting shall be in one direction only.*

33.4.7. Scoring (Clout)

33.4.7.1. *Scoring shall take place after every six arrows.*

33.4.7.2. *The Director of Shooting shall appoint one person to hold the Clout cord, and one person for each scoring ring to collect the arrows in the ring. After all arrows are collected, they are sorted according to the athlete's individual marking, and the arrows shall remain in that scoring ring until scored.*

33.4.7.3. *Each athlete shall then call the value of his arrows, commencing with those of the highest value. The Director of Shooting shall check that all arrows are correctly called.*

33.4.7.4. *The value of the arrows that do not stick in the ground shall be determined by the position of their points as they lie.*

33.4.7.5. *Arrows sticking in the Clout, or in the pole, shall score 5.*

33.4.7.6. *No athlete, except the appointed arrow gatherers, shall enter the Clout target until his name has been called to record the value of his arrows.*

33.4.7.7. *Ties in the Clout events shall be decided as follows:*

- *First by the least number of misses;*
- *If the tie is still undecided, then the least number of ones, and so on;*
- *Should all arrows be the same, the athletes so tying shall be declared equal.*

33.4.7.8. *Diagram: Scoring*

(see image 1: Clout Archery at page 219)

33.4.8. Shooting Control and Safety

(See 10. Chapter 10-Shooting Control and Safety in Target Archery (page 115 in Book 2).)

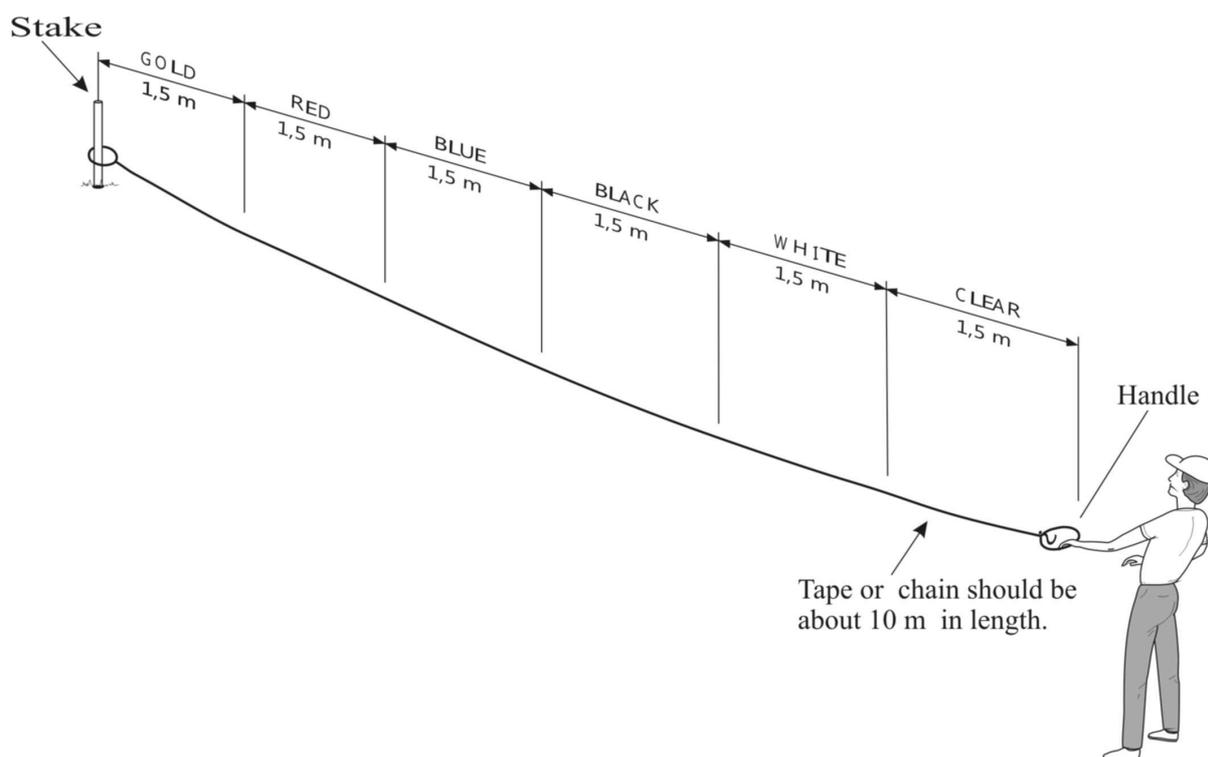


Image 1: Clout Archery

33.5. Flight Shooting

The object of flight shooting is to see the furthest distance that can be shot with certain sets of equipment.

33.5.1. Classes

33.5.1.1. *For Flight Archery World Archery recognises the following classes:*

- *Women;*
- *Men;*
- *Juniors Women;*
- *Juniors Men;*

33.5.2. Divisions

33.5.2.1. *For Flight Archery World Archery recognises the following Divisions:*

- *Target Recurve Bow;*
- *Conventional Flight Bow;*
- *American Longbow;*
- *English Longbow;*
- *Compound Flight Bow;*
- *Compound Target Bow;*
- *Foot Bow.*

33.5.3. Flight Shoots

33.5.3.1. *Flight shoots consist of ends of six arrows for the greatest distance. Shooting shall be in one direction only.*

33.5.4. World Archery Events

33.5.4.1. *In the discipline of Flight Archery:*

- *The Target Recurve Bow all classes shoot with bow weights of:*
- *35lbs (15.88kg); 50lbs (22.7kg);*
- *The Conventional Flight Bow Shoot with bow weights of:*
 - *39.7lbs (18kg); 55.1lbs (25kg); Unlimited for Women and Juniors;*
 - *39.7lbs (18kg); 55.1lbs (25kg); 72.8lbs (33kg); Unlimited for Men;*
- *The American Longbow Shoot all classes with bow weights of:*
- *35lbs (15.88kg); 50lbs (22.7kg); Unlimited;*
- *The English Longbow Shoot all classes with bow weights of:*
- *35lbs (15.88kg); 50lbs (22.7kg); Unlimited;*
- *The Compound Flight Bow Shoot with bow weights of:*
 - *39.7lbs (18kg); 55.1lbs (25kg); Unlimited for Women and Juniors;*
 - *55.1lbs (25kg); 72.8lbs (33kg) Unlimited for Men;*
- *The Compound Target Bow Shoot with bow weights of:*
- *45lbs (20.4kg); 60lbs (27.2kg) for Men, Women and Juniors;*
- *The Foot Bow Shoot all classes with the bow weight of:*
- *Unlimited.*

33.5.4.2. *No division is permitted to shoot in direct competition with another division.*

33.5.4.3. *Divisions to be shot in any tournament shall be at the discretion of the organisers and shall be advertised on the entry forms.*

33.5.5. Range Layout (Flights)

33.5.5.1. *The base line or shooting line from which the arrows are shot, and from which measurements are made, shall be at least 20m wide.*

33.5.5.2. *Contest Space is the area behind the base line and should be roped off to a distance of at least ten metres in depth to provide protection to the athletes and their equipment*

while shooting. Only athletes, their assistants (one to each athlete) and officials shall be allowed in this area.

33.5.5.3. *The range line, which is at right angles to the base line, shall be clearly marked.*

33.5.5.4. *Markers shall be placed at 150m and then at 50m intervals to at least 50m beyond the existing record of the longest Class being shot during that tournament.*

33.5.5.5. *Red warning flags shall be placed at each side of the range at 75m from the centreline at a distance of 150m from the shooting line.*

33.5.5.6. *The landing area, defined as any ground on which the arrows are expected to land, shall be at least 150m wide. This area should be free of any obstructions.*

33.5.6. Field Procedures and Measurements (Flight)

33.5.6.1. Inspection of Landing Area:

To open the Tournament, at least three members of the Contest Board or their Assistants shall examine the landing area to determine that there are no arrows thereon.

33.5.6.2. Field Measurement:

- *The Organising Committee shall have measured the centreline with a standard brand steel tape of certifiable accuracy. If a surveyors measuring device such as a theodolite or complete measuring station is being utilised, this requirement is not necessary;*
- *All measurements of arrows in the field shall be determined by a right angle intersection of the centreline. There shall be no allowance for deviation from the centreline;*
- *At the conclusion of the Tournament, the Contest Board shall re-measure the centreline in order to attest and certify its accuracy. If a surveyors measuring device such as a theodolite or complete measuring station is being utilised, this requirement is not necessary.*

33.5.6.3. Bow Weighing:

- *Bows shall be weighed just prior to commencement of shooting. Weight of the bow, length of arrow and the class for which this combination is eligible, shall be recorded on a label and affixed to the face of the bow;*
- *The weight of the bow shall be taken at two inches less than the length of the longest arrow, and again at one inch less than the length of this arrow. The difference in these weights shall be added to the last weight of the bow at full draw;*
- *When an overdraw device is used and permits a draw in excess of one inch from the back of the bow, this excess shall be considered a portion of the arrow length for bow weighing purposes;*
- *Variable poundage adjustment mechanisms shall be sealed by the officials at the time of qualifying. Breakage of this seal without notifying the officials shall constitute disqualification. Bows shall be re-qualified prior to shooting should this seal be accidentally broken;*
- *Weighing the bow at full draw shall be optional with the athlete or the host tournament organiser;*
- *Bow weighing scales or any other method of bow weighing equipment shall be tested within thirty days of the competition by a qualified agency and carry the stamp of this certification of accuracy;*
- *When a drop weight-weighing device is used, the drop weights shall be made from an approved metal such as brass or steel (not lead) and be clearly marked as to each unit's weight value. The weights shall be tested by a Sealer of Weights or equal authority and shall carry the stamp of this test or certification.*

33.5.6.4. Arrow Marking.

- *The athlete's name or initials shall be marked on each arrow;*
- *A non-duplicated serial number shall be marked on each arrow;*
- *A stamp or code mark indicating the class entered shall be marked on each arrow by the officials.*

33.5.7. Athletes Equipment (Flight)

This article lays down the type of equipment athletes are permitted to use when shooting for World Archery purposes.

If it becomes necessary for an athlete to use equipment which has not been inspected by the Judges, the onus is on the athlete to show this equipment to the Judges before using it.

Any athlete found to be using equipment contravening World Archery Rules may have his scores disqualified.

33.5.7.1. Target Bow Recurve Division.

- *A bow of any type may be used provided it subscribes to the accepted principle and meaning of the word bow as used in target archery and provided that the bow conforms to bullet 10 below;*
- *Bows shall conform to Article 11.1. (page 133 in Book 3);*
- *The maximum handle riser length of the Recurve Target Flight Bow shall not exceed 26 inches;*
- *Variable tillering adjustment mechanisms shall be sealed by the contest board at the time of qualifying. Breakage of this seal without notifying the contest board shall constitute disqualification. Bows may be re-qualified prior to shooting should this seal be accidentally broken;*
- *Keyhole bows are not allowed;*
- *Forward handles and overdraws are not allowed;*
- *Athletes shall use their own standard length target arrows and normal tab or shooting glove;*
- *Broad head, edged, bodkin, silver spoon and other large diameter piles are not allowed;*
- *Bow weights for Women, Men and Juniors shall be: 15.88kg (35lbs); 22.7kg (50lbs);*
- *The minimum length of a Target Bow being used in Target Bow Flight Classes shall be 64 inches for Men and 64 inches for Women, and Juniors. The method of measurement is shown below:*

Target bows shall be measured on the belly of the unstrung bow. A steel tape shall follow the curvature of the bow at the tips, measured straight across from imaginary lines intersecting the nock grooves on the back. The steel tape shall not follow the curvature at the handle riser. A one inch bow length measurement tolerance shall be allowed for Recurve Target Flight Bows.

33.5.7.2. Conventional Flight Bow Division.

- Keyhole bows are allowed;
- Forward handles and overdraws are allowed;
- Inter-moving drawing and release aids are not permitted;
- The following traditional flight equipment may be used:
 - - 6-gold ring;
 - - Flipper strap, single, double or treble;
 - - Bloc;
 - - Sipur or extended arrow shelf;
- Any type of arrow may be used. No arrow shall be less than 14 inches long determined by measurement from the floor of the nock to the tip of the pile;
- Bow weights for Men shall be: 18kg (39.7lbs); 25kg (55.1lbs); 33kg (72.8lbs); Unlimited;
- Bow weights for Women and Juniors shall be: 18kg (39.7lbs); 25kg (55.lbs); Unlimited.

33.5.7.3. American Longbow Division.

- The bow shall be a minimum of 64 inches in length for men and 62 inches in length for women measured from string groove along the curvature on the belly side (side of the athlete) of the bow. A tolerance of 1/8 inch shall be allowed;
- Longbow limbs in the unstrung position may show reflex. The strung bow cannot have the string touching the limb anywhere other than in the nock grooves;
- A maximum handle riser length of 24 inches is allowed, including fade out inserts, and two piece take down Longbows are allowed;
- The maximum riser width, measured at the arrow shelf or track shall be 2 3/4 inches;
- The arrow shelf cut out or arrow ledge is the only rest allowed. It may be covered by natural materials or cloth. Elevated or collapsible arrow rests are not allowed. Overdraws are not allowed. Riser width in excess of 2 3/4 inches is considered an overdraw;
- The position at the belly of the bow at the arrow shelf shall be used to determine the weight of the bow when used for conventional flight competition;
- The maximum bow weight is determined by drawing the bow at its full draw, the length of the athlete's longest arrow measured from the floor of the nock to the point of the arrow. Full draw measurement is considered where the arrow point would be drawn off the arrow shelf at the belly of the bow;
- Release shall be by fingers only. Shooting tab or glove may be used. Release aids of any type are prohibited;
- Wood arrows only are allowed;
- Fletching shall consist of feathers only;
- Bow weights for Men, Women and Juniors shall be: 15.88kg (35lbs); 22.7kg (50lbs), Unlimited.

33.5.7.4. English Longbow Division.

- The bow shall be the traditional longbow made from wood, either "self", "backed" or "laminated" with stacked belly, and nocks. It shall be not less than five feet in length for an arrow of less than 27 inches and not less than 5 feet 6 inches in length

for a 27" or longer arrow, this being measured along the back between the string nocks;

- *At no point shall the depth of the bow, measured from back to belly, be less than 5/8 of the width of the bow at the same cambered D shaped cross section. Bows of bamboo, constructed in conformity with the above, shall be permitted;*
- *Strings may be of either natural or man-made substance, and may, if desired, embody a "kisser" at any point as required, to facilitate a consistent draw position. The use of extended 'platform' tabs for this purpose is not allowed;*
- *Marks on the bow limb, or rubber bands are permitted, but sights are not allowed;*
- *The bow shall carry no support for the arrow;*
- *Wooden shafts only are allowed;*
- *Fletching shall consist of feathers only;*
- *Bow weights for Women, Men and Juniors shall be: 15.9 kg (35lbs); 22.7kg (50lbs); Unlimited.*

33.5.7.5. *Compound Flight Bow Division.*

- *Bows so constructed that a mechanical advantage is obtained by the use of accessory limbs, levers, pulleys, eccentrics or similar devices. Factory modifications are permitted;*
- *Forward handles are permitted;*
- *Keyhole type bows are permitted;*
- *Overdraws are allowed for all compound bow events. No overdraw shall be allowed permitting the arrow to be drawn farther back than the brace height of the bow. Weight of compound bows shall be determined at their "break over" point, or position of the normally drawn bow at which the bow's maximum poundage is achieved;*
- *Mechanical drawing aids are illegal. Flight release aids shall be held in the hand. No attachments or anchor above the wrist shall be permitted. Mechanical release aids are permitted;*
- *Bow weights for Women and Juniors shall be: 18kg (39.7lbs); 25kg (55.1lbs); Unlimited;*
- *Bow weights for Men shall be: 25kg (55.1lbs); 33kg (72.8lbs); Unlimited.*

33.5.7.6. *Compound Target Bow Division.*

- *A Compound Bow that shall conform to Article 11.2. (page 135 in Book 3);*
- *Overdraws are not allowed with the exception of the 6cm (2-3/8 in.) allowed in pressure point (rest) (see Article 11.2.1. (page 135 in Book 3));*
- *Standard target arrows only are allowed without restriction in vane selection;*
- *Forward handles are not permitted;*
- *Keyhole bows are permitted;*
- *Mechanical drawing aids are illegal. Mechanical release aids are permitted. Attachments or anchors above the wrist but below the elbow are permitted;*
- *Bow weights for Men, Women and Juniors shall be: 45lbs (20.4kg); 60 lbs (27.2kg).*

33.5.7.7. *Foot Bow Division.*

- *In drawing and releasing, no mechanical aid or device shall be permitted;*
- *Mechanical drawing aids are illegal. Flight release aids shall be held in the hand. No attachments or anchor above the wrist shall be permitted;*
- *The bow shall be shot with both feet placed upon the bow or in the bow stirrups. The bow shall be drawn with both hands;*
- *Crossbow type arrow tracks are not allowed;*
- *The length of arrows shall be determined by measurement from the floor of the nock to the extremity of the point of the arrow. The minimum length of arrows cast from hand held Flight Bows shall not be less than 14 inches.*

33.5.7.8. *Flight Draw and Release Aids.*

- *Mechanical drawing aids are prohibited in all events;*
- *Mechanical release aids are allowed only for compound bow events;*
- *The term “mechanical” shall be taken to mean any method that embodies a plurality of interacting parts, whether such are individual pieces or spring co-joined parts capable of co-operatively acting to affect bow string release by a separating movement of at least one such part relative to another;*
- *To be legal a flight release shall be held in the hand. No attachment or anchor of any kind above the wrist shall be permitted. This applies to all divisions.*

33.5.8. Shooting (Flight)

33.5.8.1. *Athletes shall be at least two metres apart when shooting on the shooting line.*

33.5.8.2. *Athletes shall not advance their leading foot over the shooting line.*

33.5.8.3. *Each athlete may have one assistant or advisor who shall keep at least one metre behind the shooting line.*

33.5.8.4. *Four ends with a maximum of six arrows per end may be shot on any one day or tournament.*

33.5.8.5. *Tournaments may be organised over one or more days. Where the venue permits, shooting may take place in the optimum direction.*

33.5.8.6. *Except for the Footbow, all bows shall be held in the unsupported hand and in a standing position.*

33.5.8.7. *An arrow shall not be deemed to have been shot if the athlete can touch it with his bow without moving the position of his feet.*

33.5.8.8. *No athlete shall have more than six arrows with him at his position on the shooting line.*

33.5.9. Scoring (Flight)

33.5.9.1. *After all classes have shot the first end, athletes and officials shall move forward on the signal of the Field Captain.*

33.5.9.2. *No athlete shall be allowed to carry any arrows when moving forward beyond the shooting line.*

33.5.9.3. *Where the arrow itself cannot be used for marking, the position of the arrow in the range shall be marked by suitable means and the distance determination shall be made before the next end is shot.*

33.5.9.4. *An arrow that comes to rest in other than the usual position shall be measured from the tip of the arrow if visible, or from the point at which it enters any object other than the ground.*

33.5.9.5. *If distances are to be measured only at the conclusion of the day's events, then appropriate markers, clearly visible, shall be placed at the arrows positions with all pertinent data recorded thereon. Only the farthest arrow of each athlete in each class shall be measured or marked.*

33.5.9.6. *Any lost arrow shall be reported to the Flight Captain and a full record made as to the identity of this arrow before the next end is shot. If found during subsequent ends and showing no evidence of having been moved or disturbed, the arrow may be judged for the class in which it was registered. No such arrow shall be eligible after all classes have been declared closed by the Flight Captain.*

33.5.9.7. *If an athlete shoots more than six arrows at any one end, the longest shot or shots in excess of the six arrows allowed shall be disqualified.*

33.5.9.8. *Divisions to be shot in any tournament shall be at the discretion of the organisers and shall be advertised on the entry forms.*

33.5.10. Flight Officials

33.5.10.1. *Flight Tournament Officials shall consist of not less than three.*

33.5.10.2. *The officials shall consist of the Flight Captain and his assistants.*

33.5.10.3. *The Flight Captain shall act as the final arbiter of all matters concerning the contest.*

33.5.10.4. *The Assistant Flight Captain shall aid the Flight Captain and act in his place at the base line or in the field when required to do so. Other officials shall serve as directed by the Flight Captain.*

33.5.10.5. *The Equipment Custodian shall have charge of and be responsible for all equipment used in the tournament.*

33.5.10.6. *The officials shall be appointed by the host country.*

Wherever possible officials should have had previous experience of Flight Shooting events.

33.6. The Academic Round

The Academic Round is a Target Archery team round shot on Hit/Miss targets.

In addition to the Shooting Rules as laid down in 4. Chapter 4-Competitions (page 77 in Book 2) and Book 3- Target Archery (page 131 in Book 3) (with the exception of 7.2.2. Target Faces (page 100 in Book 2), Article 7.2.3. (page 105 in Book 2), Article 14.5. (page 145 in Book 3), Article 14.6. (page 147 in Book 3)) the following rules shall apply to the Academic Round.

33.6.1. The Round

33.6.1.1. *The Round consists of four ends of six arrows where each team member shoots two arrows per end.*

33.6.1.2. *The Round can be shot outdoors at 70m.*

33.6.2. Classes

33.6.2.1. *The following classes are recognised:*

- *Women;*
- *Men.*

33.6.3. Divisions

33.6.3.1. *The following Divisions are recognised:*

- *Recurve;*
- *Compound.*

33.6.4. Targets

33.6.4.1. *The Academic Round target faces is a Hit/Miss target consisting of two zones: a hit zone and a miss zone.*

33.6.4.2. *The hit-zone (spot) of the target face for 70m has a diameter of 24.4cm.*

33.6.4.3. *The hit-zone (spot) of the target face for 18m has a diameter of 4cm in the Recurve Division and 3cm in the Compound Division.*

33.6.4.4. *The colour for the hit-zone (spot) is YELLOW (Pantone 107U).*

33.6.4.5. *The colour for the miss-zone is RED (Pantone O32U).*

33.6.5. Scoring

33.6.5.1. *An arrow touching the hit-zone shall yield one point.*

33.6.5.2. *The maximum score per team is 24 points.*

33.6.5.3. *In case of a tie after 24 arrows, each team member shall shoot one arrow until the tie is broken.*

33.6.6. FISU University Championships

33.6.6.1. *For FISU World Championships and the Universiads, the following programme is recommended:*

- *Indoor: An 18m round followed by an Indoor Match Play Round for Individuals and the Academic Round for Teams;*
- *Outdoor: A 70m Round followed by an Individual Olympic Round and the Academic Round for Teams.*

33.7. Run Archery

Run Archery combines cross-country running and archery.

The new rules shall be published as soon as finalised and approved by the Executive Board.

33.8. Standard Round

33.8.1. Events

33.8.1.1. *For the Standard Bow Division there is competition in the following classes:*

- *Cadet Women;*
- *Cadet Men;*
- *Junior Women;*
- *Junior Men;*
- *Women;*
- *Men.*

33.8.2. The Standard Bow equipment is defined as follows:

The requirements of Article 11.1. (page 133 in Book 3) shall apply in their entirety with the following additional provisions or modifications:

33.8.2.1. *The bow shall be of a simple design, either a take-apart type (with wooden or metal riser) or of one-piece construction. In both types of bow, the limbs shall be of wooden and/or fibreglass construction.*

33.8.2.1.1. *The arrow rest shall be of a simple, flexible or rigid design and it shall be non-adjustable. A simple non-adjustable pressure point may be used and shall be placed no further back than 2cm from the throat (pivot point) of the handle.*

33.8.2.1.2. *One simple draw check indicator, audible and/or visual, may be used. This indicator shall give only one indication of draw length.*

33.8.2.1.3. *The bow sight shall be of simple construction and shall not include any vertical rack and pinion or screw type of micro-adjustment. Lateral (windage) adjustment may be made by use of a screw type adjuster. The sight and any attachment to which it is fixed shall comply with the note below. The sight point may not be a fibre optic type.*

33.8.2.1.4. *Any stabilisation used shall comply with Article 33.8.2.1.9. (page 228 in). Torque flight compensators shall not be used.*

33.8.2.1.5. *Arrows shall not exceed a specification of XX75 or equivalent, and shall be of an equivalent price range and performance. The nocks shall be of simple construction, either conical or insert fitting. The points shall be conical or ogival in shape. The vanes shall be of soft plastic material or of natural feathers.*

33.8.2.1.6. *Finger protection shall not include any form of stiffening or locating platform or similar or any device to help hold, draw and release the string.*

33.8.2.1.7. *Field glasses, telescopes or any other visual aid shall not be used for spotting arrows. Shooting spectacles shall not be used.*

33.8.2.1.8. *Accessories that are permitted include bracers (arm guards), dress shield, bow sling, belt or ground quiver and tassel. Foot markers may not protrude more than 1cm from the ground. Devices to raise a foot or part thereof, attached or independent of the shoe, are permitted provided that the devices do not present an obstruction to other athletes on the shooting line, do not constitute a platform which would span or bridge the shooting line, do not anchor the foot to the platform or the platform to the ground, and do not protrude more than 2cm past the footprint of the shoe.*

33.8.2.1.9. *The unstrung bow complete with permitted accessories (stabilisation when extended in any direction) shall be able to pass through a hole or ring of 12.2cm inside diameter ± 0.5 mm.*

33.8.3. For the Standard Round there shall be Standard Round Awards.

33.8.3.1. *This shall be an arrow in a circular badge superimposed with the words 'World Archery Standard Round Award':*

WORLD ARCHERY STANDARD ROUND AWARD					
	Arrow on White	Arrow on Black	Arrow on Blue	Arrow on Red	Arrow on Gold
Men	500 Points	530 Points	560 points	590 points	620 points
Women	475 Points	505 Points	535 points	565 points	595 points

33.8.3.2. *In order to be eligible for a Standard Round Award an athlete shall not have achieved a Star Award of 1000 points or higher using either a Recurve or Compound bow.*

Chapter 34

Ski-Archery

34.1. Ski-Archery

34.1.1. *Ski-Archery combines cross-country skiing and archery. In principle, all World Archery Rules apply, unless other regulations are detailed in this Chapter.*

34.2. Classes of Athletes

34.2.1. *The following classes are authorised for World Archery competitions:*

34.2.1.1. Men and Women.

On 1 November in the year of their 21st birthday, male and female athletes shall be called Men and Women respectively and according to gender shall start only in Men and Women's competitions.

34.2.1.2. Juniors Men and Juniors Women.

Athletes who have not yet reached Men or Women's age as defined above are Juniors Men or Juniors Women respectively.

Separate competitions shall be organised for them. However, Juniors Men are permitted to take part in Men's competitions and Juniors Women are permitted to take part in Women's competitions.

34.3. Events and Competitions Specifications

34.3.1. *The events and competition specifications for the discipline of Ski-Archery are as follows:*

1	2	3	4	5
Class of Competitors	Course Length and Competition Type	Ski Loops	Shooting Ends (4 arrows per end)	Shot Penalty
MEN	12.5km Individual	5 x 2.5km	S, K, S, K	1 minute
	7.5km Sprint	3 x 2.5km	S, K	150m penalty loop
	10km Pursuit	4 x 2.5km	S, K, S	150m penalty loop
	10km Mass Start	5 x 2km	S, S, K, K	150m penalty loop
	3 x 6km Relay	3 x 2km each	S, K (each) + one spare arrow per end	150m penalty loop
WOMEN	10km Individual	5 x 2km	S, K, S, K	1 minute
	6km Sprint	3 x 2km	S, K	150m penalty loop
	8km Pursuit	4 x 2km	S, K, S	150m penalty loop
	7.5km Mass Start	5 x 1.5km	S, S, K, K	150m penalty loop
	3 x 6km Relay	3 x 2km each	S, K (each) + one spare arrow per end	150m penalty loop
JUNIOR MEN	10km Individual	5 x 2 km	S, K, S, S	1 minute
	6km Sprint	3 x 2 km	S, K	150m penalty loop
	8km Pursuit	4 x 2 km	S, K, S	150m penalty loop
	7.5km Mass Start	5 x 1.5 km	S, S, K, K	150m penalty loop

	3 x 6km Relay	3 x 2 km each	S, K (each) + 1 spare arrow per end	150m penalty loop
JUNIOR WOMEN	8km Individual	4 x 2 km	S, K, S	1 minute
	4km Sprint	2 x 2 km	S	150m penalty loop
	6km Pursuit	3 x 2 km	S, K	150m penalty loop
	6km Mass Start	5 x 1.2 km	S, S, K, K	150m penalty loop
	3 x 6km Relay	3 x 2 km each	S, K (each) + 1 spare arrow per end	150m penalty loop

- *Notes:*
- *Column 1: Class of Competitor: according to these Rules.*
- *Column 2: Course Length and Type of Competition: the required length of the course and the type of competition according to these Rules.*
- *Column 3: Number and Length of Ski Loops required for the competition.*
- *Column 4: Shooting Ends: the number and sequence of shooting ends and shooting positions.*
- *Column 5: Shot Penalty: the penalty automatically imposed for each target not hit.*

34.4. Registration and Entry

34.4.1. *Participation at World Archery Events: two separate notices shall be given:*

Registration and entry.

34.4.1.1. **Registration and Replacements.**

Registration is an early notification of the intent to participate. The numbers of athletes and team staff members that may be registered for an event are detailed in the event specific rules. The registration for events shall be made as follows:

World Archery Ski Championships / World Archery Ski Youth Championships. For the WASCH / WASYCH, the estimated number of athletes and team staff (registration by numbers) shall be received by the organisers two months before the beginning of the WASCH / WASYCH.

At least 14 days before the start of the WASCH / WASYCH, a list of the names and gender of the intended participants (registration by names) shall be received from each nation by the organisers.

The replacement of registered athletes shall be notified to the organisers immediately after the changes have been made;

SAWC Events.

For SAWC events, the estimated number of athletes and team staff (registration by numbers) shall be received by the organisers one month before the beginning of the SAWC.

At least 14 days before the start of the SAWC, a list of the names and gender of the intended participants shall be received from each nation by the organisers.

The replacements of registered athletes shall be notified to the organisers immediately after the changes have been made;

Other Events.

The registration for other events shall be as demanded in specific event rules.

34.4.1.2. **Entry.**

The entry is the written notice of athletes or a team being entered to start in a specific competition. It shall be submitted for all events at least four hours before the draw for the Individual, Sprint and Mass Start competitions.

The entry for team participation in the Relay competition shall be made for all events not later than four hours before the draw.

The names of Relay athletes shall be submitted in start order by 4 pm on the day before the Relay and Team competitions.

Entries for the Pursuit competition are not required as all athletes who qualify for the Pursuit in the qualifying competition are considered to be participants.

The numbers of athletes that may be entered for a competition are stated in the event rules.

34.4.2. Registration Procedures.

Registration shall be made in writing by post, fax or e-mail to the address indicated in the invitation and within the required deadline.

For WASCH, WASYCH and SAWC events registration shall be made or approved by the Member Association;

By registering or approving an Athlete the Member Association confirms and tacitly guarantees that he is covered by accident and liability insurance and that the athlete is medically fit to compete.

34.4.3. Late Entries

The TD may approve a late entry due to extraordinary circumstances before the draw;

The Competition Jury may approve a late entry due to 'force majeure' after the draw. The Competition Jury shall direct in which position(s) the late athlete(s) shall start. A separate draw may be used for this purpose.

34.4.4. Replacement of Entry – 'Force majeure'.

If an entered athlete cannot start due to 'force majeure', another registered athlete may take his place, but not later than 30 minutes before the listed start time of the entered athlete.

In Relay competitions, competitors may be replaced as follows: competitor for the first leg – 30 minutes before the simultaneous start, for the second – before the simultaneous start, for the third – before the first hand-over, and, for the fourth – before the second hand-over.

In case of such a replacement, a valid reason preventing the start shall be provided to the Competition Jury not later than 30 minutes before the listed start time in question, or for the specified deadlines for the Relay.

34.5. Draw and Assignment of Start Numbers

34.5.1. General.

Athletes or teams are randomly selected from the entries for the competition, by manual or computer draw, and are assigned their start numbers based on that draw unless other rules regulate that competition. A draw shall also be used to resolve any tie situation which cannot be resolved using the specific rules for that issue.

34.5.1.1. The Technical Delegate shall approve the method of the draw.

34.5.2. Timings of Draw.

The draw of any competition may be made not earlier than 24 hours before and not later than 15 hours before the start of the competition. However, if the majority of team managers agree, the draw for the Mass Start or Relay competitions may be made at the Team Managers meeting for the competition that shall precede the Mass Start or Relay competition in the event programme. If the Competition Jury decides to repeat a competition or to postpone a competition to a time which is not within the 24 hours period of validity of the draw, a new draw shall be made.

34.5.3. Place of Draws.

The draw shall be made during and at the place of the Team Managers meeting, and shall be visible to all Team Managers. However, the Technical Delegate may decide to have the draw outside the Team Managers meeting. Such an outside draw shall be supervised by at least two Competition Jury members.

34.5.4. Assignment of athletes into Draw Groups.

When submitting their entries, Team Managers shall assign one athlete to each of the draw groups. If a team consists of fewer athletes than the number of draw groups, the Team Manager shall decide in which groups he shall place his athletes (one in each group chosen). If a team consists of more athletes than the number of draws groups, the extra athletes shall be added to the draw groups at the Team Manager's discretion, one into each group.

34.5.4.1. Draw for Individual and Sprint Competitions.

The start order shall be decided by randomly drawing the names of athletes from the four draw groups into which they have been assigned by their Team Managers and by randomly drawing the start number for each athlete. The draw shall be made separately for each group in the following order:

Group 1 - Group 2 - Group 3 - Group 4.

Every athlete shall be assigned a number; blank start numbers are not permitted.

If the draw in the Individual or Sprint competition has 60 or fewer athletes the draw shall be made in three groups. If there are 40 or fewer then the draw shall be made in two groups following the same principle as for the four draw groups.

The Team Managers of the teams with the top 15 athletes, based on the current SAWC Total Score standings, are allowed to place those athletes in any draw group regardless of the foregoing regulation.

34.5.4.2. Draw for Group Starts in Sprint Competitions.

At international competitions other than the WASCH, WASYCH and SAWC competitions, the start for the Sprint competitions may be individual or in groups. If the start is made in groups, the draw groups shall be subdivided into start groups.

The number of athletes in the start groups shall depend on the conditions of the competition facilities and on the total number of athletes.

Otherwise the draw shall be the same as for individual starts. For a group start, the start numbers drawn shall determine the athletes' positions at the start.

34.5.4.3. Assignment of Start-numbers and Start-times in Pursuit Competitions.

A draw is not conducted for the Pursuit competition. Athletes are assigned start numbers and times based on the results of the Sprint Competition.

Athletes in the Pursuit shall start in the same order in which they finished the Sprint competition: the winner of the Sprint competition shall start first with start number 1, the second place of the qualifying competition shall start second with start number 2, and so on.

The winner of the Sprint competition shall have a start time of zero (0), which shall be shown on the start list as the clock time for the start of the Pursuit Competition. The remaining athletes in the Pursuit Competition shall have as their start-time the actual time by which they were behind the winner in the Sprint competition. Start lists are produced based on the foregoing and shall show the assigned start lane for each athlete. If there is a tie for the last place in the Sprint Competition that qualifies for the Pursuit Competition, both of the tied athletes are allowed to start in the Pursuit competition.

All athletes whose start times are more than five minutes after the start time of the leader shall be started simultaneously at five minutes after the first start, but their actual competition time shall show their time calculated from their actual start times from Sprint Competition.

- 34.5.4.4. *Assignment of Start Numbers and Tracks – Mass Start Competition. Start numbers at WASCH and SAWC events shall be assigned according to the applicable event rules. At all other events, a single random draw shall be used to assign the start numbers for all athletes, who shall not number more than the number of targets available.*

34.5.5. Draw for Relay Competitions.

34.5.5.1. The purpose of the Draw for Relay Competitions:

The draw for the relay competition determines each team's start number, which shall be the team's start track number and the team's shooting lane number on the range.

34.5.5.2. The method of Draw for Relay Competitions.

For the relay competition, previous results shall determine from which row a team shall start in the mass start of the first athlete of each team. Start numbers are in numerical sequence and continue consecutively for all of the entered teams. The draw shall be made as follows.

- *If there are the same number or fewer teams entered than the number of front row start tracks, only one single draw shall be done to assign the start numbers.*
- *If it is necessary to start from more rows than one, the start numbers shall be drawn for the teams entitled to start from the first row, then separately, based on entitlement, for each subsequent row.*

34.5.5.3. Placement of Athletes in Relay Start Tracks.

Start tracks shall be numbered from left to right, facing the direction of the start. Number one is the left track and the highest number of the front row shall be the right track. The lowest number in the second row shall be placed behind number one and the next consecutive number behind number two, and so on.

34.5.5.4. Selection of Relay Teams for Start Rows.

At WASCH and SAWC events, relay teams entitled to start from the front and each subsequent row shall be in the order of the ranking from the results of the previous year's SAWC Nations Cup score final standings, with the best teams in front. The number of teams starting from each row shall depend on the number of start tracks available at the competition site, never fewer than eight.

For WASYCH, the allocation of start tracks in the first row shall be determined by random draw among those nations that were placed highest in the previous year's WASYCH Relay, according to the number of front row tracks available. The remaining WASYCH teams shall be placed into subsequent rows by one random draw.

If teams entitled to the front row have not entered for the competition, the teams placed next highest based on the same criteria shall be allowed to be entered for the draw for the front row. The same procedure shall be followed for the second row, and if necessary, for the third and subsequent rows.

34.5.5.5. Extra Relay Teams.

Extra Relay teams are not permitted at WASCH, WASYCH or SAWC competitions.

At other events, however, extra relay teams are permitted: they shall start in rows behind the official teams and shall not be awarded official prizes. Extra teams may consist of members of more than one nation.

34.6. Awards

Awards (Medals, Diplomas, Prizes and Scoring points) shall only be given for competitions where five or more athletes or relay teams are competing.

34.7. Team Managers Meeting**34.7.1. General.**

At each Ski-Archery event, meetings shall be held for the Team Managers to elect the Juries, conduct draws and to give information about the event and the competitions. The first meeting shall be held at the latest on the day before the first day of Official Practice in order to elect the Jury of Appeal. For the remaining meetings of the event, the dates and time depend on the time required to conduct the draw. The Competition Chief shall chair the meetings.

34.7.2. Attendance at Team Managers meeting

The following persons shall attend the Team Managers meeting:

- *The Official World Archery representative;*
- *The TD(s) and SAIJ(s);*
- *All Competition and Appeal Jury members;*
- *At least one representative from each participating team;*
- *The Competition Chief;*
- *The Officials (Chief) of Range, Course, Timing, Stadium and the Competition Secretary or their representatives;*
- *The necessary meeting support staff and interpreters, if required.*

34.7.3. Team Managers meeting agenda:

The agenda for a Team Managers meeting shall include the following items, as appropriate:

- *Call to order;*
- *Roll call of nations (or teams);*
- *Election of the Jury of Appeal;*
- *Draw(s);*
- *Technical briefing for the next competition(s);*
- *TD(s) comments;*
- *Weather report;*
- *Other business;*
- *Adjournment.*

34.7.4. Start list and start numbers should be issued to the teams at the end of the meeting.

34.8. General Organisation and Appointment

The following organisation and persons shall be established or appointed for the preparation, conduct and control of Ski-Archery events and competitions:

- *Organising Committee;*
- *Competition Jury;*
- *TD (s) and SAIJ (s);*
- *Jury of Appeal;*
- *The official World Archery representative (if applicable).*

34.9. Competition Jury**34.9.1. General**

A Competition Jury is established for Ski-Archery events to act as the authority on all matters related to the event, which are not specifically designated to be under the jurisdiction of other World Archery organs. One Competition Jury is established for both the Mens and the Womens competitions. The Competition Jury shall make decisions about the event, competitions and re-

lated arrangements and conditions to ensure fairness and correctness. The Competition Jury imposes penalties for violations of rules reported by the TD(s), SAIJ(s), competition officials and Competition Jury members, and imposes penalties and disciplinary measures on its own. Additionally, the Competition Jury decides on time adjustments and rules on competition situations not covered by these Rules or other World Archery authority publications. The Competition Jury passes on all appeals submitted to it to the Jury of Appeal.

The procedures of the Competition Jury follow the World Archery Jury procedure and the rules laid down in 34.29. Penalties (page 258 in Chapter 34), 34.30. Disciplinary Measures (page 260 in Chapter 34) and 34.31. Prohibitions and Sanctions for Non-Competing Persons (page 261 in Chapter 34).

34.9.2. **Duration of Office.**

The Competition Jury established for an event remains in office throughout the event.

34.9.3. **Chair.**

The chairperson of the Competition Jury is the Technical Delegate

34.9.4. **Competition Jury Composition.**

At WASCH, WASYCH and SAWC competitions the Competition, Jury shall consist as follows:

- *The TD;*
- *The 2nd TD;*
- *The Competition Chief;*
- *The chairman of the Tournament Judges Commission (SAIJs).*

34.9.5. **Competition Jury meetings and Decisions.**

The Competition Jury shall assemble within a minimum of time whenever a meeting is required, as directed by the Competition Jury chairperson, and shall remain readily available for CJ duties for 15 minutes after the publication of the Interim Results.

Meetings of the Competition Jury shall normally be held as follows:

- *Immediately after the first Team Managers meeting;*
- *Approximately one hour before the start of the competition;*
- *At any time during the competition when called by the Competition Jury chairperson;*
- *Immediately before the last finish in the competition;*
- *At any other time when a meeting is called by the Competition Jury chairperson. Decisions of the CJ are normally made with all its members present. However, in exceptional cases the CJ is entitled to pass a resolution if at least three members are present. The CJ chairperson shall only vote in case of a tie vote. Decisions are made by each member voting on the issue and a simple majority shall decide.*

34.9.6. **Tasks of the Competition Jury.**

34.9.6.1. *Prior to the Competition:*

- *To check if the competition facilities comply with the rules;*
- *To check the eligibility of all athletes registered for the event;*
- *To supervise the draw;*
- *To determine if a competition has to be postponed or annulled due to serious difficulties (such as extreme weather conditions, cold, high winds, etc.);*
- *To restrict or prohibit training on the competition facility due to circumstances such as very wet snow conditions or very little snow, which could jeopardize the conduct of the competitions;*
- *To decide if, and under which conditions, a late entry may be accepted;*
- *To decide if a competitor properly entered for participation may be replaced by a substitute in the case of 'force majeure'.*

34.9.6.2. During the competition:

- To ensure that the competition is conducted according to these rules;
- To direct the necessary measures if difficulties occur such as heavy fog or a storm which seriously endangers the correct and fair conduct of the competition – an extreme option may be to stop the competition;
- To decide on the admission of athletes who arrive late at the start due to 'force majeure'.

34.9.6.3. After the competition:

- To authorise the award ceremony and the posting of interim results;
- To impose or reject penalties on violations reported by the TDs, SAIJs, Competition Jury members and officials of the Organising Committee;
- To determine necessary time adjustments;
- To stop or cancel the competition if necessary;
- To order the repetition of the competition, if justified and possible.

34.9.6.4. At all time, to decide on all matters which are not covered in these rules.**34.10. Jury of Appeal**

34.10.1. *An appeal may be made against a decision of the CJ. The appeal shall be made to the Jury of Appeal established for the event, and in accordance with Jury procedure and the Ski Archery Disciplinary Rules.*

34.10.2. *The Jury of Appeal for the event is composed of three members elected during the first Team Managers meeting. Nominations are requested from the Team Managers for candidates to be members of the Jury of Appeal. If there are three candidates, no vote is necessary and the candidates become Jury of Appeal members by acclamation. If there are more than three candidates, a vote shall be taken from the Team Managers. Only one vote per nation is allowed. A simple majority shall elect a Jury of Appeal. If no simple majority is obtained by any candidature, the person with the fewest votes is removed as a candidate and the vote is repeated for the remaining candidates until the Jury of Appeal members are elected.*

34.11. Technical Delegates

TDs are appointed by World Archery and are official representatives of World Archery. TDs are responsible to ensure that events are prepared and conducted in accordance with the World Archery Rules.

34.12. Ski-Archery International Judges**34.12.1. General Regulations.**

SAIJs are persons who are appointed by World Archery to officiate at World Archery Ski-Archery events. They are responsible for the correct performance of duties and tasks related to their area of responsibility, in co-operation with the Organising Committee and the TD. SAIJs are required to direct, advise and assist competition officials in their duties, and to intervene to prevent a mistake from being made. The SAIJs at an event are subordinate to the chairperson of the Tournament Judge Commission, report to him in the performance of their duties and shall follow his directions.

34.12.2. SAIJs Functions at Competitions.

The functional areas where SAIJs shall be employed at competitions are as follows:

- Start/Finish;
- Shooting range;
- Course;
- Equipment inspection.

The chairperson of the Tournament Judge Commission is SAIJ of the Shooting Range.

34.12.3. Numbers of SAIJs for events.

The following number of SAIJs shall be appointed for events:

- WASCH 4
- WASYCH 4
- SAWC 4
- SACC 4

34.12.4. SAIJs tasks and duties.

Details of tasks and duties of SAIJs are given in Appendix B to these rules.

34.12.5. SAIJs Costs.

Organisers of events and competitions are responsible for paying the accommodation and meal costs for the period of the duty.

34.13. Competition Facilities and Arrangements

34.13.1. General.

The competition facility is the site on which Ski-Archery competitions and practice are conducted, and consists of the stadium area and the course.

Located in the stadium area are the start/finish areas, shooting range, penalty loop, Relay hand-over zone, ski test area, team wax huts, spectators areas, the necessary Organising Committee buildings, offices and parking spaces. The site shall be technically suitable, according to these Rules, for facilitating all the types of Ski-Archery competitions and shall offer the best possible viewing of the competitions to spectators and for the requirements of TV coverage.

34.13.2. General Requirements.

The start and finish areas, shooting range, penalty loop and Relay hand-over zone shall be located on level ground and close together with good viewing of competition activities for the majority of the spectators. These areas and critical parts of the course shall be fenced in order to prevent athletes from being impeded or going astray, and to prevent access by unauthorised persons. There shall be sufficient space for athletes and competition officials to conduct their required activities and adequate room for team support staff, press, photographers and spectators, and enough space for TV camera crews and transmission facilities without interfering with the competition.

34.13.3. Maximum Distance.

The competition facility shall be no more than 30km or 30 minutes travel from the teams' accommodations, unless otherwise approved by the TD.

34.13.4. Competition Office.

A Competition Office or sub-office shall be located in or near the stadium area. The office shall be open during the event and shall be the official interface between teams and the Organising Committee.

Teams shall be able to submit entries for competitions at the office and information about the event and competitions shall be available in the office.

A mailbox for each participating team shall be provided in the office.

34.14. Start Areas

34.14.1. General.

The start area for all competitions shall be level with the snow well packed and smoothly groomed, and shall be visible to spectators.

The start line shall be placed at right angles to the skiing direction and shall be marked with a red line sunken into the snow. The area shall be well fenced and shall be suitable for the traffic flow of athletes, team support staff and officials.

There shall be a warm-up area immediately adjacent to the start area for athletes to perform their final, before competition warm-up which shall include arrangements to take care of warm-up clothing, and contain an adequate number of bow racks.

34.14.2. Individual and Sprint Competition Start Area.

The start area for Individual and Sprint competitions shall be approximately 8-10m long and a minimum of 4m wide and shall be separated from the warm-up area by a fence with an opening to allow controlled access.

34.14.3. Pursuit Competition Start Area.

The start area for the Pursuit Competition shall have a minimum of three start lanes and the actual number of start lanes is determined by the number of simultaneous start times in the start list. If there are four starts at the same second, then there shall be four start lanes, etc. A common start line, marked in the snow, shall cross the end of the start lanes. The start lanes shall be 1.5m - 2m wide and sufficiently long to hold the required number of athletes. The lanes shall be immediately adjoining each other and shall be separated by fencing.

There shall be a spare passage or lane, which allows access to the start line in the case of late starts. This lane shall be controlled by a start official with a stopwatch synchronised to the competition time.

34.14.4. Pursuit Start Boards.

Separate boards, showing the start numbers and start times of each lane in large print readable by athletes and officials, shall be positioned in front of the applicable start lanes.

34.14.5. Relay and Mass Start Competition Start Area.

The start area shall be laid out in such a way that all the athletes shall be required to ski the same distance until they reach the common trail. A minimum of eight straight, parallel sets of tracks, with a minimum of 1.2m between each set of tracks (measured from centre to centre), shall be set for a minimum of 35m from the start line. The number of start tracks is to be based on the space available and the number of Relay teams entered, with the objective of having the fewest possible start rows. The end of the parallel tracks shall be clearly marked.

After the first parallel tracked section there shall be a further straight 50m to 100m of level and smoothly groomed, trackless, gradually converging area, which leads to the competition trail.

34.14.6. Start Track Number Boards - Relay and Mass Start competition.

The start tracks shall be marked with number boards showing the number of the tracks. There shall be the same number of boards as the number of teams in the competition. The number boards are to be placed on the left of each track and shall show the number to the front and the rear. The numbers on the boards shall be at least 20cm high and shall be highly visible to the athletes and TV.

34.14.7. Course Information Boards.

There shall be a board within the start area on which the course map is shown. At the start line there shall be a board, which shows the trail colour sequence for the competition.

34.14.8. Start Clock.

At the start area for Individual and Sprint competitions there shall be a start timer placed so that it is easily readable from the start line. The display of the timer and the sound signal shall be synchronized. For the Pursuit competitions, there shall be a start clock for each start lane. In or near the start area there shall also be a clock displaying the correct time of day, which shall be clearly visible to athletes in the area.

34.14.9. Start Equipment Control.

The start equipment control shall be located in close proximity to the start. Its placement and design shall facilitate the smooth, orderly and timely flow of athletes through to the start. The control station shall have tables and the required equipment and forms to perform the checks.

34.15. Course and Associated Parts**34.15.1. General.**

The course is the network of ski trails to be used for the competition. It shall consist of continuously changing flats, climbs and downhill sections. Extremely long and difficult climbs, dangerous descents, monotonous flats and hills that shall be sidestepped are not permitted. Changes in direction of a trail shall not occur so frequently that an athlete's ski rhythm is seriously disturbed.

34.15.2. Altitude, Width and Length.

The maximum altitude of any part of the course may not be higher than 1800m above sea level, unless the TD specifically authorises an exception in necessary circumstances. For SAWCH, SAJWCH and SAWC competitions, trails shall have a minimum width of 6m of groomed snow surface. If required in places like difficult climbs, the trail shall be wider. If narrower sections such as bridges or mountain passes are unavoidable, the narrow parts may not be less than 4m wide or longer than 50m. The actual length of the course may not be more than 5% different from the length specified for the competition.

34.15.3. Use of Trails.

Trails in a competition may be used several times during a competition if they are at least 6m wide. If trails are less than 6m wide, they should not be used more than twice during a competition. For flexibility of usage there should be a minimum of two separate trail loops.

34.15.4. Setting of Tracks.

If required by the competition circumstances, the TD shall direct that a track be set on the right or left side of the trail. If required, downhill sections shall be tracked as directed by the TD. Tracks shall not be in such a way or in places where they may endanger or hinder athletes. The width and depth of tracks shall be set so that all regular types of boots and bindings can be used without side friction.

34.15.5. Safety.

Athletes shall be allowed to ski downhill at full speed without undue risk of an accident. When evaluating the risk, extremely fast trail conditions shall be considered.

34.15.6. Grooming.

Trails shall be as level as possible, solidly packed and smoothly groomed. They shall not be artificially frozen. Downhill turns shall be banked as necessary. All types of hindrances and obstacles shall be cleared from the trails, such as stumps, branches, stones and soil. Overhanging or protruding branches shall be trimmed so that they do not obstruct or endanger athletes.

34.15.7. Marking.

The trails shall be clearly marked and defined so that at no time is an athlete in doubt how to follow the trail. This applies especially to descents and other critical points. Clear markings shall be placed at such points. At 100m from the finish line there shall be a signboard indicating "Finish - 100m".

34.15.8. Course Sequence Colours.

The sequence of the trails shall be uniformly marked on the right side in the ski direction by coloured signboards. The first trail shall be marked red, the second green, the third yellow, the

fourth blue and the fifth brown. If a trail is to be used more than once, the colours shall appear on the boards in the sequence of use from left to right or from top to bottom. Junctions shall be clearly marked with trail colours. If only one trail loop is used for the competition, the marking colour shall be red.

34.15.9. **Fencing.**

All trails that shall not be used in the competition shall be fenced or barricaded. Fences shall separate trails close to each other so that athletes cannot go on the wrong trail.

34.15.10 **Forerunners.**

Immediately before the start of the competition the entire course shall be skied before the first athletes start by at least 10 forerunners who shall not take part in the competition. While on the course, they shall clear it and correct the markings, if required.

34.15.11 **Course Specifications by Competitions**

The following table details the required technical specifications for courses for each type of competition.

Distance between Shooting Ends	Height Difference	Maximum Climb	Total Climbs
2.5km	100m	75m	210/300m
2km	100m	75m	200/350m

34.15.12 **Relay Hand-over Zone.**

In Relay competitions there shall be a well-marked hand-over zone, 30m long and 8m wide, at the end of a straight section placed in such a way that incoming athletes shall arrive at a controlled speed. The last 50m of the trail before the zone shall be at least 8m wide. The hand-over zone shall begin at the timing line. The beginning and end of the zone shall be marked with a red line in the snow and with a sign at the beginning: "Hand-over". The zone shall be fenced along both sides, with one access gate for controlled entry by starting athletes.

34.15.12.1 *The last 50m of the course before the hand-over zone shall be straight.*

The hand-over zone may only be entered by the incoming and outgoing athletes and the officials responsible for control of the hand-over zone. At 100m before the hand-over zone there shall be a signboard indicating "100m".

34.15.13 **The Penalty and Penalty Loop.**

For the Individual competition the penalty is one minute for each missed arrow. For Sprint, Pursuit, Mass Start and Relay competitions, a penalty loop shall be set up immediately after the shooting range – no further than 60m of skiing distance from the right edge of the range to the entrance of the penalty loop. The loop shall be an oval trail which is 5m wide and 150m (plus or minus 5m) long, measured along the inside perimeter of the loop. The entrance and the exit of the penalty loop shall be clearly marked by means of boards, to avoid mistakes.

If targets with paper target faces are used, there are no penalty loops. The penalties are as follows: 60 seconds for Individual Competitions and 30 seconds for Sprint, Pursuit and Relay Competition.

34.15.13.1 *The penalty loop shall be located in a level area in such a way that no additional distance between the course and the penalty loop has to be skied by the athletes when they have to enter the penalty loop.*

34.15.14 **Ski Test Area.**

At SAWCH, SAJWCH and SAWC, a ski glide test area shall be set up on slightly sloping terrain in or near the stadium area, large enough to accommodate all participating teams. The glide test downhill slope shall be an eight to 12 degrees slope and a minimum of 30m long. The test

area shall be prepared and groomed the same as the competition trails. In the ski test area there shall be an information board on which the temperature of the air and the snow, at the highest and lowest points of the course profile, shall be shown and updated at three, two and one hours prior to the first start, and thereafter every 30 minutes until the last athlete has started.

34.15.15 Warm-up Trail.

In proximity of the stadium and with easy access from the team huts, there should be a separate trail on which athletes can warm-up. The trail should be approximately 600m long and shall be prepared the same as the competition trails.

34.16. Shooting Range

34.16.1. General.

The shooting range is where all shooting takes place during a Ski-Archery Competition. It shall be located in the central area of the stadium and both the targets and the shooting ramp shall be visible to the majority of spectators. The range shall be flat and level and shall be surrounded by adequate safety barriers on the sides and behind the targets. The placement and configuration of the range shall be set up with strict regard for safety in relation to the trails, stadium and the surrounding areas. The shooting direction should be generally north to enhance light conditions during competitions. Safety protection should not obstruct the view of the competition, neither by spectators nor by TV.

34.16.1.1. The range shall conform to all local laws.

34.16.2. Specifications and Configurations.

34.16.2.1. Shooting Distance.

The distance between the front edge of the shooting ramp and the line of targets shall be 18m (± 10cm).

34.16.2.2. Kneeling and Standing

Looking in the shooting direction, the right half of the range is for shooting in a standing position and the left half for shooting in the kneeling position.

The division shall be clearly indicated to the athletes by signboards. An exception to the right and left configuration is made during Pursuit, Mass Start and Relay competitions when athletes shoot from all lanes in both kneeling and standing positions.

34.16.2.3. Entrance and Exit

During practice and competition, athletes shall enter the range from the left and exit on the right side.

34.16.2.4. Levels

The surface of the shooting ramp and the surface on which the targets stand shall be near the same level as possible.

34.16.2.5. Space Configurations

At the rear of the range there shall be a fenced-off area of 10 to 12m width (shooting ramp), measured back from the front edge of the shooting line, and extending along the entire back of the range. The area is reserved for athletes, officials and members of the Juries. However, if authorised by the TD, other persons such as TV camera teams may be allowed in this area. Directly behind that area there shall be a second fenced area of at least 2m width reserved for three team staff members per team. This area

shall be arranged so that the team staff members have good visibility of the targets and the shooting ramp area.

34.16.3. The Shooting Ramp.

The shooting ramp is the area at the rear of the range where the athletes stand or kneel to shoot. The ramp shall be totally covered with snow, solidly packed, even, smoothly groomed and not icy, and the entire area used by athletes during the competition shall be level.

34.16.3.1. Shooting Lanes.

The shooting ramp is divided into shooting lanes from which one athlete at a time shall shoot. Every shooting lane shall be at least 2m but not more than 3m wide. The width of the lanes shall be marked on both sides on the shooting ramp from its front edge for a distance of 1.5m to the rear with a red-coloured board sunken into the snow so that it is level with the snow surface. Both sides of each lane shall be marked from the ramp to the targets with flags, posts or similar markings, which clearly define the lanes, but do not interfere with shooting.

There shall be a distance of 3m between the outer edge of the left and right lanes and the start of the safety barriers they adjoin. This distance shall be maintained from the ramp to the targets.

34.16.3.2. Shooting Mats.

For shooting in both the standing and kneeling positions, mats shall be placed at the front part of each shooting lane on the ramp. The mats shall be 150cm x 150cm and 1 or 2cm thick, and shall be made of synthetic or natural fibres with a rough, non-slip surface.

34.16.4. Targets.

There are two main kinds of targets used for Ski-Archery practice and competitions:

- *Drop-down targets;*
- *Targets with paper target faces.*

Only drop-down targets shall be used for competition and only targets with paper target faces shall be used for the zeroing of bows. Both paper target faces and drop-down targets may be used for practice.

Only targets which are in conformity with the Material Catalogue (see Appendix 1-Material Catalogue, 1. Appendix 1-Material Catalogue (page 261 in Chapter 34)) may be used for World Archery competitions. A shooting range for WASCH, WASYCH and SAWC competitions shall have at least 30 shooting lanes and targets. The targets used for WCH shall have a remote reset capability.

34.16.4.1. *The same type of targets shall be used for all athletes in one competition.*

34.16.4.2. Target Maintenance.

Targets shall be well maintained and adjusted, according to the manufacture's instructions.

34.16.4.3. Target Placement.

The targets shall be set up in a level straight line, parallel to the front edge of the shooting ramp. They shall be level in all directions. The targets shall be placed so that the centre aiming mark of the target is the middle of the width of the lane. The targets shall not deviate sideways more than 1% from the right angle lines of their shooting lanes. The target centre shall be 100cm higher than the surface of the shooting ramp.

34.16.4.4. Target Background and arrow stopper.

Behind the targets there shall be an arrow proof white net or a similar soft material arrow proof device to stop the arrows which have missed the targets. The height of ei-

ther the net or any similar device shall be 1m above the upper edge of the target and not less than 2m.

34.16.5. Numbering and Markings.

The shooting points and the corresponding targets shall have the same number, easily visible, and beginning from the right with number 1. At WASCH, WASYCH and SAWC competitions, the shooting lanes shall be numbered on the left and right side at the front edge of the shooting ramp. The numbers at the shooting ramp shall be placed so that they do not obstruct TV coverage of the shooting athletes and shall be 20cm high and 3cm in width. The size of the target numbers is 40cm high with a line width of 4cm and they shall be mounted immediately above the targets.

34.16.5.1. Entrance and Exit Boundaries.

At the entrance and exit of the range, 10m outward from the left and right hand shooting lanes, there shall be a clear marking. These markings indicate the outer edges of the information prohibition zone of the range.

34.16.6. Wind Flags.

At competitions and official practice, wind flags shall be installed at the side of every third shooting lane, on the target line.

The flags shall be placed between the targets, at 1m height.

34.16.7. Bows Racks.

Suitably placed on the range in front of the team staff area, there shall be racks for the spare bows for each participating team during competitions and an adequate number during practice. The racks shall be clearly marked with the names of the participating nations or teams. The racks may be used by teams during competition, practice and zeroing.

34.16.8. Video Cameras on Range.

For WASCH, WASYCH and SAWC competitions, video cameras shall be installed on the shooting range so that the placement and number of cameras totally covers and records all actions of all athletes on the range.

34.17. Finish Area

34.17.1. General.

The finish area begins on the competition trail at the finish line and ends at the start of the finish equipment control point and shall be at least 30m long and 8m wide. The last 50m before the finish line shall be straight and 8m wide. Only officials, finishing athletes and specially authorised TV personnel are permitted in the finish area. In the finish area, the 10m distance immediately after the finish line shall be clearly marked to indicate the zone in which athletes are not permitted to display their bows or skis for advertising.

34.17.1.1. The finish line shall be marked by a sunken red line in the snow at a right angle to the incoming trail.

34.17.2. Finish Equipment Control.

The finish equipment control shall be located so that finishing athletes flow into it and through it, naturally and under control. This is particularly important for relay competitions so that finished athletes do not obstruct the outgoing trail from the hand-over zone. The finish area fencing and placement shall be set up so that athletes have no way of evading the finish equipment control.

34.17.3. Media Area.

Adjacent to the finish area, a fenced-off area (Mixed Zone) has to be established for TV journalists and photographers to have close contact with the athletes for interviews and pictures after they finish.

34.17.4. Refreshment Point.

There shall be a refreshment point after the finish area, its location to be agreed with the TD, to serve drinks and to provide paper tissues and similar necessary services to athletes after they finish. Anything consumable served shall be protected against the introduction of unauthorised foreign substances.

34.18. Team Waxing and Warming Cabins**34.18.1. General.**

In or very near the stadium area, there shall be a sufficient number of shelters, permanent buildings or good quality temporary structures (including tents), in which teams may store equipment, wax skis and keep warm.

34.18.1.1. The cabins shall be provided with ventilation (adequate for exhausting wax fumes), lights and electric power outlets, and shall be warmed to at least 20 degrees Celsius.

34.18.1.2. Each team should have its own cabin but combining of more than one team per cabin is allowed if workspace and security requirements permit.

34.18.1.3. Two rooms per team should be provided if possible to prevent breathing of waxing fumes by the athletes. If this is not possible, then a separate warming shelter shall be provided to the athletes.

34.18.1.4. The cabins should be equipped with locking doors and teams are to be provided with keys. If the entrances cannot be locked, the Organiser shall provide security for the cabins. Parking space for teams shall be provided within a reasonable distance of the cabins.

34.18.1.5. A loudspeaker for the public address system should be placed near the cabins.

34.19. Competition Equipment and Clothing**34.19.1. General Rules.**

The term 'competition equipment and clothing' includes all of the equipment, competition gear and clothing, which the athlete uses during a competition, including advertising. The definitions and specifications of competition equipment and clothing are regulated by the Material Catalogue (see Appendix 1-Material Catalogue, 1. Appendix 1-Material Catalogue (page 261 in Chapter 34)) and advertising by Article 2.2.3. (page 21 in Book 1) to Article 2.2.8. (page 22 in Book 1).

34.19.2. Inspections of Equipment and Clothing.**34.19.2.1. General.**

Athletes' equipment and clothing are inspected at the start and finish of a competition. Additionally, a preliminary check is provided before the competition to ensure that no problems occur.

34.19.2.2. Start Equipment Control Inspection.

Athletes shall report at the start equipment control area not later than 15 minutes prior to their scheduled time to have their skis and bow checked and marked, and their clothing inspected. Athletes whose equipment and clothing do not conform to World Archery regulations shall not be authorised to pass through the Start Equipment Control until the discrepancies have been corrected. Equipment, bow and clothing which have been inspected and marked at start equipment control shall not be modified in any way prohibited by these Rules or the Material Catalogue.

Team spare bows are to be brought to the equipment control for inspection and marking, and then shall be taken directly to the range and deposited in the spare bow racks, by the end of zeroing – the range staff shall not permit the deposit of bows after this

time. To facilitate the inspection of the spare bows the equipment check point shall be opened at least 15 minutes before the start of zeroing.

34.19.2.3. Specific Checks at Start Equipment Control.

The following checks are made:

- *The athlete is wearing his athlete number;*
- *The bow shall be correctly placed on the back between the shoulders and tightened in such a way that it can neither fall nor slide;*
- *The draw weight shall comply with the fixed restrictions;*
- *The arrows shall be correctly fixed to the bow or on the harness;*
- *Skis and poles are checked for correctness and the skis are marked;*
- *Clothing and other equipment is inspected for correctness, including advertising;*
- *Spare bow, if provided, shall be checked before being carried to the shooting range;*
- *The arrows shall comply with regulations of Material Catalogue;*
- *The carrying system shall be suitable to give the greatest safety against any possible damage both to the athlete and to the equipment.*

34.19.2.4. Marking.

Marking of equipment is done to prevent unauthorised change of equipment during the competition by using the athlete's start number and colours. Both skis and the bow are marked. In Individual, Sprint, Pursuit and Mass Start competitions, one colour shall be used to mark skis. The marking shall be made with a coloured marker pen or stamp, unique for that competition. In Relay competitions, the skis shall be marked according to the team start numbers and the colours or numbers of the start sequence within the team.

34.19.2.5. Delayed Start.

Delayed starting times because of late reporting at the equipment control area, or corrections that have to be made to clothing and equipment, shall be the responsibility of the athlete.

The organiser shall provide sufficient staff to ensure correct control times and to prevent delayed starting times of athletes who have reported in time. The early opening of the start equipment control is permitted and encouraged at all competitions in order to avoid time difficulties.

34.19.2.6. Final Check Before Start.

Between one to two minutes prior to the start, a check shall be made of the athlete by the start assistants in order to ensure the following:

- *The athlete is wearing a start number;*
- *The skis and bow are properly marked;*
- *Advertising regulations are not being violated.*

34.19.3. Finish Control.

After arriving at the finish and in Relay competitions after the hand-over zone, a check shall be made to confirm the following:

- *The bow shall be in the required position;*
- *Athletes have finished with at least one ski marked for them and their marked bow, with the skis and poles in accordance with the Material Catalogue;*
- *The bow draw weight is the same as stated on the control mark;*
- *The advertising regulations were not violated.*

34.19.4. Preliminary Examination of Equipment and Clothing.

At WASCH, WASYCH, SAWC and ACCH events, the Organising Committee in consultation with the TD shall conduct a preliminary inspection of equipment to confirm that the equipment and clothing to be used by teams is permitted by the rules. The check shall normally be done at

least two days before the first competition. The pre-examination does not relieve athletes of the obligation to pass equipment control at the start and finish.

34.19.4.1. Attendance.

The responsible staff of the Organising Committee shall conduct the examination. Also in attendance shall be the SAIJ for material control. The examination is voluntary but a team representative should attend with clothing or equipment that may be questionable. At the first AWC event of a season, it is mandatory that at least one representative of each team attend the examination.

34.20. Practice and Zeroing

34.20.1. General.

Athletes and team staff shall be provided with the opportunity and the facilities to prepare for the competition. For that purpose the organiser shall provide Official Practice times, ski testing facilities, the opportunity to zero bows and warm-up for athletes prior to the competition.

34.20.1.1. Exceptions.

In extraordinary circumstances, the Competition Jury may close the entire facility or limit practice on the facility to certain parts and timings.

34.20.1.2. Rights for Practice.

Athletes who have registered for a World Archery event may use the competition facility during the Official Practice. Men and Women may not participate in Official Practice and zeroing for the other gender. All athletes who participate in Official Practice shall wear a practice bib.

34.20.1.3. Type of Practice.

Official Practice is the period of time that the Organiser shall provide for practice on the facility. During Official Practice the facility shall be prepared the same as for the competition. Unofficial Practice is the time that the Organiser allows for practice on the facility other than Official Practice, and the facility does not have to be prepared as for the competition. Organisers should allow as much time as is possible in the event program for Unofficial Practice.

34.20.2. Official Practice.

34.20.2.1. General.

At WASCH, WASYCH, SAWC, SACCH and SACC events the competition facility shall be open for inspection and practice (Official Practice) at least once before the first competition, prepared as for the competition and at the same time of day as the competitions. Each subsequent competition should also be preceded by Official Practice unless it is not possible in the event program or due to other circumstances. The TD has the authority to permit mixed training on competition days when this is in the best interests of the athletes and the organisers.

34.20.2.2. Skiing Practice.

The competition course for Official Practice shall be open at the times corresponding to the competition, if possible, and shall be groomed, marked and fenced or barricaded as for the competition.

34.20.2.3. Shooting Practice.

The practice shooting on the day prior to the competition shall be organised at times corresponding to the competition day, if possible. The practice shall begin at the same time as the zeroing time of the competition day, with only paper targets in use and on assigned shooting lanes. After 30 minutes, drop-down targets shall be used and the

choice of shooting lanes shall be free, until the end of the practice period. The organisers should also provide some paper targets during the free period, if possible.

34.20.3. Warming-up Practice (Zeroing of Bows).

34.20.3.1. Timing and Targets.

Prior to the start of a competition, athletes shall be given the opportunity to adjust (zero) their bows on the range for a period of 45 minutes, which shall begin one hour before and end no later than five minutes before the first start. For the Pursuit, Mass Start and Relay competitions, a shorter time may be used but it shall be at least 30 minutes, and without paper target change. If necessary, Men and Women may both be zeroed prior to the first competition but this shall be done separately.

34.20.3.2. *Bow adjustment (zeroing) may take place only on the range and only paper targets shall be used for adjustment (zeroing). If the paper targets have to be changed during zeroing, the time required for the change shall not be deducted from the time allocated for adjustment (zeroing).*

34.20.3.3. Allocation of Warming-up Practice (Zeroing) Lanes.

For Individual and Sprint competitions, if possible, each team shall be allocated one warming-up (zeroing) lane on the range. The allocation of lanes shall be determined by random draw conducted under supervision of the TD. For Relay competitions, the team-warming-up (zeroing) lane is the same as the start number. For the Pursuit and Mass Start competitions, the team-warming-up (zeroing) lane shall be the lowest start number of that team, but if a nation has more than four athletes starting, it shall be allocated two adjoining warming-up (zeroing) lanes. One reserve member of each team is permitted to zero before each competition, including the reserve Relay team member.

34.20.3.4. Placement of Targets with Paper Target faces for Zeroing.

Every target with paper target faces for Warming-up (zeroing) shall be placed in the middle of two lanes, with the faces at the same level and the same distance as the competition targets.

34.21. Warming-up on the Course

34.21.1. General.

Except at WASCH, the parts of the competition trail directed by the TD may be used for warming-up before and during the competition. The trails may be used only by those athletes who shall start in that particular competition and only in the competition ski direction. The TD shall decide if the course may be used for warm-up prior to the competition, based on circumstances.

34.21.1.1. Other Use of Trails.

Team support staff and athletes who are not entered to start in the competition may ski on the course up to five minutes before the first start. After this time, they may not ski on the competition trails but may walk along the side of the trails. When skiing on the trails the non entered athletes and team staff members shall wear practice bibs or course armbands respectively.

34.21.1.2. Ski Testing.

It is forbidden to use the competition trails for the ski testing. Ski testing shall be done in the area assigned for ski testing. In extraordinary circumstances the TD may authorise ski testing on the competition trails. In such a case, electronic measuring devices shall be removed from the trails not later than 10 minutes before start.

34.22. Start Regulations

34.22.1. Start types and intervals.

34.22.1.1. General.

There are four types of starts: single start, pursuit start, group start and simultaneous start (mass and relay), and two standard start intervals: one minute or 30 seconds. At WASCH, WASYCH, SAWC, SACCH and SACC competitions the following regulations shall apply.

34.22.1.2. Individual competitions.

For all individual competitions, only single starts shall be made normally with 30 seconds intervals. However, 45 seconds or one-minute intervals are permitted if it is best for the competition. The TD in consultation with the organisers shall decide which start interval is the best for the circumstances. A sufficient number of targets shall be available for the number of athletes if the start interval is 30 seconds.

34.22.1.3. Sprint Competitions.

For all Sprint competitions either single starts, normally with 30 second intervals, or group start shall be made. Start intervals of 45 seconds or one minute are permitted if it is best for the competition. The TD in consultation with the organisers shall decide which start type or interval is best for the circumstances.

34.22.1.4. Pursuit Competitions.

In all Pursuit competitions, no start standard interval is used. Athletes start at the exact time listed in the start list as their start time, which is the time- behind- winner of the qualifying competition.

34.22.1.5. Mass Start Competitions.

Start in the Mass Start competitions shall be made in one single simultaneous start of all the athletes.

34.22.1.6. Relay Competitions.

Start in Relay competitions shall be made in a simultaneous start of the first athlete of each team. Subsequent starts of the other team members shall be made with a tag by the incoming team member in the Relay hand-over zone.

34.22.2. Starting positions and Starts.

34.22.2.1. Single start with electronic timing.

Athletes shall stand as close to the gate as possible and shall pass through the gate at the starting time.

34.22.2.2. Single Start with manual timing.

If only manual timing is used, athletes shall stand with both feet completely behind the start line and shall cross the line at their starting time.

34.22.2.3. Pursuit Start.

Athletes shall arrive in the start area at the time directed by the Competition Jury for placement in to the start lanes. They shall then be lined up in the start lanes in their start order, alternating between lanes. Each simultaneous start shall be in a separate lane. Physical control of each start shall be done by an official located at the start line at the end of each lane. The officials shall bar the crossing of the start line by holding their arm horizontally across the end of the lane, and quickly lowering the arm at the exact start time for that lane. Athletes shall start when they are the next in line and when the arm is dropped.

34.22.2.4. Relay Start.

In the Relay competitions the first starters shall stand in their assigned start tracks with both feet behind the line marking their start row, or behind their track number if

no line is marked. They shall cross the line when the designated start signal is given. Subsequent members of a Relay team shall stand in the hand-over zone, according to their start sequence, and shall start when tagged by the incoming team member.

34.22.2.5. Group start.

In group starts the athlete with the lowest start number of that group shall take track 1, the second lowest number track 2, etc. They shall stand as for the relay simultaneous start and shall start when the designated signal is given. The process is repeated for each group.

34.22.2.6. Mass Start Competition Start.

The mass Start competition shall start the same as the first starters in the Relay simultaneous start.

34.22.3. Start Signals.

34.22.3.1. Single Start - Electronic gate.

The start command is given by the electric sound of the start clock - a loud beep, and the visual time of the start clock. The starter shall not touch the athlete.

34.22.3.2. Single Start - Manual timing.

At single starts without an electronic start gate, the starter shall say "Ready" 10 seconds before the time of start and then count down loudly from five seconds before the start, saying "5 - 4 - 3 - 2 - 1". At the exact start time, he shall give the command "Go". The starter shall not touch the athlete.

34.22.3.3. Pursuit Start.

The start signal for each Pursuit start is the dropped arm of the lane official.

34.22.3.4. Simultaneous and Group starts.

In Relay, Mass Start and Sprint competitions with group starts, the start signal shall be given by a shot from the start pistol or another start device, or with a flag. Verbal warning signals shall be given at one minute, 30 seconds and "Ready" prior to the start, with the Start signal given within five seconds after "Ready".

34.22.3.5. Start in the Hand-over zone.

In Relay competitions, the Relay hand-over shall take place within the hand-over zone in such a way that the arriving athlete touches the body (including torso, arms, legs, hands, feet and head) or the bow of the outgoing athlete with his hand.

34.22.4. Time of Start, Early start, Late start and False start.

34.22.4.1. Electronic Start time.

In single starts, the electronically recorded time of activating the gate shall be the start time if the athletes activate the gate within three seconds before or three seconds after the start list time. If an athlete starts more than three seconds before the scheduled time, it is an early start. If an athlete starts more than three seconds later than the scheduled time, it is a late start and the time shall begin from the scheduled time of start.

34.22.4.2. Manual Start time.

If only manual timing is used and the start is single, the time of start for individual athletes is the time stated in the start list. If an athlete starts before the start signal, it is an early start. If the athlete starts too late, it is a late start.

34.22.4.3. Pursuit Competition.

The time of start of each athlete is the time listed in the start list. Early starts shall not be permitted to happen. If a late start occurs, the late athlete shall be directed through the spare passage, and the official at that point shall record the time that the athlete crosses the start line. If the athlete is late by his own or his team's fault, his competi-

tion time shall be calculated from his official start time in the start list. If the cause of the delay was 'force majeure' or incorrect or accidental actions by someone outside his team, his competition time and placement in the pursuit shall be calculated from the time recorded by the official.

34.22.4.4. Relay and Mass Start Competitions and Sprint Competitions with group starts.

The moment of start is at the time of the start signal.

34.22.4.5. Hand-over Zone start time.

The start time for Relay team member taking over shall be the moment when the incoming team member enters the hand-over zone by crossing the timing line at the beginning of the zone.

34.22.4.6. Early Start – Single.

If an early start occurs in a Single competition or in the hand-over zone, the starter's assistant shall stop the athlete as quickly as possible after the start line or the hand-over zone and send him back. The athlete shall return to behind the start line or into the hand-over zone in Relay competitions, and start again. If possible, except in a Relay, the athlete shall be restarted at his correct start time through the gate or over the start line in manual. If the correct start time is expired, the time of start reverts to the listed start time. Time thus lost shall count against the athlete. The foregoing does not apply to pursuit competitions.

34.22.4.7. False Start – Mass-start, Group start and in the Hand-over zone.

If there is a false start during a mass or group start, the assigned SAIJ and officials shall stop the athletes at the end of the set parallel tracks. After a false start, there shall be a new start. If the Relay hand-over occurs before or after (outside) the hand-over zone it is a false start and the procedure shall be repeated within the zone. An athlete or team shall be considered as having not started if they have made an early start and do not return to start again correctly.

34.22.4.8. Late Start.

If athletes are late at the start, they shall start through the start gate at the first possible opportunity as directed by the starter, without obstructing other athletes.

34.22.4.8.1 *If the athlete is late due to his own fault, his start time shall be the one on the start list. If the late start was due to 'force majeure' the Competition Jury shall decide his start time.*

34.22.5. Start Numbers.

34.22.5.1. General.

At WASCH, WASYCH, SAWC, SACCH and SACC Competitions, all athletes shall wear a bib, which has their start number on the front, back, and both sides. Athletes shall also wear their start number on both thighs. Athletes are responsible for ensuring that their start numbers remain attached to the required positions during a competition. The start number and sequence colour worn by an athlete, shall be the number and colour assigned for that athlete for that competition by the competition start list.

34.22.5.2. Numbering.

At WASCH, WASYCH, SAWC, SACCH Competitions, the set of start numbers for Men, Women, Junior Men and Junior Women for each start shall begin with the number 1 and shall continue in numerical sequence to the last number.

34.22.5.3. Colour.

The colour of the start number shall clearly contrast against the base colour of the cloth.

34.22.5.4. Sizes of Start Numbers.

The sizes that shall be used for start numbers in World Archery Competitions are detailed in the Material Catalogue.

34.22.5.5. Start Number Colours by Competitions.

34.22.5.5.1 Individual, Sprint, Pursuit, Mass start Competitions.

The start numbers of all athletes shall be the same colour.

34.22.5.5.2 Relay Competitions.

The start number colours within the team shall be red for the starting member, green for the second, yellow for the third and blue for the fourth.

34.22.6. Weather Conditions.

34.22.6.1. Temperature.

Ski-Archery Competitions shall not be started if the air temperature is colder than minus 20 degrees Celsius measured at the coldest part of the site (range or course), 1.5m above ground.

34.22.6.2. Wind Chill.

Regardless of temperature, wind chill shall be considered before starting and during the competition. In the case of high wind chill factor, the Competition Jury shall decide whether to start or continue the competition. Changing of the course to be skied may also be done to avoid windy areas.

Wind chill temperature equivalents

Temp °C	Wind speed in km/h								
	10	15	20	25	30	35	40	45	50
	-3	-5	-8	-10	-11	-13	-14	-14	-15
-1	-4	-6	-9	-11	-12	-14	-15	-16	-17
-2	-5	-7	-9	-13	-14	-15	-17	-18	-18
-3	-6	-8	-11	-14	-15	-16	-18	-19	-19
-4	-7	-10	-12	-15	-16	-18	-19	-20	-21
-5	-8	-11	-13	-16	-18	-19	-21	-22	-22
-6	-9	-12	-14	-18	-19	-20	-22	-23	-24
-7	-10	-13	-15	-19	-20	-22	-24	-24	-25
-8	-11	-14	-17	-20	-22	-23	-25	-26	-27
-9	-12	-15	-18	-22	-23	-25	-27	-27	-28
-10	-13	-16	-19	-23	-24	-26	-28	-29	-30
-11	-14	-18	-20	-24	-26	-27	-29	-30	-31
-12	-15	-19	-22	-26	-27	-29	-31	-32	-33
-13	-17	-20	-23	-27	-28	-30	-32	-33	-34
-14	-18	-21	-24	-28	-30	-31	-34	-35	-36
-15	-19	-22	-25	-29	-31	-33	-35	-36	-37
-16	-20	-23	-27	-31					

Notes:

- 1. this is only a guide – the decision to start or not shall be made by the Competition Jury in consultation with the Competition Physician;*
- 2. Top shaded line is the -20 °C equivalent boundary;*
- 3. Bottom shaded area indicates that exposed flesh freezes in one minute (<-27 °C);*
- 4. Wind speed is to be measured at height of 1.5m on the range.*

34.23. Skiing Regulations

34.23.1. General.

34.23.1.1. General Skiing Rules.

Athletes shall ski the entire distance of the stipulated competition course in the correct sequence and direction on skis, carrying their bow and at least the required number of arrows, and following the marked course precisely. They may use no other form of propulsion than skis, poles and their own muscular force.

All skiing techniques are permitted.

34.23.1.2. *If an athlete observes that another athlete has an accident, he shall report it to the next checkpoint.*

34.23.1.3. *If an athlete withdraws from the competition before the finish, he shall inform the first official he meets.*

34.23.1.4. Carrying the Bow.

Each athlete shall use a harness to carry the bow in the required position vertically on the back between the shoulders and with the sight window turned towards the back. Each athlete may carry a small repair kit. If the bow is damaged during the competition so that it is not possible to carry it in the required position, it is permitted to carry the bow in the hand to the shooting range and then it shall be immediately exchanged for the team spare bow. All the arrows, included the spare arrows, shall be carried by the athlete himself.

34.23.1.5. Wrong Trail.

If an athlete takes the wrong trail which would result in a time advantage or the wrong sequence, he shall return to the point where he made the wrong turn, along the part of the trail he skied in error. In order to do so, the athlete may have to ski against the correct ski direction and is totally responsible for ensuring that he does not obstruct or endanger other athletes. There is no penalty for having committed the error as long as no time advantage has been gained and there has been no interference with other athletes.

34.23.1.6. Passing and Giving Way.

An athlete, who is in position to pass another athlete, and wishes to pass, shall yell "Track". An athlete who is about to be overtaken shall clear the track or trail in front of the passing athlete at the first yell of "Track", even if the trail is wide enough. However, this obligation does not apply to the last 50m before the finish line and the last 50m before the hand-over zone.

34.23.1.7. Skiing Penalty Loops.

In all competitions in which the shot penalty is the 150m penalty loop, the athletes shall ski the loop once for every missed target immediately after the shooting end.

34.23.1.8. Responsibility.

Athletes are responsible for skiing the required number of penalty loops immediately after the shooting end. It is not permitted to complete penalty loops at a later time.

34.23.1.9. Penalty Loop Error.

If athletes due to a mistake by the organiser or a target malfunction, skis too many penalty loops, the Competition Jury shall decide on an appropriate time allowance. The organiser shall ensure that, in each competition the average penalty loop ski time is recorded, based on at least five athletes.

34.23.1.10 Skating at Relay, simultaneous and group starts.

The use of the skating technique (one or both legs sideways) is prohibited in the tracked portion after the start line in simultaneous or group starts.

34.23.2. Obstruction.

It is strictly forbidden to impede other athletes at any time during the competition. This prohibition also includes the dropping of objects on the competition trails or the shooting range in such a way that it obstructs other athletes.

34.23.3. Exchanging Equipment, Repairs, Assistance.

Athletes may repair their skiing equipment during a competition, provided they receive no assistance from any person.

34.23.3.1. Exchange of Skis and Poles.

An athlete may exchange one of his skis, but only if it is broken or the binding is damaged. Broken poles and straps may be exchange repeatedly. The replacement skis and poles shall be in conformity with the World Archery Material Catalogue rules.

34.23.3.2. Glide Performance.

The athletes may not change the glide performance of their skis by the application of any substances during a competition.

34.23.3.3. Refreshments.

Athletes may consume refreshments during the competition. The refreshments may be carried by the athletes or be given to them.

34.23.3.4. Other Assistance.

Athletes are not permitted to receive any assistance from any person, other than as stated in these rules.

34.24. Shooting Regulations**34.24.1. General.****34.24.1.1. Shooting Rules.**

All shooting during practice and competition takes place at the shooting range only aiming at the target. In a competition, athletes shall shoot after having completed each of the required sections of the course for the competition, except the last which ends at the finish or the Relay hand-over. The shooting specifications for all competitions are detailed in 3.1. World Championships (page 67 in Book 2) and shall apply for shooting at all World Archery Ski Archery competitions.

34.24.2. Specific Rules For Types of Competition.**34.24.2.1. Selection of Shooting Lanes.**

In Individual and Sprint competitions, the athletes may freely choose shooting lanes. In the Pursuit, Mass Start and Sprint with group start competitions, the athletes shall go sequentially in the shooting lanes starting with lane 1 and taking the lowest available number and then for the Pursuit competition starting again at number 1. In Relay competitions, the shooting lane designated by the team's start number shall be used.

34.24.2.2. Relay Competitions - Spare Arrows.

In the Relay competition, each athlete shall shoot the first four arrows and if targets remain standing he shall use the spare arrow (only one for each shooting). All the arrows, including the spare arrows, shall be carried by the athlete himself.

34.24.3. Shooting Position.**34.24.3.1. Kneeling Position.**

Athletes, while shooting in the kneeling position, shall only place one knee on the ground and the chest should remain upright.

34.24.3.2. Standing Position.

Athletes shall shoot from a standing position and without support, with both feet behind a rope or a ribbon marking the shooting line.

34.24.3.3. Disposal of Shot Arrows.

The arrows shot by the athlete during the competition remain in the target or on the ground until the end of the competition.

34.24.3.4. No Removal of Skis.

It is prohibited to remove one or both skis while shooting, including practice and warming-up (zeroing), or to place any kind of objects under the skis. While shooting in the kneeling position, it is allowed to unfasten one ski only, but the foot shall rest on the ski.

34.24.3.5. Position in Shooting Lane.

The athlete shall ensure that no part of his body or equipment protrudes beyond the 1.5m red lines marking the shooting lane, or the extension of those boundaries while shooting.

34.24.3.6. Enforcement.

If a Range Official warns an athlete that his shooting position or his position in the shooting lane is not according to the rules, the athlete shall immediately make the correction.

34.24.4. Safety Regulations.

34.24.4.1. General.

Shooting is permitted only on the shooting range, during officially authorised timing. It is forbidden to make movements with a bow which might endanger persons, or which may be perceived by others as dangerous. When the range is open for shooting, no 1 is permitted to be in front of the shooting line. Shooting the bow is only allowed in the direction of his targets, not on the ground. At all times, the athlete is responsible for the safety of his actions and bow.

34.24.4.2. Placing an arrow on the bow.

An arrow may be placed on the bow only with the arrow pointing in the direction of the targets. When moving from one shooting point to another, the athlete shall first take his arrow from his bow and place the bow on his back in the normal carrying position.

34.24.4.3. Removal of Bow on the Range.

An athlete may not remove a strap of his bow carrying harness from his shoulder before he has reached the shooting lane from which he shall shoot. He shall cross the lane marking line with both feet and place both ski poles horizontally on the ground prior to removing his bow from the carrying position.

34.24.5. Damaged Bows and Arrows.

34.24.5.1. Bow Repair.

The athletes may repair their bows during a competition all along the course provided they receive no assistance from any person. Only the personal marked spare bow and spare arrows placed on the rack and marked, are permitted on the shooting range.

34.24.5.2. Damaged Bows.

If a bow needs to be repaired, the athlete may do the repairs himself without any assistance and using only the repair kit carried by himself. If the bow cannot be made functional, it may be exchanged for his personal marked spare bow placed in the rack on the shooting range.

34.24.5.3. Spare Bows.

A bow, which as been damaged during the competition or malfunctions for technical reasons to such an extent that it cannot be used to continue the competition may be ex-

changed for a spare bow which has been inspected and marked at the equipment check and deposited in the designated spare bow rack on the range before the competition by the athlete himself. The athlete shall then continue the competition with his marked spare bow.

34.24.5.4. Bow Exchange Procedure.

To exchange a bow damaged while skiing on the course the athlete himself may ski to his spare bow in the rack on the range, prior to going to the shooting lane, exchange his bow and then continue to his shooting lane. During shooting the athlete shall indicate that his bow needs to be exchanged by raising his hand. When a Range Official responds, the competitor shall point to his bow and say "Bow" and the name of his nation and his personal number, loudly. The Range Official shall get the personal marked spare bow from the designated bow rack and bring it to the athlete.

34.24.5.5. Damaged Arrows.

An athlete who damages one or more arrows during a competition can replace them from the spare arrows in the rack at the entrance of the shooting range. If the athlete discovers a damaged arrow when on the shooting line, he may obtain replacement arrows from a Range Official by raising his hand and saying "Arrow", the name of the nation and his personal number, loudly. The Range Official who responds shall get the spare arrow from the athlete's personal marked spare arrows placed behind the range and deliver it to the athlete.

34.24.5.6. No Time Adjustment.

There shall be no time adjustment for repairing or exchanging a bow or obtaining spare arrows.

34.24.5.7. Response by Range Official.

All Range Officials shall be alert to observe a raised hand by an athlete for spare arrows or bow exchange. The Range Officials shall react with a sense of urgency and move quickly to minimise the time required to bring the arrows or to exchange the bow.

34.24.6. Target Errors and Malfunctions.

34.24.6.1. Target Malfunctions.

If a target fails to function, the athlete shall be directed to another target.

34.24.6.2. Cross-shooting and Target Hit by Another Athlete.

If a target on which an athlete is shooting is hit by another shooter, the incorrect shooter shall be stopped immediately. If no target plates have fallen, the correct athlete may continue shooting. If a target plate has been hit, the target shall be reset immediately and the athlete then continues shooting.

34.24.6.2.1 *Before such a target reset, the hits and their position shall be recorded. In such a case in the Sprint, Pursuit and Relay competition, the Range Official shall tell the offending athlete how many penalty loops shall be done.*

34.24.6.2.2 *If an athlete cross shoots onto a target not in his shooting lane, and no other athlete is shooting on that target, he shall be allowed to continue without disturbance. The athlete's hits shall be only those that are on the correct target.*

34.24.6.3. Time Adjustment and Responsibility

In those cases where an athlete loses time due to a target error, which is not his fault or a target malfunction, the Competition Jury shall make an appropriate time adjustment.

34.24.6.4. Own Error.

If an athlete makes an error such as cross shooting or selecting a target which has been used and not reset, he is responsible and no time adjustment shall be made.

34.24.6.5. Scoring of Shooting.

For all shooting in competition, a system of scoring the shooting shall be put in place by the organiser. Each arrow that is shot in a competition shall be observed by three independent persons or methods.

34.25. The Finish, Competition Time and Results**34.25.1. The Finish.****34.25.1.1. Moment of Finish.**

Finish is the moment when an athlete's or Team's competition time ends. When electronic timing is used, the finish occurs when the athlete breaks the beam of the electronic sensor at the finish line. When manual timing is used, the finish occurs when the athlete crosses the finish line with one or both feet. In Team competitions the timing is taken from the last member to finish.

34.25.2. The Competition Time.

The competition time is the period of elapsed time during the competition on which the placing of an athlete or Relay team in the results of the competition is based. The time always includes any penalties or adjustments imposed or granted by the Competition Jury.

34.25.2.1. Individual Competitions.

In all Individual competitions, the athlete's time is the elapsed time between start and finishing.

34.25.2.2. Sprint and Pursuit and Mass Start Competitions.

In all Sprint, Pursuit and Mass Start competitions the athlete's time is the elapsed time between start and finish. In the Pursuit competition the first athlete to cross the finish line, subject to penalties, shall be declared the winner. This also applies to the rankings of subsequent finishers.

34.25.2.3. At WASCH and SAWC in Pursuit competitions if the leading athlete laps an athlete, the overtaken athlete shall withdraw from the competition immediately.

34.25.3. Relay Competitions.

In all Relay competitions the competition time of a team member is the elapsed time from the start, or hand-over, to the hand-over or the finish. The total time of a Relay team is the time elapsed between the start of the first member to the finish of the last member. The time of the incoming member stops when he crosses the timing line into the hand-over zone and the time of the outgoing member begins at the same moment.

34.25.3.1. Placing in Relay Competition.

The placing of Relay teams in the results shall be decided by the order of finish of their last athlete, except when the Competition Jury has imposed time penalties or made time adjustments.

34.25.4. Same time – tie.

If two or more athletes in an individual or sprint competition have the same competition time, they shall be placed in the results with equal (tie) ranking. There shall be no ties in Pursuit, Mass Start and Relay competition.

34.25.5. Photo finish.

At WASCH, WASYCH and SAWC in Pursuit competitions and Relay competition, a photo-finish camera shall be installed at the finish line to record the finish. The camera shall be placed exactly in line with the finish line and in such a position that the camera sees the entire finish line. If the photo-finish record is required to decide the order of finish, the order in the record

shall determine the placing. The decision shall be based on the first part of the first foot crossing the finish line. The SAIJ Start/Finish shall be the photo-finish Judge and decide the finish order based on the photo-finish record. Photo finish is not mandatory at SACCH or SACC competitions but may be used.

34.25.5.1. Finish Video Camera.

At all World Archery events a video camera shall be installed at the finish in such a way that it shall record the start numbers of athletes as they cross the finish line.

34.25.6. Intermediate Time.

At WASCH, WASYCH and SAWC competitions, timings after each end of shooting shall be available to the electronic information board, the media and teams. An intermediate timing line shall be set after the penalty loop and the timing of each athlete shall be recorded at the line after each end of shooting.

34.26. Timing Systems

34.26.1. Requirements.

Competition time shall be measured electronically, backed by manual timing. Manual timing is used only if the electronic system fails during the competition. Specifications of timing equipment are given in Appendix 1-Material Catalogue, 1. Appendix 1-Material Catalogue (page 261 in Chapter 34).

34.26.2. Units of Measure.

Electronically and manually measured competition times shall be registered by 1/10 of a second (0.1).

34.27. The Competition Results

34.27.1. General.

Results are the record of the performance of the athletes or teams in a competition. The organisers are responsible for producing and distributing the results on paper. At SAWCH, SAJWCH and SAWC competitions English shall be used in the results, however more than one language may be used in the same results. Interim and final results shall include the following information:

- *Name and location of the event;*
- *Type, time and date of the competition;*
- *Course and weather data;*
- *Names of the competition Jury members;*
- *Signature of the TD;*
- *Number of entered athletes and total ranked;*
- *Number of those who did not start and did not finish;*
- *Notes about imposed penalties;*
- *Columns for:*
 - *Placing, in ranking order from first to last;*
 - *Start numbers;*
 - *Last and first names of the athletes;*
 - *Nation or team;*
 - *Shot penalties by bout;*
 - *Ski times to 1/10 (0.1) second;*
 - *Total time and team time (in Relay);*
 - *Time behind;*
 - *World Cup points (when appropriate). For the Pursuit competition the times shown shall be the qualification competition results by actual clock time of the start for the winner followed by the time behind for the remainder.*

34.27.1.1. Ties.

If there is a tied placing (equal competition time), the tied athletes shall be given equal ranking in the results; however, there shall be no next placing in the results.

34.27.2. Types of Results.

There are three types of results: Intermediate, Interim and Final.

34.27.2.1. Intermediate.

Intermediate Results reflect the competition situation during the competition and are for information only. They shall be displayed on the scoreboard and announced by the public announcer.

34.27.2.2. Interim Results.

Interim results are the first official record of the competition produced by the organiser after the last finish. Interim results are subject to appeal and shall be published and posted at the finish area and competition office as soon as possible after the finish of the last athlete. The time posting of the Interim results shall be marked on the Interim results and shall be signed by the TD.

34.27.2.3. Final Results.

The Final results are the final record of the competition and shall be published immediately after the deadline for appeals has passed, or as soon as the Competition Jury has made its decisions on appeals that were submitted.

34.28. Appeals**34.28.1. General.**

Appeals shall be submitted in writing to the Competition Secretary, for the Jury of Appeal and shall be accompanied by a fee of 50 USD, or host nation equivalent. If the appeal is upheld, the money shall be paid back. If the appeal is rejected, the money shall go to World Archery.

34.28.2. Appeals Types and Conditions.**34.28.2.1. Eligibility Appeals.**

Appeals concerning the eligibility of an athlete may be submitted at any time up to the end of the appeal time for the competition in question.

34.28.2.2. Appeals During and After Competitions.

Appeals concerning violation of rules by athletes and team staffs, mistakes made by officials, competition conditions and the Interim Results shall be submitted in the time period between the start of the competition to 15 minutes after the posting of the Interim Results. A clear announcement shall be made by the organiser immediately after the posting of the Interim Results to inform everyone that they have been posted.

34.28.2.3. Repetition and Annulment.

If the examination of an appeal reveals circumstances that are so serious that they make the sporting value of the competition doubtful, or if the Competition Jury from its own observation comes to the same conclusion, the Competition Jury may decide to repeat the competition or to annul the competition without repetition.

34.29. Penalties**34.29.1. Athletes are subject to penalties.****34.29.2. Kinds of Penalties.**

Penalties that may be imposed are:

34.29.2.1. Reprimands.

A reprimand shall be imposed in case of:

- *Jeopardizing or defaming the honour or reputation of World Archery or its interests;*
- *Insulting World Archery, its organs, its members, its members' organisations and organs or guests of World Archery;*
- *Violations of rules for which there is not an expressly stated more severe penalty.*

34.29.2.2. Start Prohibition.

An athlete or team shall be prohibited from starting for:

- *Appearing for start with equipment or clothing not in accordance with the World Archery Material Catalogue or advertising not in accordance with Article 2.2.3. (page 21 in Book 1) to Article 2.2.8. (page 22 in Book 1)*
- *;*
- *Appearing for start with the wrong start number, or no start number, due to a mistake made by the athlete or his team;*
- *Violating the rules regarding official practice, zeroing, warm-up and ski testing.*

The prohibition applies for the competition in which the violation occurred, or the next competition, as applicable.

34.29.2.3. One Minute Penalty per mistake in all individual competitions.

A time penalty of one minute shall be imposed on athletes for:

- *Not giving way at the first request by an overtaking athlete;*
- *Committing a very minor violation of the principles of fair play or the requirements of sportsmanship.*

34.29.2.4. Two Minutes Penalty.

A time penalty of two minutes shall be imposed on athletes or teams for:

- *Every penalty loop, as the result of shot-penalties, not done immediately after each kneeling or standing shooting by an athlete or a team's shooting member;*
- *Using the skating technique (one or both legs sideways) in the Relay competition in the prepared start tracks after the start line;*
- *Every arrow not shot if the athlete recommences skiing before he has shot all four arrows in an Individual, Sprint, Pursuit and Mass Start competition and all five arrows in a Relay competition, having not hit all targets;*
- *For every arrow shooting in the ground;*
- *Committing a minor violation of the principles of fair play or the requirements of sportsmanship.*

34.29.2.5. Disqualification.

An athlete or team shall be disqualified for:

- *Taking part in a competition for which he or she is not eligible;*
- *Receiving prohibited assistance from his team staff or a non-competing athlete of his team;*
- *Using equipment, bow or clothing not in conformity with World Archery Rules, including carrying unauthorised advertising in a World Archery event or competition;*
- *Avoiding start or finish controls;*
- *Taking part in a competition with skis or bow not properly marked;*
- *Modifying equipment, bow or clothing which has been inspected and marked at start control, in a prohibited way;*
- *Participation in a competition with a start number or start number sequence colour which has not been assigned to him by the competition start list, deliberately or due to a mistake by him or his team;*

- *Deviating from the marked trail, or skiing a wrong trail, thus gaining a time advantage for himself or his team, or skiing the course loops in a wrong sequence or in the wrong direction;*
- *Using means of propulsion other than skis, poles and one's own muscular force;*
- *Not carrying his bow while skiing during the competition, and for not carrying the bow on the course, when it is not damaged, in the correct way;*
- *Returning to the track, after the shooting, without replacing the bow between the shoulders in the correct manner;*
- *Hindering another athlete on the course or at the shooting range by serious obstruction;*
- *Exchanging both skis during the competition;*
- *Accepting unauthorised assistance from any person when repairing equipment;*
- *For applying any substances during a competition intended to change the glide performance of the skis;*
- *Shooting more than the permitted number of arrows in any shooting end in Individual, Sprint, Pursuit and Relay competitions;*
- *Remaining in an incorrect shooting position or incorrect position in the shooting lane after having been warned;*
- *Not drawing the bow in the direction of the target;*
- *Shooting an arrow in a direction that may create a hazard, shooting without aiming at the target;*
- *Violation of any other shooting safety regulation;*
- *Not following the shooting sequence specified for that competition;*
- *Using an arrow of a length different from the recorded length;*
- *Committing a serious violation of the principles of fair play or the requirement of sportsmanship.*

34.29.2.6. **Suspension.**

In case of a blood test (one hour before the competition start) showing haemoglobin values exceeding 17.0 mg/ml for male athletes and 16.0 mg/ml for female athletes, the athletes in question shall be suspended for health reasons with immediate effect from the respective competition for a period until a blood-re-test shows haemoglobin values below 17.0 mg/ml for male and 16.0 mg/ml for female athletes.

A blood re-control can be performed not earlier than five days after the initial blood control showing exceeded haemoglobin values. A blood re-control shall take place at the latest before the next event, in the case that the period between the initial blood control showing exceeded values and the next event is more than five days long.

34.29.2.7. **Refusal of Blood Test or Doping Control.**

Athletes, who have been selected for blood test, doping control or gender verification, and refusing to do so shall be treated in such a way as if evidence of exceeded haemoglobin values in the blood, doping, or of wrong gender had been established. In these cases culpability is legally assumed.

34.30. **Disciplinary Measures**

34.30.1. *Coaches, trainers, officials and staff of World Archery and its Member Associations, individual members of World Archery and members of competition committees are subject to disciplinary measures.*

34.31. Prohibitions and Sanctions for Non-Competing Persons**34.31.1. General.**

Unfair assistance or assistance not allowed by these Rules to athletes during a competition is prohibited.

34.31.2. Specific Prohibitions.**34.31.2.1. On the Shooting Range.**

It is forbidden for any persons to give athletes any oral or visual information, advice, information by radio or any other communication method on the range including 10m to the left and right of the range. This does not apply to the general expressions of applause or disappointment by the spectators.

The area of the range shall be marked by clearly visible markings, 10m from the left and right of the shooting lanes.

34.31.2.2. On the Course.

Pacing - that is, running or skiing in front, beside or behind athletes is forbidden. It is permitted to run without skis up to 50m beside athletes to give competition information or to offer beverages. It is forbidden to touch athletes in such a way as to assist their propulsion or to obstruct other athletes.

Assistance to athletes to change the glide performance of their skis is prohibited during the competition.

In the area 100m before and to 100m after the range, in the hand-over zone and in the last 100m before the finish, running beside athletes is forbidden.

34.31.2.3. Sanctions.

Spectators and other persons shall be clearly informed of these rules by the official announcer before the beginning of the competition and warned that a violation of these rules may lead to spectators being removed from the area of the competition by the Organising Committee.

34.32. Abbreviations**34.32.1. Abbreviations of words and terms used in these Rules are defined as follows:**

SACC - Ski-Archery Continental Cup

SACCH - Ski-Archery Continental Championship

SAWC - Ski-Archery World Cup

WASCH - World Archery Ski Championship

WASYCH - World Archery Ski Youth Championship

CJ - Competition Jury SAIJ (s) - Ski-Archery International Judges

K - Kneeling

MA - Member Association

S - Standing

TD - Technical Delegate

33. Appendix 1

Material Catalogue

33.1. General

33.1.1. Purpose

The purpose of the World Archery Material Catalogue is to regulate all aspect of World Archery Ski-Archery competition related material. Only the approved material can be used.

33.1.2. Types of Material.

The term material is sub-divided into two major categories:

Competition equipment and Organisation equipment.

33.1.2.1. Competition Equipment.

Competition equipment refers to all items that an athlete wears or carries for a competition and official or unofficial practice during an event. Competition equipment includes e.g. skis, poles, bindings, boots, bow, arrows, harness, clothing; and accessory equipment such as gloves, goggles and earmuffs.

33.1.2.2. Organisation Equipment.

Organisation equipment consist of all the other material that is required to conduct a World Archery Ski-Archery competition or practice during an event, that is not worn or carried by the athlete. Examples of organisation equipment are: targets, timing equipment, mats, wind flags, signage and equipment measuring devices.

33.1.3. General Prohibitions.

In principle all material is prohibited which:

- Affects the natural movements of feet and arms during push-off action or those that enhance it (such as spring devices or other mechanism in skis, poles, bindings or boots).
- Makes use of sources of energy not originating from the athlete such as artificial heating devices, chemical energy suppliers, electrical batteries, mechanical aids etc.
- Affects the external conditions for the competition to the detriment of other athletes, such as changing the track or snow conditions.
- Increases the risk factor for injury of athletes and other persons who are authorised to be present on the competition facility, when used normally.

33.2. Material Specifications

33.2.1. Competition Equipment

33.2.1.1. Competition Skis.

Competition skis shall have the following characteristics:

- Ski length: minimum length is the height of athlete minus 4cm; no maximum limit;
- Ski width: minimum 40mm, maximum no limit;
- Ski tip section: minimum width of the ski tip area is 30mm;
- Curvature: measured under binding, minimum from ground shall be 20mm; maximum from ground shall be 35mm;
- Ski tail section: when the unweighted ski is placed on a flat surface, the height of the ski tail from the surface shall not exceed 3cm;
- Weight: the total weight of a pair of skis shall be at least 750 grams;
- Type of construction: no limit;
- Shaping: both skis shall have the same type of construction, so that there is no difference between the left and the right ski. There is no restriction on the types of lamination construction used. There are no limitations on rigidity in any dimension;
- Gliding surface: the entire length of the running surface can either be smooth or slightly grooved in the longitudinal direction. Except for the guiding grooves, the entire length and width of the running surface shall be flat. Engraved or impressed climbing aids such as scales or steps are permitted. Devices that are activated by other than the athlete's own muscular power are not permitted;
- Top surface: no limitations;

- Edges: the sidewalls may not be angled as they extend upwards so that the ski base becomes narrower than the upper surface (wedge form not allowed);
- Stress properties: no limitations;
- Ski bindings: no restrictions on the type of material used or its make;
- Competition ski boots: no restrictions on the type of material used or its make.

33.2.1.2. **Competition Ski Poles.**

33.2.1.2.1. **Use of the Poles.**

In the competition, athletes shall use two poles of equal length, one in each hand.

33.2.1.2.2. **Specifications.**

The maximum length of the poles shall not be longer than the athletes body height, measured by placing the pole tip on the ski in front of the binding;

The pole shall have a fixed length: the shaft shall not be telescoping or variable length;

The pole shall not have any energy source to improve push, such as springs or other mechanical devices;

There is no upper or lower weight limit for poles;

The poles may be asymmetrical: there can be a distinct right and left hand pole;

The pole shall not cause changes to the competition conditions such as changes to track or snow conditions;

The handgrip shall be permanently fastened to the shaft. There are no restrictions concerning its geometry, construction or material;

The strap shall be connected to the handgrip or the shaft. It can be adjustable both in length and width. There are no restrictions on materials;

There is no limitation on the shape or material of the shaft, or on the mass distribution;

Exchangeable baskets with different geometric features and materials to match different snow characteristics are allowed;

The tip may be connected at any angle to the shaft. One or more tips are allowed. There are no restrictions on materials.

33.2.1.3. **Clothing.**

Advertising on the competition clothing shall be in accordance with the current World Archery regulation.

No adhesive material, such as textile texture, wax, resin, glue or extra stitching (except for fastening or padding) is allowed on the outside of the clothing.

33.2.1.4. **Bow.**

33.2.1.4.1. The Recurve bow is a tool consisting of a stiff central part and two peripheral flexible parts ending in a tip with a string nock. The bow shall be of a simple design, either take-apart (with wooden or metal riser) or of one-piece construction. The bow is braced for use by a single string attached directly between the two string nocks only, and in operation is held in one hand by its handle (grip) while the fingers of the other hand draw, hold back and release the string. Multi-coloured bow risers and trademarks located on the inside of the upper limb are permitted. The draw weight shall not exceed 35lbs.

33.2.1.4.2. **Draw weight measurement.**

The arrow is marked 1.5" (3.8cm) back from the point with a black mark. Then the bow is drawn with a bow scale until the black mark touches the centre of the cushion plunger. The checked weight is recorded. The arrow length to be recorded is measured from the inside of the nock to the end of the point (full length).

33.2.1.5. **The Bowstring**

A bowstring of any number of strands of the material chosen for the purpose with a centre serving to accommodate the drawing fingers, a nocking point to which may be added serving(s) to fit the arrow nock as necessary, and to locate this point one or two nock locators may be positioned, and at each end of the bowstring a loop to be placed in the string nocks of the bow when braced. In addition one attachment is permitted on the string to serve as a lip or nose mark. The serving on the string shall not end within the archer's vision at full draw. It is possible to use a peep-hole in addition.

33.2.1.6. **The Arrowrest.**

An arrow rest, which can be adjustable, any moveable Pressure Button, Pressure Point or Arrowplate may all be used on the bow provided they are not electric or electronic and do not offer any additional aid in aiming. The Pressure Point shall be placed no further than 4cm back (inside) from the throat of the handle (pivot point) of the bow.

33.2.1.7. **Draw Check Device.**

A draw check device, audible or visual, other than electric or electronic, may be used.

33.2.1.8. **Bowsight.**

A bowsight for aiming is permitted, but at no time may more than one such device be used. A bow sight attached to the bow for the purpose of aiming, which may allow for windage adjustment as well as elevation setting is subject to the following provisions:

- It shall not incorporate a prism or lens or any other magnifying device, levelling or electric or electronic devices nor shall it provide for more than one sighting point;
- A bow sight extension is permitted;
- A plate or tape with distance marking may be mounted on the bow as a guide for marking, but shall not in any way offer any additional aid;
- If the bow sight is attached to the bow riser, no screws may project into the bow window;

33.2.1.8.1. Bow sight, counter-weights or stabilisers are permitted provided that they do not project more than 5cm from the most forward point of the back face of the bow.

33.2.1.8.2. The maximum horizontal projection of bow equipment is 5cm to permit the use of a cushion plunger and a bowsight.

33.2.1.9. **Arrows.**

An arrow consists of a shaft with head (point), nock, fletching and if desired, cresting. The arrows of each athlete shall be marked on the shaft with the athlete's name or initials, and all arrows used by any athlete shall carry the same pattern and colour(s) of fletching, nocks and cresting, if any.

Only fully aluminium arrows are allowed. When shooting at dropping targets, the arrows shall have points that are hemispherical, the diameter of the points may be the same or up to 5% larger than the diameter of the arrow shaft. All arrows of a competitor are of the same length.

33.2.1.10. **Finger Protection.**

Finger protection in the form of finger stalls or tips, gloves, shooting tab or tape (plaster) to draw, hold back and release the string is permitted, provided they do not incorporate any device that shall assist the athlete to hold, draw and release the string. A separator between the fingers to prevent pinching the arrow may be used. An anchor plate

or similar device attached to the finger protection (tab) for the purpose of anchoring is permitted. On the bow hand an ordinary glove, mitten or similar item may be worn but shall not be attached to the grip.

33.2.1.11. **Carrying Harness.**

There are three permitted ways to carry the bow and the arrows:

- Straps attached directly to the bow and with a container of the arrows attached to the bow. The bow shall be carried with the sight window turned toward the back of the athlete;
- A soft harness which shall firmly keep the bow in such a way that it can not slip off even in case of a fall, with a container of the arrows attached to the bow. The bow shall be carried with the sight window turned toward the back of the athlete;
- A stiff harness which shall firmly keep the bow in such a way that it can not slip off even in case of a fall, with a container of the arrows which can be attached either to the bow or to the harness. The bow can be slipped into the harness at the discretion of the athlete.

The three carrying methods shall comply with the rules and allow carrying the bow vertically on the back, between the shoulders, in such a way that the lower end of the bow does not exceed half the distance between the centre of the knee and the rotation axis of the thigh-bone.

33.2.2. **Organisation Equipment**

33.2.2.1. **Targets.**

33.2.2.1.1. **Types of Targets and General Specifications.**

There are two main types of targets used for Ski-Archery competitions and practice:

- Targets with paper target faces and
- Drop-down targets.

The colour of the faces shall be black with a white spot.

The 'hit' zone is of 16cm in diameter.

The shape and dimensions for both targets are shown in the following diagram:

(see image 2: Ski-Archery at page 266) measured in cm.

The height of the centre of the target/target face shall be 1m above the level of the shooting line. The release device of the dropping face shall allow the fall of the face when hit on its lower end by a force of 1.10kg (calculated on the basis of an arrow weight of 18g and a speed of 130km/h).

33.2.2.1.1.1. **Targets with paper target faces.**

The paper target faces shall be fixed to a soft support (target butt) fit for stopping the arrows. The faces shall be arranged as mentioned above. Behind the targets there shall be placed a white net or a similar device to stop the arrows that have missed the target. The height of the net and of any similar device shall be 1m above the top of the target but at least 2m high.

33.2.2.1.1.2. **Drop-down Targets.**

The drop-down targets are made up of fold-away elements made of material that does not cause any damage to the arrows;

The working mechanics shall be made in such a way that they cannot be damaged by the hit of the arrows;

They shall have a reset system that can be operated from the shooting line;

Any part of the target or its support likely to damage an arrow shall be covered. The protective devices shall be made of material that prevents the penetration and breaking of the arrows;

The entire target frame, except the drop-down faces, shall be white.

33.2.2.2. **Start Numbers.**

Start number pullover bibs shall be used. The other two numbers shall be placed on both thighs.

33.2.2.3. **Timing Equipment.**

For WASCH, WASYCH and SAWC competition computer driven, electronic timing equipment shall be used. The equipment shall have an electric or electronic sensor at the start and the finish. Additionally the timing equipment system shall be able to receive and process manually or automatically activated intermediate time signals.

For manual timing good quality professional stopwatches or manually activated electrical timing devices shall be used.

34. **Appendix 2**

Tasks and Responsibilities of Ski-Archery International Judges

34.1. **Ski-Archery International Judges' Tasks**

34.1.1. **Prior to the competitions.**

SAIJs shall arrive at the event site in time to prepare prior to the first official practice. On arrival they shall announce their presence to the chairperson of the Tournament Judge Commission and the TD. They attend the Team Managers meeting. Also they shall contact the Organising Committee concerning their area of responsibility.

34.1.2. **During the competitions.**

To prepare and control each competition, the SAIJs shall:

- Stay in their areas to supervise all activities to ensure the correct and orderly conduct of the part of the competition which is their responsibility;
- Intervene to stop an error from being made;
- Assist and advise the organising officials if requested;
- Ensure all safety precautions are being carried out;
- Report to the chairperson of the Tournament Judges Commission when significant activities occur such as the first and the last start, the first and last athlete on the shooting range, first finish, etc., and if anything unusual occurs such as an injury, etc.;
- Observe violations of the rules and report them to the chairperson of the Tournament Judge Commission;
- Carry out any other tasks as directed by the chairperson of the Tournament Judge Commission or the TD.

34.1.3. **After the competitions.**

At the end of each competition the SAIJs shall:

- Report to the chairperson of the Judges Commission that all is clear for their area or report the problems which have occurred and have not been previously reported: these reports shall be made im-

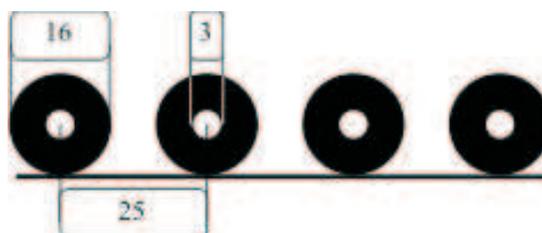


Image 2: Ski-Archery

mediately when it is possible in order to assist the speedy posting of Interim Results and the conduct of the unofficial awards ceremony;

- Report to the Competition Jury about the circumstances of penalties, when so directed;
- Hold a short evaluation meeting about the competition for the chief and supervisor of the area.

34.2. Ski-Archery International Judges' Responsibilities

34.2.1. General.

SAIJs are directed by the chairperson of the Tournament Judge Commission concerning the appropriate preparations and the correct and orderly conduct of competitions in their areas of responsibility. The chairperson of the Tournament Judge Commission is the liaison between the SAIJs, the TD and the Organising Committee. He is responsible for all the necessary information from the Judges reaching the TD and the Organising Committee. SAIJs are not in charge of the conduct of activities in their areas, but are responsible to ensure that all operations are carried out correctly. The primary relationships for SAIJs within the Organising Committee is mentioned in brackets for each area of responsibility.

34.2.2. Specific areas of responsibility:

34.2.2.1. Course control (SAIJ ? Chief of Course):

All course matters including configurations of loops, technical specifications, grooming, signage and fencing, control and control points, access control, TV zones layout and enforcement, forerunners, communication, safety and first aid arrangements.

34.2.2.2. Range Control (SAIJ ? Chief of Range):

All range matters including layout and configurations, specifications, targets and their operations, penalty loop, coaches enclosure, signage and numberings, lane markings, wind flags, bow racks, grooming, scoring, control procedures, communication and safety.

34.2.2.3. Start/Finish Control (SAIJ ? Chief of Timing):

All start/finish area matters and timing system including layout, configurations, specifications, relay hand-over zone, start clock and course sequence board, photo-finish camera when appropriate, arrangements for athletes' clothing, grooming, signage and fencing, traffic flow and control, start and finish procedures, communication, timing procedures and equipment, and safety.

34.2.2.4. Material Control (SAIJ ? Timing Equipment and Material Control Supervisor):

All material control matters including timing, control equipment, preliminary examination of equipment, start and finish control, layouts in consultation with Start/Finish SAIJ, control procedures, traffic flow and control, communication and safety.

