

CHAPTER 13: THE WORLD ARCHERY BEGINNERS' AWARDS PROGRAM

13.1. Introduction:

This World Archery Beginners' Award Program Manual is a guide for beginner archers and their Level 1 archery coaches.

13.1.1. To the Level 1 Archery Coaches:

Thank you for promoting archery!

This guide will help coaches in properly educating novices in archery and in evaluating their progress.

We encourage you to make regular use of the World Archery Level 1 Coaching Manual and/or audio-visual document in your coaching activities.

13.1.2. To the Beginner Archers:

Congratulations on taking up Archery!

This chapter presents the curriculum of each of the 7 levels of the World Archery Beginners' Awards Program. It will help you to develop your general shooting skills, knowledge of archery and performance. Your progress will be encouraged and rewarded by the earning of World Archery Beginners' Award pins.

After completion of the Entry level program, you will be encouraged to take part in some World Archery tournaments, through which you can win other World Archery awards specific to each archery discipline.

World Archery wishes you a life of enjoyment within the World Archery family.

13.1.3. The World Archery Beginners' Awards Program at a glance:

The World Archery Beginners' Awards Program has been designed to be implemented in all countries of the world at any time; incorporating Indoor and Outdoor disciplines. Up to seven awards lead the novice:

- from a very short shooting distance - 6 to 10 meters, depending on the archer's age;
- to the shortest Indoor distance - 18 meters, but on a bigger target face than the World Archery official one for this distance;

- and even further - to 26 meters on an 80 cm target face, which is close to the first World Archery Outdoor distance, 30 meters.

This process is not only based on score, since skills, knowledge and know-how are also assessed; hence the main goal of the World Archery Beginners' Awards Program (BAP) is the archer's education as a whole.

13.2. Overall presentation

13.2.1. Goals:

World Archery has produced this manual to guide beginners in assessing their progress during the long period covering the entry-level program before they compete in official tournaments.

13.2.2. Evaluation principle

To earn any of the World Archery Beginners' Awards, you have to reach a minimum level of:

- score;
- skill development;
- Knowledge and/or know-how.

13.2.2.1. SCORE

Your performance is evaluated at reduced shooting distances and number of shots. At each stage, 15 arrows are shot at an 80 cm target face.

Note about the shooting distances:

Seven shooting distances are on the program. This high number of shooting lines could be a problem in some facilities; for example, with a permanent wall of target. If so, you can modify the requested score of:

- 1 hit per meter of change in the shooting distance for the Feather Awards
- 3 points per meter of change in the shooting distance for the Arrow Awards

Note about the target faces

Only a few factors can involve a change of the target faces that if the archer is not accurate enough.

Decision factors can be:

- Very young archers
- Instinctive archers
- Disabled archers

In this case the coach can decide to use the 122 cm target face. This decision is to take with absolute caution and just in exceptional case.

See the evaluation form for the shooting distance for each award level.

13.2.2.2. SKILLS DEVELOPMENT

The achievement of a good score is only a consequence of well-implemented skills, as described in the World Archery level 1 Coaching Manual.

Thus, for each development level, some skills are expected to be acquired. Their assessment is based on some key elements described in the World Archery Entry Level 1 Coaching Manual. If you need help in evaluating these skills, do not hesitate to consult this reference manual. To help with your training, collaborating with an archery coach is also strongly recommended

13.2.2.3. Knowledge and/or know-how

Learning archery is not restricted to learning the steps of the shooting sequence. The novices have also to:

- play safe, and know the safety rules;
 - know the specific terminology;
 - look after their equipment - to brace the bow, maintain and repair the equipment (i.e. arrows, string, arrow-rest), etc.;
- learn the competition rules.

13.2.3. Delivery of the World Archery Beginners' Awards

The following organizations are entitled to order the World Archery Beginners' Awards from the World Archery office:

- Member Associations (the National Archery Federations) in good standing with World Archery;
- Clubs and Regional Archery Associations, as long as they can prove their membership in World Archery Member Association is in good standing with World Archery.

Note: In some countries, only the National Archery Federation is entitled to sell or distribute the World Archery Beginners' Awards to its Clubs and Regional Archery Associations. Please check with your respective National Archery Federation, if you are allowed

to directly order the Beginners' Awards to World Archery.

In most cases, clubs maintain a stock of World Archery Beginners' Awards, which they have ordered either through their National Archery Federation, or directly from the World Archery office.

13.2.4. Types of Awards

Two sets of beginners Awards are available:

- One set for the youngest beginners (under 12 years old) and for some disabled novices. It is up to the coach (or person in charge of the entry level programme) to decide the archer's eligibility to challenge for these awards. World Archery does not ask for any proof of age or disability. This group of awards is entitled "FEATHERS".
- One set for pre-teens, teenagers and adults: This group of awards is entitled "ARROWS".

The awards are pins and can be displayed, on the quiver for instance.

13.2.5. Recommended examination guidelines for awards

Develop a schedule of specific sessions for challenging the World Archery Beginners' Awards and require a minimum attendance in entry-level practice sessions to be eligible to take part in an evaluation session.

For instance:

Schedule a specific session for challenging the World Archery Beginners' Awards every 2 months; open only to those who have attended at least 7 practice sessions during the two preceding months.

To challenge for a World Archery Beginners' Award, those who have attended less than 7 practice sessions will have to wait until the next specific challenge session and complete at least 7 practice sessions before then.

Beginners who fail some components of the evaluation may re-challenge these items only, but they must retrain on all the modules failed and the reassessment/evaluation cannot be retaken until the full program is completed.

All novices must start by challenging the Red Feather or the White Arrow. Starting at any other level would make it difficult to evaluate the

skills, knowledge and know-how that were supposed to have been learned previously.

World Archery Feather Awards at a glance.

In order to measure my progress, every 2 months* my club organizes, a threefold evaluation through which I can get the World Archery Red Feather then the Gold Feather

* As an example

With 15 arrows, I have to hit an 80cm target face, scoring 6 or better, 12 times.

At 6 meters for the WA Red Feather.

At 8 meters for the WA Gold Feather

I have to answer correctly several questions about the basic safety rules and I have to know how to take good care of the equipment, such as retrieving the arrow and bracing the bow correctly.

My shooting form, from stance to arrow loading, is evaluated.

After the World Archery Gold Feather, I will challenge the World Archery Arrow Awards, starting with the White one at 10 meters

World Archery Arrow Awards at a glance.

In order to measure my progress, every 2 months (for instance) my club organizes, a threefold evaluation through which I can get the various World Archery Arrows. Each of the 5 Arrow awards is from one color of the archery target face.

With 15 arrows (half an Indoor round), I have to score 115 points on an 80cm target face, at:

10 m for the White World Archery Arrow.

14 m for the Black World Archery Arrow.

18 m for the Blue World Archery Arrow.

(which is an official FITA Indoor distance, but my target face is bigger than the official one. Nevertheless I can shoot from the same shooting line as the experienced archers).

25 m for the Red World Archery Arrow.

30 m for the Gold World Archery Arrow.

Then I will be ready to shoot 30 meters, the shortest Official Outdoor World Archery distance.

I have to answer correctly several questions about:

- Safety;
- Archery terminology /language;
- Rough description of the archery disciplines;

I also have to know how to:

- Install/assemble the equipment;
- Handle the equipment;
- Maintain the equipment;
- Register to take part in a local tournament.

My shooting form and sequence are evaluated.

When I have achieved the Gold FITA Arrow, I am able to attend some local tournaments shot at short distances

13.3 The FEATHERS



15 Arrows				
1 Hit	2 Hit	3 Hit	End	Total
○	○	○		
○	○	○		
○	○	○		
○	○	○		
○	○	○		

Example of a completed scorecard:

15 Arrows				
1 Hit	2 Hit	3 Hit	End	Total
●	○	●	2	
○	●	●	2	4
●	●	●	3	7
●	●	○	2	9
●	●	●	3	12

The beginner who successfully completes the three evaluations for a Feather level earns one of the pins shown above.

13.3.1. Recommended guidelines for the Feathers

13.3.1.1. Score evaluation (for Feather awards)

Where: Indoor or Outdoor.

Warm-up: Not limited. Up to the coach.

Target face: 80 cm spot target face, only the 6 to 10 rings count.

Alternately a full 40 cm target face can be used although it is tougher to aim at.

Target height: the centre of the target face should be 80 cm to 1 meter from the ground/floor.

Arrows per end: 3

Number of ends: 5

Time per end: Not limited (some kids and disabled people need a lot of time to load the arrow on the bow).

Total number of arrows: 15 (half the number of arrows shot at one of the 2 Indoor distances).

Scoring: A simplified scoring system is proposed in order to allow the youngest to score by themselves. An arrow inside or touching the outermost line (of the "6" zone) is worth one hit. See the sample of scorecard below.

When a 40 cm target face is used, the scoring zone covers the 1 to 10 ring and scores 1 point. 12 hits are required.

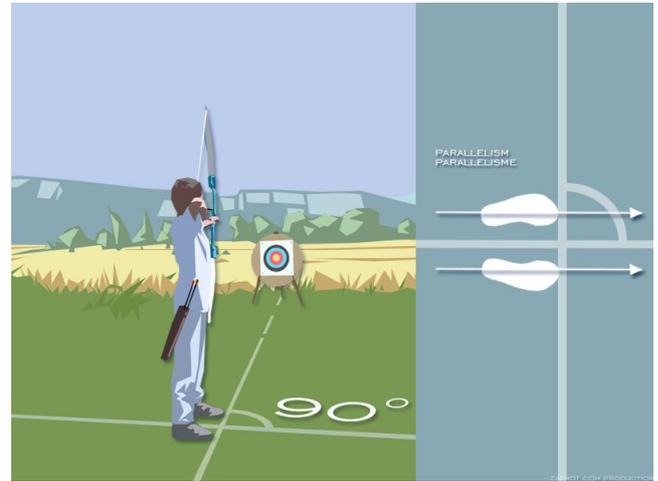
13.3.1.2. Skills Evaluation (for Feather awards)

A coach should practically evaluate each candidate on the respective skills for the Red and the Gold Feather awards. Sections 13.3.2.2. and 13.3.3.2. detail the skills for each of these 2 Feather Awards.

13.3.1.3. Knowledge and Know-How Evaluation (for Feather awards)

Sections 13.3.2.3. and 13.3.3.3. detail the knowledge and know-how that are required for the Red and the Gold Feather awards. For the knowledge, an online multiple-choice questionnaire can be posted. The novices could download it, complete it and submit it by a deadline. The know-how has to be evaluated during a practical session.

13.3.2. Red Feather



Proper stance on the shooting line

13.3.2.1. Performance:

From a shooting distance of 6 meters, you must achieve a minimum of 12 hits of 15 arrows shot in 5 consecutive ends of 3 arrows at either:

- an 80 cm spot target face,
- a full 80 cm target face, only the 6 to 10 rings count for one hit
- an 40 cm target face, any scoring zone counts for one hit.

13.3.2.2. Skills

FEET POSITION (Stance)

Objective:

Consistency in positioning and spacing relative to the archer, the shooting line and the target, achieving optimal stability.

Form:

Feet parallel on the shooting axis, set at approximately shoulder width.

Rationale:

This stance gives the archers the opportunity to repeat actions easily and accurately, and provides sound support to the pull and push efforts in the shooting plane. It gives consistent direction to the body in the shooting plane and avoids back problems.

Safe and proper arrow loading

Objective:

Identical placement of the arrow on the bow. The action must be performed in a safe manner to protect the archer, the other archers, and the equipment.

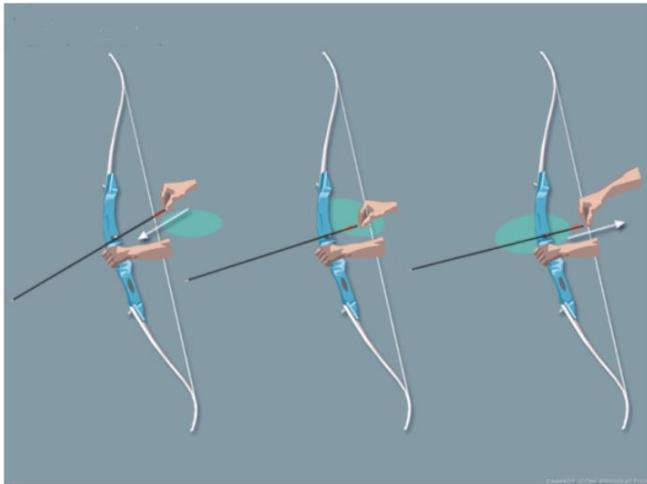
Form:

Hold the arrow by the nock, place the arrow on the rest, correctly orient the arrow*, and nock it on the string.

(*) Arrows with four vanes do not require orientation and more quickly stabilize the arrow on its trajectory.



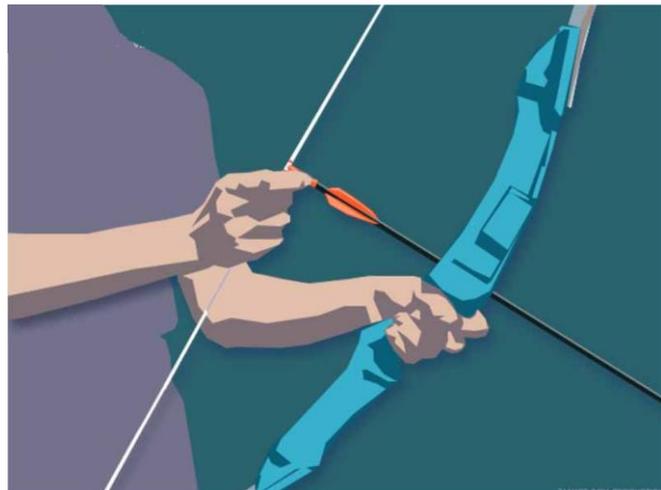
Taking an arrow out of the quiver



Arrow loading

Rationale:

Taking hold of the arrow in front of the vanes makes nocking more difficult and risks damaging the fletching if the hand slips during the nocking process. A finger must not be used to hold the shaft on the arrow rest since the rest does not endure strong vertical pressure and could be damaged.



Nocking the arrow



Finger pressure damaging the arrow rest

12.3.2.3. Knowledge and/or Know-How

You must know the following subjects:

BOW SAFETY

- Releasing the string from full draw without an arrow on the string could cause damage and/or injury.
- After shooting one end put the bow on a bow stand or rack located in the equipment lane.
- Bow stands located behind the waiting line are ideal for storing bows when they are not being used during training sessions.



Equipment stored in the equipment lane

When shooting arrows at a shorter distance than usual (for a specific drill, for instance), you can

lay your bow on the floor or ground 3 m behind the archers. When you return to the regular shooting distance, store your bow on a rack behind the waiting line or on the floor.



Movable bow-stand holding multiple bows

ARROW LOADING SAFETY:

The arrow should be placed on the string only while you are standing on the shooting line and a clear signal has been given (meaning that everyone is behind or on the shooting line).

You must straddle the line or have both feet on the line before loading the arrow.

SAFE ARROW RETRIEVAL/COLLECTION

When approaching the targets, care must be taken to avoid walking into arrows sticking into the ground or target. Nocks are very sharp. Pick up all arrows that have fallen short of the target, regardless of who their owner may be.

Make sure that no one is directly behind the person pulling the arrows. Arrows can come out of a target suddenly and the nock may hurt anyone who is too close. Bending over in front of the target is dangerous, as you may hit an arrow either while bending or straightening up. You should wait beside the target to collect arrows.

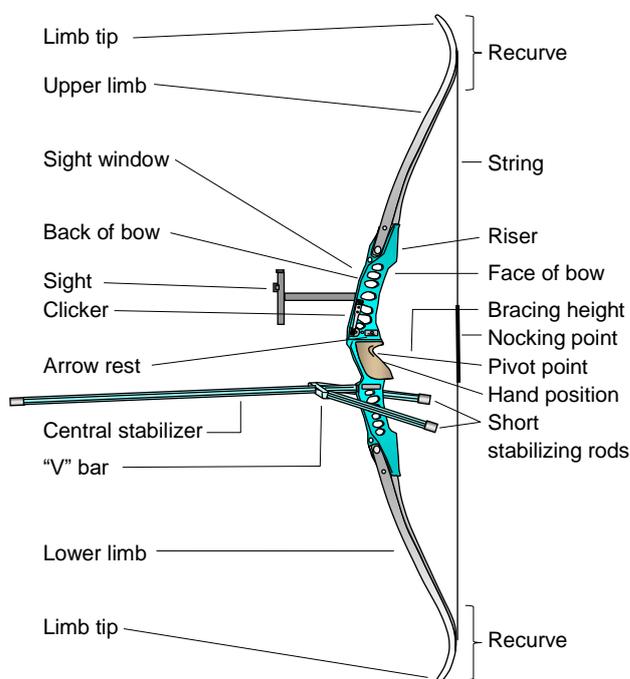
To pull an arrow out of the target, press one palm hand flat around the arrow sticking in the target. With the other hand, grab the arrow shaft close to the target face and pull out the arrow in line with the shaft and without bending the arrow shaft.

When pulling an arrow out of the grass, do not pull the arrow straight up; you could bend or break the arrow shaft. Instead, move the grass away from the fletching, especially if you are using natural feathers and pull the shaft back in line with the shaft and along the grass. When the point is out of the grass you can lift the arrow up.

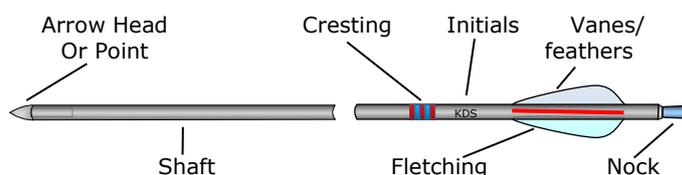
EQUIPMENT TERMINOLOGY

You should know the names designating the various parts of your equipment. During the evaluation you will have to name five parts or components of the bow.

1) Recurve bow:



2) Arrow



VISUAL AND ACOUSTIC SIGNALS

The archer must know the visual and especially the acoustic signals.
Before the start of the shooting everybody has to wait behind the waiting line.

The archer can take up the bow and wait for the two acoustic signals.

Now he can go to the shooting line. After the next single acoustic signal the shooting can start and will finish at the latest when the next 2 acoustic signals are to hear.

Evaluation form for Red Feather Candidates

Name of the beginner: _____ Form A

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

PERFORMANCE	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result)
Shooting distance	6 meters			
	12 hits			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual.
Warm-up	Knowing and executing warm-up exercises named by the coach			#11.1
Feet position (Stance)	Feet either side of the shooting line			#6.1.1
	Feet at shoulder width apart			#6.1.1
	Line of feet square to the shooting line			#6.1.1
	Feet parallel			#6.1.1
Safe and proper arrow loading	<i>Implemented with bow <u>vertical</u></i>			#6.2.1
	<i>No finger pressing the arrow on rest</i>			#6.2.1
	<i>Arrow properly rotated cock feather away from bow window</i>			#6.2.1.
KNOWLEDGE and/or KNOW-HOW	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Acoustic signals	Respect the acoustic signals			Chapter 13.5; Visual and acoustic time control
Bow safety	No dry firing (dry loosing)			#2.3
	Set the bow in equipment lane after shooting the end			#2.2.2
Arrow loading safety	<i>Load the arrow on the bow only when everyone is behind the shooting line and the signal is given</i>			#2.2.1 & 2.2.2
	<i>To be done only when the feet are set each side of the shooting line</i>			#2.2.2
Safe arrow retrieval/ collection	Walk carefully to target (do not run and watch your step)			#2.3
	Stand to the side of the target (not behind arrows)			#2.2.2
	Properly pull the arrow out of the target (or grass)			#2.4
Equipment terminology	Can name 3 parts or components of the bow			#9.3.1
TOTAL				
TOTAL	18 positive evaluations are required			** Granted ____ not yet granted ____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the assessor/evaluator: _____

13.3.3. Gold Feather



13.3.3.1. Performance

From a shooting distance of 8 meters, you must achieve a minimum of 12 hits of 15 arrows shot in 5 ends of 3 arrows at either:

- an 80 cm spot target face,
- a full 80 cm target face, only the 6 to 10 rings count for one hit
- a 40 cm target face, any scoring zone counts for one hit a

13.3.3.2. Skills

BODY SETTING

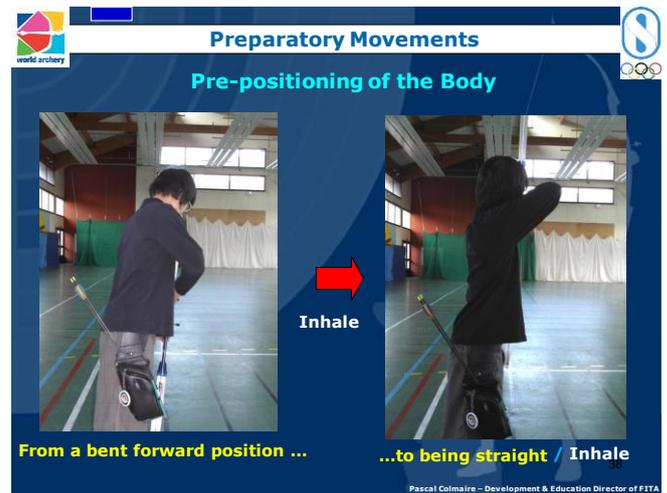
(from before drawing until full draw)

Objective:

Provide an identical, stable foundation that facilitates a consistent repetition of upper body actions as well as optimal general balance. It should also allow the position of the aiming eye at the same stable spot in the space on each shot. Imagine the aiming eye as the top of the "big pyramid" (your coach will instruct you on the pyramid system – refer **to sections** 6.5.1. Complementary Knowledge and 6.10. Complementary Knowledge for details)

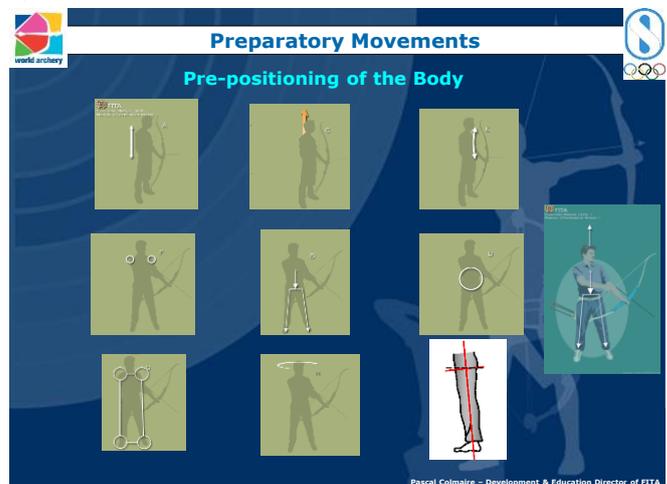
Form:

Most novices are slightly bent over while setting up the string and bow hands. Moving from a bent over position to an upright one creates a good base at the beginning of the execution process of the shot.



The following illustrations present alternative ways to pre-set the body. From Left to Right and Top to bottom:

- Stay upright with flat and straight back;
- Head stretched upwards;
- Flat chest - *Do not move the chest up when stretching the head up;*
- At the same time, keep the shoulders low and down;
- Feel a strong lower body, and feel the body weight spread on both feet;
- Feel a strong belly and a low centre of gravity;
-



Keep the entire body in the shooting plane with shoulders above hips and feet;

- Turn the head toward the target;
- A little less weight on heels than on the front part of the feet;
- The illustration on the right-hand side summarizes the vertical firmness well.

LEGS

Form:

The legs form an upside-down "V" that is symmetrical around the vertical axis going through the head. Weight is placed as equally on both feet as possible.

Rationale:

The body weight is distributed approximately equally on both legs. Swaying in the vertical plane is reduced because the body weight is slightly forward (toward toes).

The string leg participates in the production of the push while the bow leg contributes to the pull. The two efforts strengthen your vertical body axis and generate a downward pressure, providing a solid foundation for upper body work and good stability.



Flat chest, powerful belly and body weight equally shared on both feet



String (right) leg assists the push effort



Bow (left) leg assists the pull effort

THE UPPER BODY

Initially the torso, shoulder, and head are positioned close to their final position.

Form:

Turn or tilt the pelvis backwards (flattening the lower back), and stretch the spine up while keeping the shoulders in the same plane as the hips. Lower your shoulders and flatten your chest - you may feel a slight stretching in the trapezius muscles. Turn your head toward the target (whilst maintaining the stretching up action) until your nose is directed toward the target.

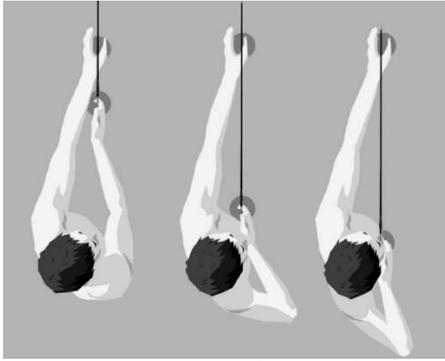
Rationale:

Stretching-up your head and spine assures an erect vertical stance. Tilting your pelvis, flattening your chest and the lowering your shoulders lower the centre of gravity, making your body more stable. Furthermore, it transfers energy from the upper body to the lower body, helping you to relax. Shoulders and the head are close to their final position, thus minimizing movement during the draw.

BODY SETTING_(end of draw)

Objective:

Draw the bow without disturbing the pre-set position achieved above. In fact, maintain this body position until after the shot.



Draw made in the shooting plane

simple, and control is easily preserved. Striving for symmetry will maintain balance in the shot. The production of effort is dispersed, which facilitates achieving symmetry, reduces local fatigue effects, and minimizes the risk of injury. The major muscles are used to generate the effort and full drawing effort is attained as soon as the draw approaches the face, which enhances the control of the shot. Because the beginning of the draw is faster, the archer saves energy.

13.3.3.3. KNOWLEDGE AND/OR KNOW-HOW

BOW ASSEMBLY:

You must learn from your coach how to properly mount the limbs onto and remove them from the riser (if you use a takedown bow). An assembled Recurve bow that has not been braced has the tips of the limbs towards the target (not towards you) when your hand is properly in the grip. On some older bows, due to a former World Archery rule, the internal part (the side facing you when your hand is properly in the grip) of the top limb is blank, while the limb specifications (length and weight) are written in the internal part of the bottom limb, as shown on the illustration below.



The top and bottom body remain well in place during the draw and end of draw

Form:

A balance between the production of traction and repulsion (pull and push) forces must be created and maintained throughout the draw. As previously noted, these pull and push efforts are supported by the legs.

Always stay in control, keeping momentum movements to a minimal or non-existent level. The drawing motion diminishes in speed as you near the facial reference, but it does not stop. The torso remains almost immobile. If there was no pre-draw, a slight rotation of the chest, aligning the shoulders with the shooting plane may occur.

The body is vertical or leans slightly toward the string leg. The shoulders remain low and the head remains in place and extended up - it should not move toward the string during the draw. The arrow always remains parallel to the ground and the string moves straight to the face in the shooting plane.

Rationale:

This form is easy to duplicate because the foundation stays in place, the movement is

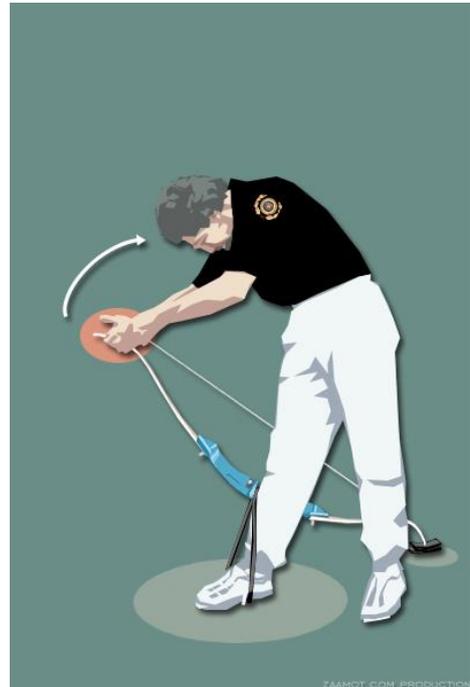


The technical specifications of the limbs are often written on the internal part of the bottom limb

BOW BRACING:

Your coach will most likely have your bow strung before the start of the first two or three practice sessions. Stringing and unstringing of the bow is usually taught on the third or fourth session when the students are a little more familiar with the equipment. Below we recommend some safe methods for stringing the bow.

A loop stringer is inexpensive, easy to use and makes the task of stringing the bow almost effortless. Like any other stringing methods, it is necessary to check the string positioning before taking the bow stringer pressure off the upper limb tip. Place a small piece of carpet or rubber on hard and rough ground to prevent damage to the lower limb tip. A tip protector on the lower limb would also serve this function and also help keep the string loop in the proper location.



Use of a string loop with 1 foot



Use of a string loop with 2 feet

You also can buy a bow stringer like the one show below from any archery shop. They are a little tricky to use properly at first, but over time and with experience they become simple and reliable tools.



Finally, a wall or pole-mounted bow stringer is another excellent device for setting the string on the bow. It is made of 2 pieces of metal cylinder, wrapped with something to protect the limbs, and affixed to a wall or pole.



SAFETY and ETIQUETTE on the SHOOTING LINE:

Only draw your bow back if you are on the shooting line. Never draw the bow with your bow hand higher than your drawing hand, and you should not shoot "cross-court" (toward a target that is not straight ahead) unless specifically directed to (for a competition or game, for instance).

Avoid talking on the line or otherwise distracting other archers during the shooting of the end.

Leave it to the coach to critique any archer's technique, but encouraging remarks are welcome at any time.

If your bow or arrow falls in front of the shooting line and you can reach it without leaving the shooting line, ensure that the archers on either side of you have their bows down at their sides before retrieving your equipment. Any arrow which cannot be retrieved without moving your feet on the shooting line should only be retrieved after shooting has stopped.

RANGE SAFETY:

Under no circumstances should anyone shoot if someone is downrange on the field. Arrows may glance off the targets or depart from their intended path.

The shooting line should be straight, not staggered.

When in a group where archers are not shooting at the same distance, it is safest to have the targets at the desired distances and all the archers on the same shooting line.



EVALUATION FORM FOR GOLD FEATHER CANDIDATES

Name of the beginner: _____

Form B

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

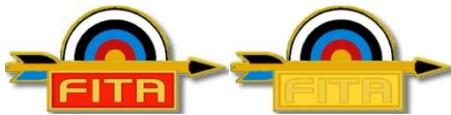
PERFORMANCE Shooting distance	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result)
8 meters	12 hits			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual.
Warm-up	Knowing and executing warm-up exercises independently			#11.1
Body setting (before drawing and at full draw)	Vertical body			#6.5.1
	Balance on 2 feet			#6.5.1.
	Spine and shoulders making a cross shape			#6.5.1.
<i>Body setting (end of draw)</i>	<i>Let the string hand land on face (chin and/or lips do not reach forward to the string)</i>			#6.8.1.
KNOWLEDGE and/or KNOW-HOW	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Equipment terminology	Can name 5 parts or components of the bow			#9.3.1
<i>Bow assembling</i>	<i>Know how to properly mount and remove the limbs on/from the riser</i>			<i>This evaluation can be omitted if there is no takedown bow</i>
Bow bracing	Able to brace their own bow			#9.3.2
<i>Shooting direction</i>	<i>Only draw towards a clear target butt from the shooting line (not toward anyone or the sky)</i>			#2.2.2
Safety and etiquette on the shooting line	Do not disturb (touch or talk to) other shooting archers			2.5
	How to retrieve an arrow that has been dropped on the floor			#2.2.2
Total	12 positive evaluations are required			** Granted ____ or not yet granted

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the assessor/evaluator: _____

13.4. THE ARROWS



The Red and Yellow Arrow FITA awards will be replaced with WA ones, once they will be out of stock

13.4.1. Recommended evaluation guidelines for the "Arrows"

13.4.1.1. Score evaluation (for the Arrow awards)

Where: Indoor or Outdoor.

Warm-up: No more than 4 ends (recommendation only).

Target face: 80 cm (a full one)

Target height: centre of the target face 1 meter to 1.3 meter from the ground/floor.

Arrows per end: 3

Number of ends: 5

Time per end: 2 minutes.

Total number of arrows: 15 (half the number of arrows shot at one of the 2 Indoor distances).

Scoring: As per World Archery Indoor and Outdoor scoring rules.

13.4.1.2. SKILLS EVALUATION (for the Arrow awards)

A coach should practically evaluate each candidate on the respective skills for the various Arrow Awards. The sections below detail the skills for each of these five Arrow Awards.

13.4.1.3. KNOWLEDGE and KNOW-HOW EVALUATION (for the Arrow awards)

The sections below detail the knowledge and know-how that are required for the five Arrow Awards. For the knowledge, an online multiple-choice questionnaire can be posted on the Internet site of the association the beginners belong to. The novices could download it, complete it and submit it by a deadline. The know-how has to be evaluated during a practical session.

White arrow candidates:

Depending on your current level, three cases are possible:

- a) You have not earned any Feather awards, but your coach wishes you to challenge the White Arrow (suggested for beginners who are 12 years old or older).
For this level, you must learn the "Skills" and "Knowledge and Know-How" for all three of the Red Feather, Gold Feather and White arrow levels.
Your evaluator will use form C1.
- b) You only have the Red Feather award
You should complete the Feather awards program by earning the Gold Feather (this applies to most of the youngest beginners; i.e. under 12 years old). Only after getting the Gold Feather will you be allowed to challenge the White Arrow.
- c) You already have the Gold Feather award.
You are ready to challenge the White Arrow level. Your evaluator will use form C2.

13.4.2 White Arrow



13.4.2.1. Performance

Shooting distance: 10 meters

Minimum required score: 115 points

13.4.2.2. Skills – Your shooting sequence should include the following

FEET POSITION:

For candidates having earned no World Archery Feather awards, see the "Skills" section of the Red Feather curriculum.

ARROW LOADING:

For candidates having earned no World Archery Feather awards, see the "Skills" section of the Red Feather curriculum.

BODY SETTING (before drawing and full draw):

For candidates having earned no World Archery Feather awards, see the "Skills" section of the Gold Feather curriculum.

BODY SETTING (end of draw):

For candidates having earned no World Archery Feather awards, see the "Skills" section of the Gold Feather curriculum.

RAISING THE BOW:

Objective:

Perform the preliminary movements with as little unnecessary motion and disruption to initial positioning as possible. This initial positioning must allow for an effective draw.

Form:

Synchronized raising of the two hands towards the target until both hands are level with the nose.

Throughout the process:

- the bow shoulder must stay as low as possible;
- the upper body (shoulders, chest and centre of gravity) stays in its lowest position;
- the arrow must stay within the shooting plane as it is moved up;
- the head and spine stay extended;
- the pelvis remains tilted (if this position is chosen).

Toward the end of the raising:

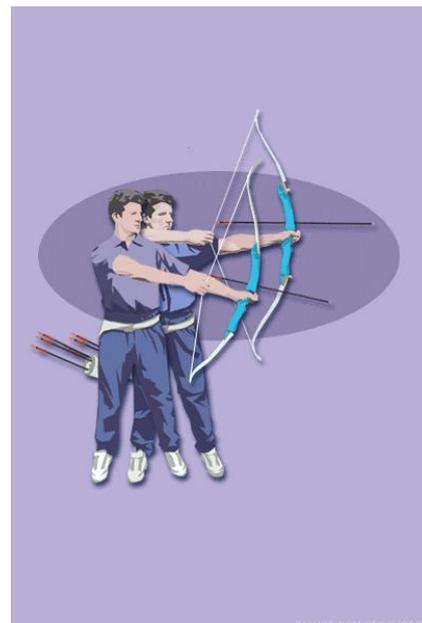
- both hands are moved up to the same level;
- the arrow is parallel to the ground;

At the end of the raising:

- the arrow is at the nose/eyes level;
- the string shoulder is lower than the arrow shaft;
- the string wrist is in line with the string forearm;
- a slight backward inclination of the torso toward the string foot is acceptable, but a straight body is recommended.

Rationale:

The simplicity of the movement makes it easy to repeat. It is a safe starting position for the draw, even if an arrow is inadvertently released. Raising the arms in this manner only slightly changes the body elements already in position, if at all. The forces exerted on the upper body facilitate the low positioning of the shoulders. The body's inclination toward the string foot counter balances the weight of the bow and moves the archer's centre of gravity away from the target (the use of bows with light mass weight will reduce this inclination).



13.4.2.3. Knowledge and/or Know-how – You must know the following

BOW SAFETY:

For candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of the Red Feather curriculum.

ARROW LOADING SAFETY:

For candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of the Red Feather curriculum.

SAFE ARROW RECUPERATION:

For the candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of the Red Feather curriculum.

BOW PREPARATION:

For candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of both the Red Feather and Gold Feather curricula.

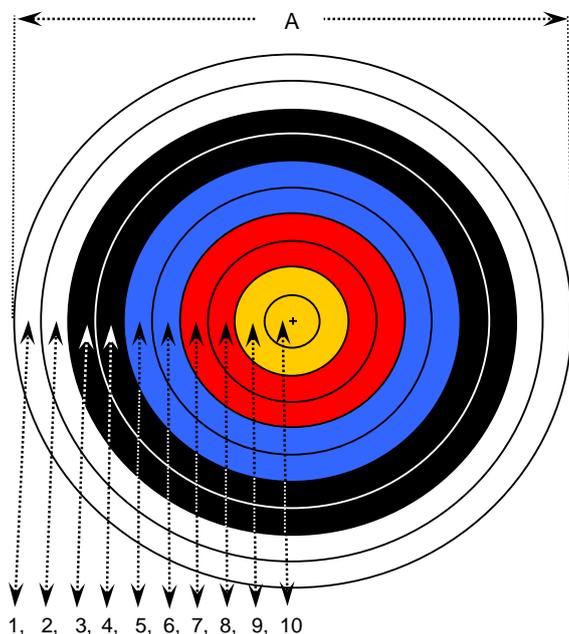
SHOOTING DIRECTION:

For candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of the Gold Feather curriculum.

SAFETY AND ETIQUETTE ON THE SHOOTING LINE: For candidates having earned no World Archery Feather awards, see the "Knowledge and/or Know-how" section of the Red Feather curriculum.

SCORING:

You should be able to identify the arrow's value.



You should know how to complete a scorecard for a complete "World Archery BAP round". The value that each arrow scores must be entered on the scorecards in descending order as called out by the athlete to whom the arrows belong. The other athletes on that target will check the value of each arrow called out and in case of disagreement call the assigned judge who makes the final decision.

Example of a blank scorecard (for BAP Arrow round only):

15 Arrows				
1	2	3	End	Total
10s:		Xs:		

Example of a completed scorecard (for BAP Arrow round only):

15 Arrows				
1	2	3	End	Total
X	8	5	23	
10	10	8	28	51
10	8	7	25	76
8	8	0	16	92
X	7	7	24	116
10s: 5		Xs: 2		116

EXECUTING THE WARM-UP ROUTINE:

A detailed description of the warm-up program for general and archery specific physics can be found in the chapter 11.1.

A routine for the warm up is important. Start with general cardio-vascular exercises as for example:

- light jogging jumping jacks

After this general warm up you will start with movements for general warm of:

- Torso
- Leg
- Shoulders

- Wrist and fingers
- Neck

Further you may do some warm-up exercises with a rubber band.

In the Chapter 11 of the Beginners Award Program Level 1 you will find a detailed explanation of possible exercises.

EXPLAIN THE ACOUSTIC SIGNALS

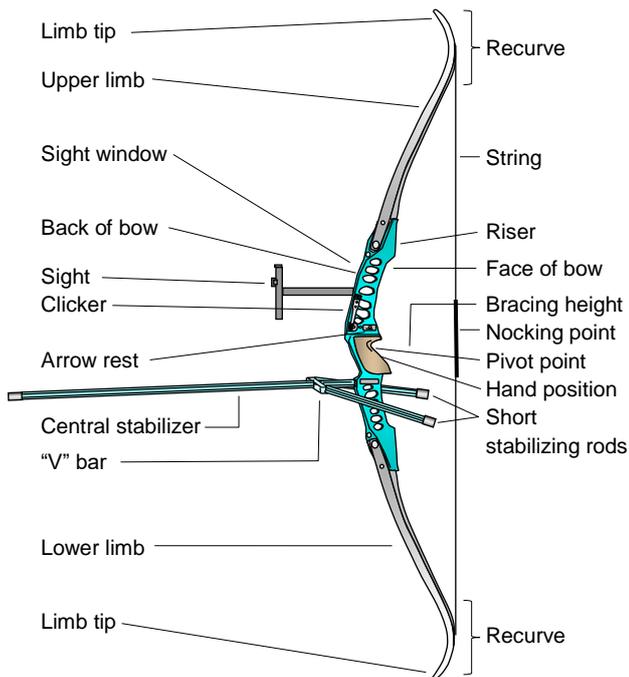
The couple rules for the acoustic signals can be found in chapter 13.5 of the WA rule book.

Make sure you use the same signal each time you want the archers to carry out a particular task, for example 1 whistle to start shooting; 3 whistles to collect the arrows.

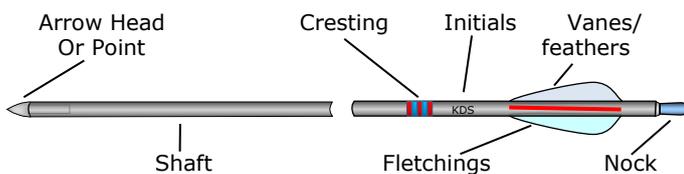
EQUIPMENT TERMINOLOGY

You should know the names designating the various parts of your equipment. During the evaluation you will have to name five parts or components of the bow.

3) Recurve bow:



4) Arrow



Evaluation form for **White Arrow** candidates
having earned **no Feather awards**.

Page #1 (start /front page)

Name of the beginner: _____ Form C1

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

PERFORMANCE Shooting distance	Required minimum score	Achieved *	*Not yet achieved	Total score
10 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual
Warm-up	Executing the warm-up routine			#11.1
Feet position (Stance)	Feet either side of the shooting line			#6.1.1
	Feet at shoulder width apart			#6.1.1
	Line of feet square to the shooting line			#6.1.1
	Feet parallel			#6.1.1
Safe and proper arrow loading	Implemented with bow vertical			#6.2.1
	No finger pressing the arrow on rest			#6.2.1
	Arrow properly oriented (index fletching away from bow window)			#6.2.1.
Body setting (before drawing and at full draw)	Vertical body			#6.5.1
	Balance equal on both feet			#6.5.1.
	Spine and shoulders making a cross shape			#6.5.1.
Raising	Synchronized hands			#6.6.1
	Raise hands while keeping the shoulders down			#6.6.1
	Hands at same height and at nose or eye level once raised			#6.6.1.
	Arrow parallel to the floor once raised			#6.6.1
Body setting (end of draw)	Let the string hand land on face (chin and/or lips do not reach forward to the string)			#6.8.1.

Evaluation form for **White Arrow** candidates
having earned no **Feather awards**.

Page #2 of form C1 (end / Back page)

KNOWLEDGE and/or KNOW-HOW	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Acoustic signals	Explain the acoustic signals			Rule Book: chapter 13.5; Visual and acoustic time control
Bow safety	No dry firing (dry loosing)			#2.3
	Place the bow in the equipment lane after end			#2.2.2
Arrow loading safety	Load the arrow on the bow only when the Field of play is empty, the shooting signal has been given and			#2.2.1 & 2.2.2
	done only when both feet are set, one on each side of the shooting line			#2.2.2
Safe arrow recuperation	Walk carefully to the target (not running and watching his/her step)			#2.3
	Stand to the side of the target (not behind arrows)			#2.2.2
	Properly pull the arrow out of the target (or grass)			#2.4
Equipment terminology	Can name 5 parts or components of the bow			#9.3.1
Bow preparation	Know how to properly mount and remove the limbs on/from the riser			This evaluation can be skipped if no take down bow is available
	Can brace his or her bow			#9.3.2
Shooting direction	Only draw towards a clear target butt from the shooting line (<i>not toward anyone or the sky</i>)			#2.2.2
Safety and etiquette on the shooting line	Not disturbing (touching or talking to) other shooting archers			2.5
	Properly retrieve an arrow that dropped on the floor			#2.2.2
Scoring	Identify each arrow's value			Chapter 14 Scoring
	Complete a scorecard for a complete round			Chapter 14 Scoring
TOTAL	33 positive evaluations are required			** Awarded ____ or Not awarded yet ____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

13.4.3 Black Arrow



13.4.3.1. Performance:

Shooting distance: 14 meters
Minimum required score: 115 points

13.4.3.2. Skills – Your shooting sequence should include the following:

DRAW PROCESS: See the "The Upper Body" section of the "Skills" from the Gold Arrow curriculum.

FULL DRAW (the hold)

Objective:

Body and equipment stability for effective aiming. Holding the bow at full draw without collapsing from the bow's draw weight or mass.

Form:

With the body in an upright position and keeping the torso still, let the chest and shoulders exert a steady downward effort while seeking to spread out the shoulders. Maintain an erect spine and head. Strike a balance between the push and pull forces, supported by an equal use of both legs and an engaged abdominal area. The constants are:

- the distance between the arrow and the bow shoulder in the horizontal plane;
- the distance between the chin and bow shoulder;
- the height difference between the arrow and the bow shoulder in the vertical plane;
- the height of the shoulders;
- the bow's vertical position;
- The positions of the torso and head.

Rationale:

This form strongly opposes the spring effect of the bow, which can cause the archer to collapse, and draws in the chest, facilitating string

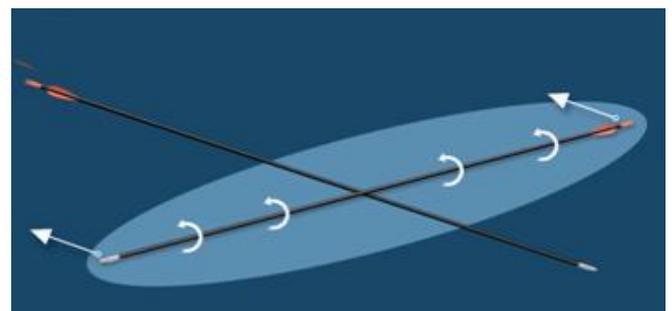
displacement. The production of effort is dispersed, which facilitates achieving symmetry, reduces local fatigue effects, and minimizes the risk of injury. Moreover, major muscles are used in generating the movement and effort and promote stretching the spine helping the archer stay erect and vertical. Flattening the chest and lowering the shoulders lowers the centre of gravity, making the body more stable. The combination of the above actions contributes to maintaining the draw length and helps to keep the head and the aiming eye at a constant level. Furthermore, a certain level of muscle tone is necessary; weak muscles will probably collapse under the spring effect of the bow.

13.4.3.2. Knowledge and/or Know-how

ARROW SAFETY AND CHECKING

When shot, an arrow may not fully stick into the target. Instead it may hang loose from the point of the arrow and lay down along the target face. If this happens, shooting on that target butt should cease until the arrow is removed. If shooting continues at a target with a dangling arrow, other arrows may hit it causing damage to either the hanging arrow or the one that strikes it. The striking arrow may also ricochet off the hanging arrow.

Arrows should always be straight. Usually small bends in aluminium arrows do not affect a beginner's accuracy. Straightness can be checked by eye, down the shaft, or by spinning the arrow and noting wobble or vibration. Rolling the shaft along a table can also be used to check straightness.



Always check shafts for damage such as splits, chips or compression lines as these make the arrows dangerous to use and inaccurate.



Always check shafts for damage such as splits, chips or compression lines as these make the arrows dangerous to use and inaccurate

If there are no splits in a wooden or aluminium shaft, but there is a bend in it, a shaft straightening tool can be used. Straightening can be done by hand, but this requires some

experience. Be careful because sometimes a shaft can break during the straightening process.



Evaluation form for BLACK Arrow Candidates.

Name of the beginner: _____ Form D

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Total score
14 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual
Draw process	Done with two hands always at the same level (or arrow always parallel to floor)			#6.8
	Draw in shooting plane			#6.8
Main action (What is happening at full draw?)	Stationary arrow point (no draw creeping) - or better - arrow point constantly moving back			#6.10
	Consistent distances between arrow and bow shoulder (vertically and horizontally)			#6.10
Visual attention	Can observe himself (or herself) in a mirror while releasing			6.12 and its exercise "Visual Control of the Release – Exercise"
Subjects 2 evaluations	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Arrow safety and checking	Know what to do in the case of a hanging arrow on the target			#2.4
	Can check the straightness of an aluminium arrow or the integrity of a carbon arrow			#9.4.5.5
TOTAL	8 positive evaluations are required			** Awarded ____ or Not awarded yet _____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the assessor/evaluator: _____

13.4.4 Blue Arrow



13.4.4.1. Performance:

Shooting distance: 18 meters
Minimum required score: 115 points

13.4.4.2. Skills – Your shooting sequence should include the following:

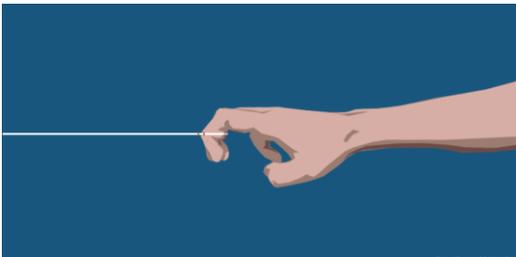
STRING GRIP (String Hook)

Objective:

Consistent finger positioning on the string, about the arrow

Form:

The fingers grip the string between the two upper joints. The palm of the hand is relaxed and the back of the hand is flat.



With a proper string hook, the back of the hand and the wrist are flat (Example for sight use)

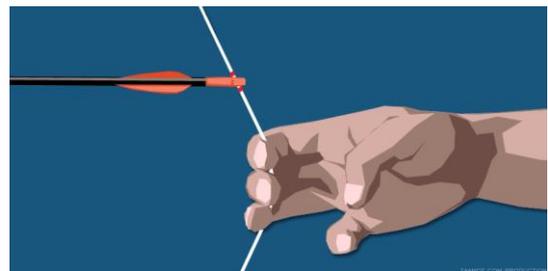
The three fingers share the workload equally. The back of the hand remains as vertical as possible, not curled-up, with the wrist as flat as possible. The interior of the forearm remains relaxed. Consequently, the hand is in the same axis, or vertical plane, as the forearm and arrow.

The ring finger should face the bow

Rationale:

A “deep” string grip in the fingers allows the muscles of the string hand, arm and forearm to relax from the string side. The more relaxed these body parts are, the less they interfere with the string and the cleaner the string releases from the fingers.

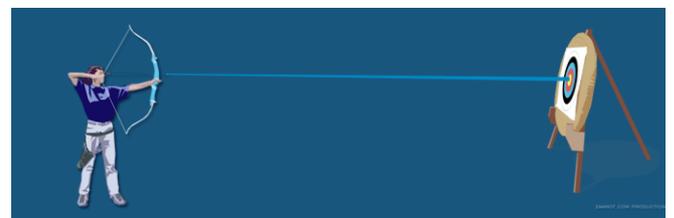
In most of the unsighted methods, three fingers are used and positioned beneath the arrow. In the shaft aiming method (straight line), the space between the nock and the forefinger is about two to three fingers’ width, depending on facial bone structure and size of string fingers.



FACIAL MARKS:

Straight line:

The archer looks straight along the arrow shaft to the point of aim on the target.

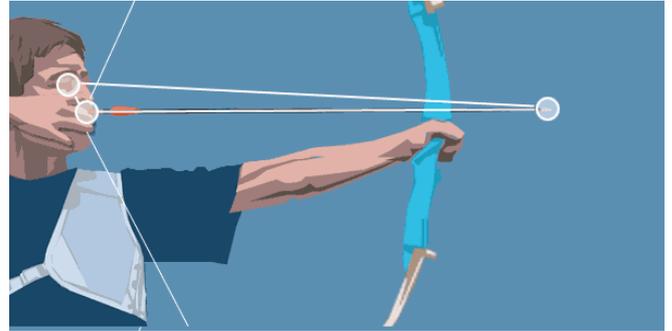
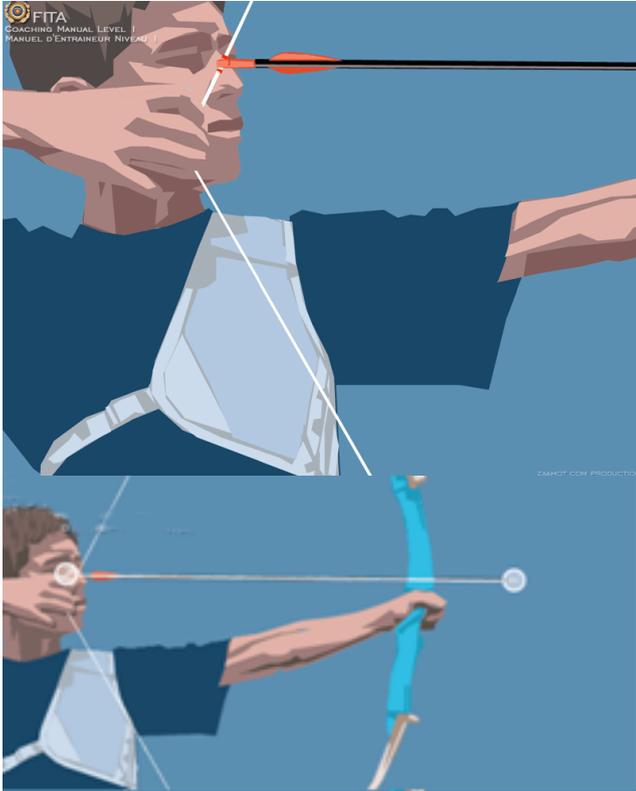


This aiming style has its advantages:

- simple visual alignment of the arrow shaft on the centre of the target is enough, no need to repeat the facial marks at full draw (see

triangle and quadrilateral methods described further down in this chapter);

- the aiming eye positioning in reference with the shooting plane is automatic (hence no need for string alignment);
- no concern about applying a vertical finger pressure on the arrow (upward or downward) with the string fingers.



To ensure the consistent reproduction of the triangle, the archer has to position the aiming eye for string alignment.



In the triangle method and following quadrilateral one, the aiming eye position (for string alignment) is mandatory

Triangle:

The aiming style positions the arrow using two reference points:

- The arrow point, by visual placement on the target while maintaining a consistent draw length (because the archer is aiming "through" the point);

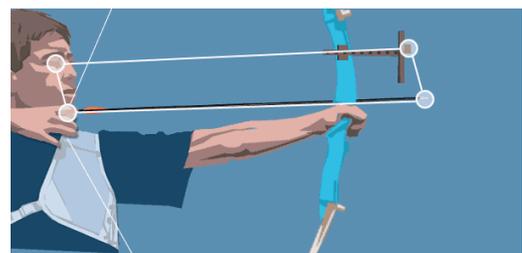


- The arrow nock, through contact of the string hand on the face.

Quadrilateral:

This aiming style requires the introduction of a sight. The arrow is positioned by two reference points:

- The arrow point, by visual placement of a sight on the target;
- The arrow nock, through tactile placement of the string hand on the face.



Furthermore, to ensure consistent repetition of the quadrilateral method, the archer must maintain:

- the bow in the vertical plane or consistently canted the same amount;
- a consistent draw length;
- the position of the aiming eye for string alignment.

ARROW- STRING FOREARM ALIGNMENT:

Objective:

Determine the body position that requires the minimum effort for maximal stability at full draw.

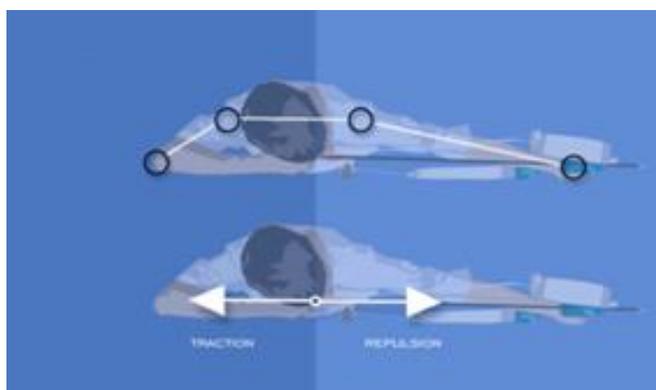
Form:

Your string forearm should be as much as possible in the vertical plane passing through the arrow.

Rationale:

In terms of required effort, this position is the most efficient. Furthermore, it allows the muscles in the string arm, forearm and wrist to stay relaxed.

The relaxation of these muscles facilitates the use of the muscles located in the back and behind the string shoulder.



FEELING ATTENTION:

In order to get a better kinaesthetic perception (physical feeling) of the skill and, in this case, the string hand, shoot at a very short distance (about 3 meters) with your eyes closed and focus on the feeling of the shot. Shooting at an empty buttress (nothing to aim at) with your eyes open also makes it easier to sense physical perceptions.

13.4.4.3. Knowledge and/or Know-how

BOW KNOWLEDGE:

You should be able to give the overall description of 3 types of bow.

The following gives a general description of the Recurve, Compound and Bare-bow.

Recurve:

The only type of bow allowed in Olympic competitions. Its limbs curve away from the archer. It is also called Classic Bow.

Compound:

This bow has pulleys and cables to make the holding weight less than half of the draw weight.

Bare-bow:

This is a recurve bow without a mechanical sight or stabilizers.

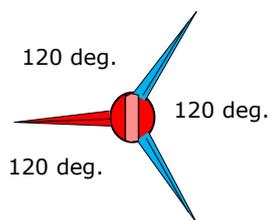
ARROW MAINTENANCE: NOCK REPLACEMENT

1. Remove the remaining part of the broken nock, if any. For easier removal you can slightly warm the remaining part of the nock with a flame or warm water.
2. If desired, you can use a fine sand paper on the cone of an aluminium shaft. Clean the area where the new nock will fit with 91 % isopropyl alcohol. For an Aluminium/Carbon shaft, clean the area that will receive the new nock, but do not sand it.
3. Put a drop of glue on the area where the new nock will fit, as shown below.



4. Press the nock onto the shaft and rotate it to spread the glue.

5. Orientate the grove of the nock so that it is square to the index vane, as in the picture below.



6. Give the glue time to properly set before shooting the arrow with the new nock.

EVALUATION FORM FOR BLUE ARROW CANDIDATES

Name of the beginner: _____ Form E

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Total score
18 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual
String hand	Flat back of hand (no knuckles pointed out)			#6.3.1
	3 fingers are used for gripping the string			#6.3.1
	Vertical back of hand			#6.3.1
	Consistent grip			#6.3.1
Facial marks	Consistent location			#6.9.1
	Provide "decent" alignment between arrow and string forearm			#6.9.1
	Can align the string			#6.9.2 - String Alignment Discovery Exercise
Feeling attention	Can shoot with eyes closed			#Intro of chapter 6 - Standard Teaching Process
Subjects 3 evaluations	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Bow knowledge	Can give the overall description of 3 types of bow			WA
Arrow maintenance	Knows how to replace a nock			#9.4.5.1
TOTAL	11 positive evaluations are required			** Awarded ____ or Not awarded yet ____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the evaluator: _____

13.4.5 Red Arrow



13.4.5.1. Performance

Shooting distance:

Depending if you shoot in- or outdoor the shooting distance and the target varies as listed in the following table.

	Distance	Target
Indoor	18m	60cm
Outdoor	25	80cm

Minimum required score: 115 points

13.4.5.2. Skills – Your shooting sequence should include the following:

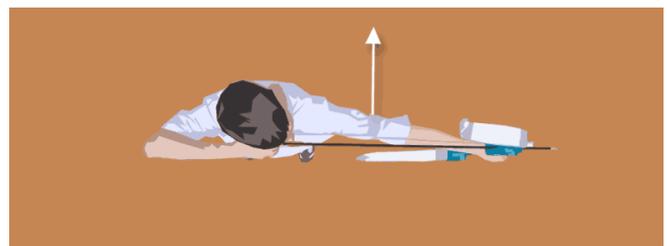
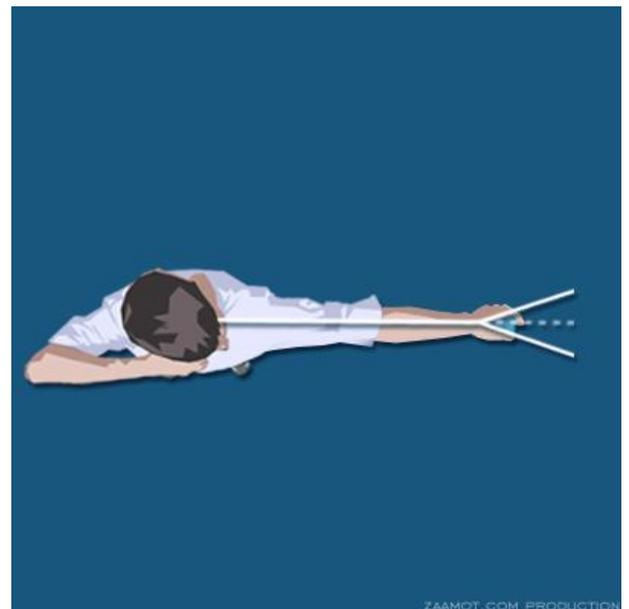
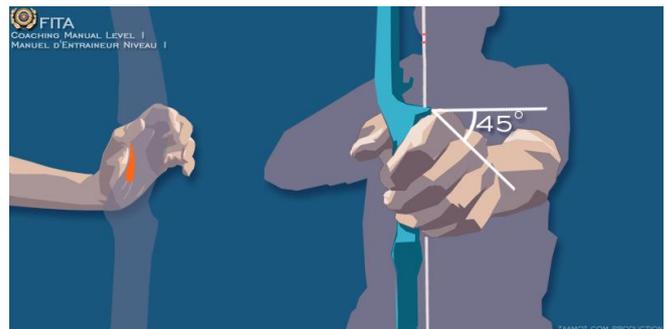
Bow hand and arm:

Objective:

- Consistent bow hand contact with bow grip;
- Apply a minimum degree of influence to the bow grip with your bow hand;
- Sufficient string clearance during the shot (this last objective will be better described in the Gold Arrow curriculum).

Form:

Fingers are relaxed and naturally curled, but not gripping or choking the bow. The wrist is flexed and the "V" between forefinger and thumb is centred on the forearm axis. The bow presses on the centre of the zone made by the thumb axis and the life line. The main pressure zone is about 1 to 2.5 cm from the top of the webbing between the thumb and forefinger. The side of the palm across the life line from this "V" should not press on the centre of the grip.



The bow forearm is straight but not stretched. The bow elbow is fixed and straight. The elbow point must be turned to the left for right hand archers, not toward the ground.

Rationale:

This bow hand grip requires very little muscle contraction and promotes relaxation. The more relaxed the archer is, the better they can perform and the less likely they are to influence the shot with their bow hand.

RELEASE

What happens on the string side of the archer?

Objective:

Continue all on-going activities, and further refine the release of the string.

Form:

Upon the string release, the string hand immediately moves backwards, in the shooting plane. It moves along either the jaw (in the "Straight line" and "Triangle" methods) or neck (in the quadrilateral method). The string hand stops at or just beyond the string ear, often touching the ear or neck. The place where the string hand finishes is called the "back end." The upper string arm ends up in the same plane as the shoulders.

Rationale:

Because the muscles of the back are connected to the string shoulder, their contractions affect the entire string arm and the backwards motion that it was implementing during the "full draw" sequence.



RELEASE

What happens on the bow side of the archer?

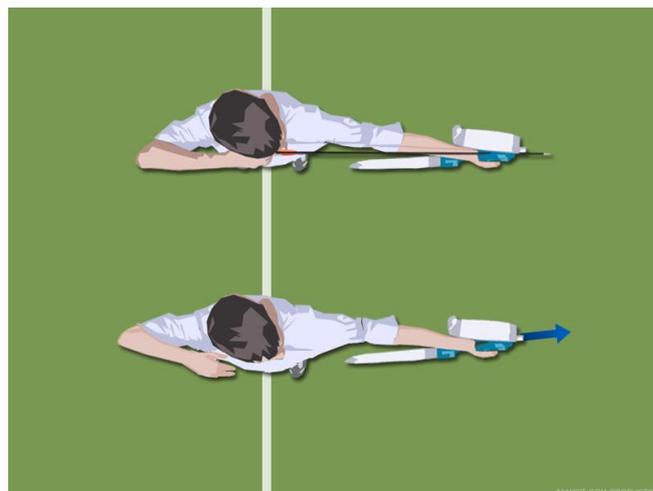
Bow arm:

Objective:

Continue all on-going activities, the bow arm, and even the whole body moves slightly forward.

Form:

Upon the release of the string, the bow arm moves towards the back of the archer.



Rationale:

The deviation of the bow arm towards your back is mainly due to the continuous action of the posterior muscles of the bow shoulder in much the same way as for the string hand.

The forward motions toward the target are due to the continuous push effort produced at "full draw" by the whole body from the bow arm to the string leg.

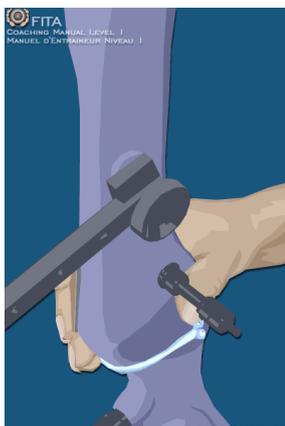
Bow hand:

Objectives:

Continue all on-going physical activities during the arrow propulsion period (just after release). Develop a passive bow hand and fingers to get a clean arrow launch without any force being applied to the riser that could create torque in the bow at full draw and/or during the arrow propulsion period.

Form:

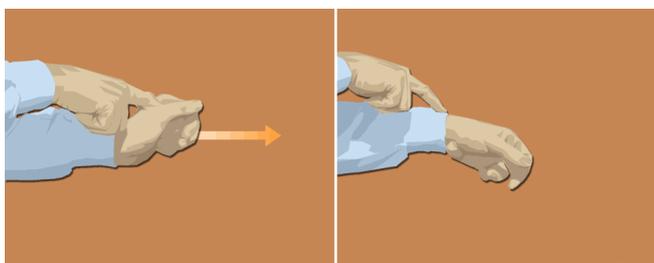
When the bow is propelled forwards after the release, your wrist gets stretched and pulled by the sling. Then when the bow cants forward and drops down, your wrist flexes down with it.



Example of a bow hand that has been kept well relaxed until the end of the shot

Rationale:

The bow presses on your relaxed hand and wrist. When this pressure disappears (when the bow is propelled forwards at the end of the string's forward movement), the hand remains totally relaxed and follows the motions of the bow.



Simulation of a relaxed bow wrist and hand

The World Archery 1440 Outdoor Target Archery Round consists of 36 arrows from each of the following distances shot in this order:

- 60,50,40,30 meters for Cadet Women;
- 70,60,50,30 meters for Women, Cadet Men, Junior Women and Master Women;
- 90,70,50,30 meters for Men, Junior Men and Masters Men.

Or in the order:

- 30,40,50,60 meters for Cadet Women;
- 30,50,60,70 meters for Women, Cadet Men, Junior Women and Masters Women;
- 30,50,70,90 meters for Men, junior Men and Masters Men.

The 122cm target face is used for the 90, 70, 60m (and 50m for Cadet Women) distances and the 80cm face is used for the 50 (other than Cadet Women), 40 and 30m distances. The 80cm multiple centre set-up may be used at 50, 40 and 30m.

Indoor Target Archery:

World Archery Indoor Target Rounds may be shot by both the Recurve and Compound archers, in separate divisions.

The 25-meter World Archery Indoor Round consists of 60 arrows on a 60cm diameter face or the 60cm triple centre set-up, for all classes.

The 18-meter World Archery Indoor Round consists of 60 arrows on a 40cm diameter face or 40cm triple face for all classes.

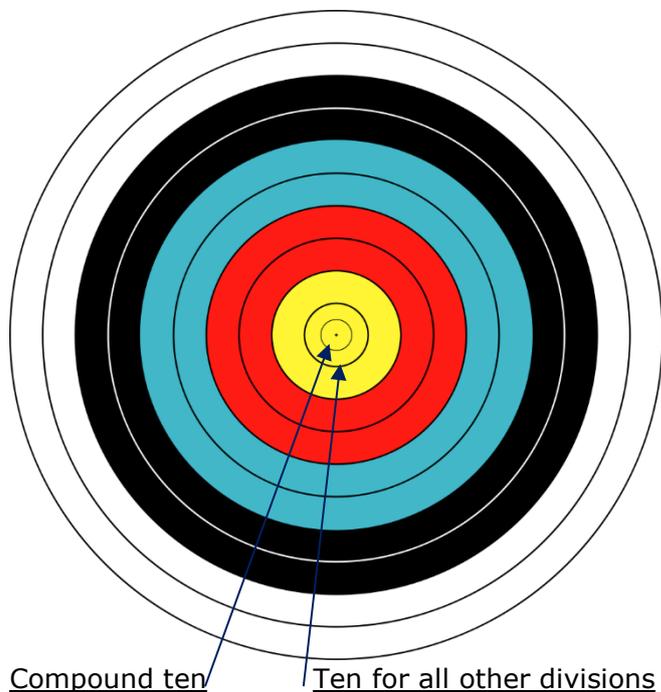
13.4.5.3. Knowledge and/or Know-how

ARCHERY DISCIPLINES.

Outdoor Target Archery:

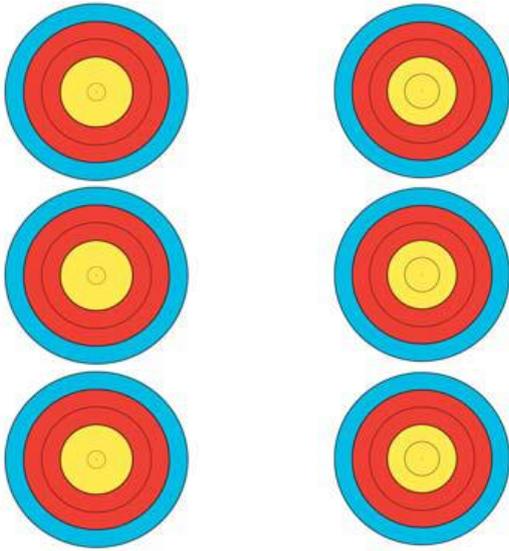
The World Archery Outdoor Target Archery rounds may be shot by both Recurve and Compound archers, in separate divisions. However, only the Recurve division competes in the Olympic Games. The World Archery Standard Round may only be competitively shot by athletes conforming to the World Archery Standard Bow Division.

- a) The 50m Round for Compound consists of 72 arrows on the 80cm target face.
- b) The 60m Round (for Recurve) for Cadets and Masters consists of 72 arrows shot at 60m on the 122cm target face.
- c) The 70m Round (for Recurve) consists of 72 arrows shot at 70m on the 122cm target face.



Vertical triple face:
For Compound

For others



The combined World Archery Indoor Round consists of the above two rounds shot in succession in the order listed above.

Field Archery:

The World Archery Field Archery Rounds may be shot by Bare-bow, Recurve and Compound archers, in separate divisions.

The World Archery Field Round consists of 12, 16, 20 or 24 targets. Three (3) arrows are shot per athlete at each target. The targets are arranged along a course with such difficulties in aiming and shooting as the terrain presents and the spirit and traditions of the discipline require. The target butts are set between 5 meters and 50 meters for Bare-bow and between 10 meters and 60 meters for Recurve and Compound. The course may be marked or unmarked.

The World Archery Arrowhead Round consists of any number of targets totalling between 24 and 48 targets which is divisible by four, or in other words two complete World Archery Field Rounds. The rounds may be shot on marked or unmarked courses or one of each.

ARROW MAINTENANCE

Removing points (and/or inserts)

When removing a metal point, insert and point together, or an insert and point in two pieces, you must:

- 1 - Lightly heat the exposed end of the point or insert for 3-5 seconds over a small gas flame.
CAUTION: Do not overheat the component or the shaft.
- 2 - Grip the point with a pair of pliers.

- 3 -Twist and pull out the point (and/or insert if any).
- 4 -If the point and/or insert cannot be removed, reheat for another 3-5 seconds and try to remove again.
- 5 -Repeat procedure step 4 until the adhesive softens enough to remove the component.

Installing points and/or inserts in the shaft

Material needed for installation:

- 91 % isopropyl alcohol;
- Paper towels;
- Cotton swabs;
- Hot-melt (archery specific);
- Torch or burner.

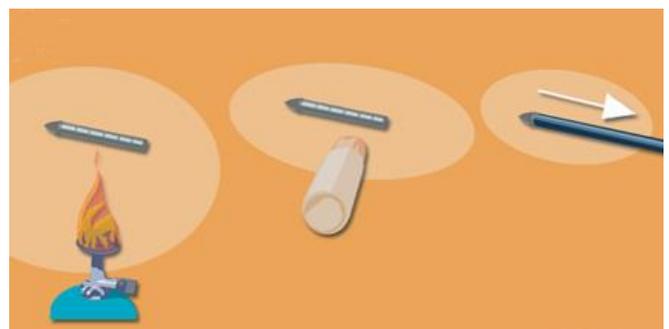
The following instructions can be used for one-piece points or for aluminium inserts with a point already screwed in.

After cutting your shaft to length, follow the point installation procedure carefully to prevent overheating the point. Overheating points can damage the arrow by:

- destroying the shaft's epoxy bond between the carbon and the aluminium tube (in an aluminium/carbon shaft);
- change the endurance of the aluminium in this area if aluminium shafts are being used;
- destroy the epoxy that bonds the carbon fibres (in an all-carbon arrow).

For gluing points and/or inserts, use hot-melt adhesive.

1. Clean approximately two inches inside the point end of the shaft using a cotton swab dipped in 91% isopropyl alcohol. Repeat the process until a fresh cotton swap is free of cutting dust, residue or other contaminants. Let the shaft dry thoroughly before bonding.
2. Carefully heat a stick of hot-melt adhesive over a small gas flame; then apply a ring of hot adhesive to the inside of the point-end of the shaft.



CAUTION: Do not apply heat directly to the arrow shaft.

The melting point of hot-melt adhesive is low enough that the shaft will not be damaged during installation and high enough to keep the point securely bonded despite the frictional heating generated when the arrow penetrates a target mat. Arrow points can come out in the target mat if a lower melting temperature hot-melt adhesive or if not enough is used.

3. Hold the end of the point with your fingers. (Do not hold with pliers because it is then possible to overheat the point.) Heat the insert portion of the point shank or insert until you feel it getting warm. It should be just hot enough to melt the adhesive.

CAUTION: Do not overheat the points. If the point becomes too hot to hold in your fingers, it is too hot to put in the shaft. Set the point on a non-combustible surface until cool.

4. Heat the hot-melt adhesive and apply a generous layer of adhesive to the shank of the point or insert.
5. While the adhesive is still fluid, push the point and/or insert into the shaft with rotating motion until the point flange seats against the end of the shaft. To assure an even distribution of glue, rotate the point for two complete revolutions after it has seated against the shaft.

NOTE: Do not force a point and/or insert into a shaft. If it does not seat fully, reheat the point immediately for 2-3 seconds and try pushing it in again.

6. Wait for it to cool, then pick the glue ring off towards the point (away from the shaft). This has the added benefit of not wasting the excess glue; simply reheat it and put it on the end of the glue stick.

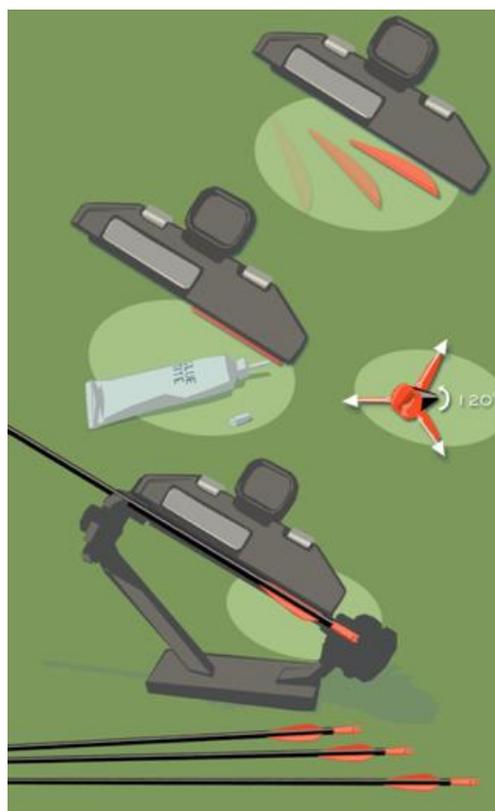
CAUTION: Do not apply heat directly to an arrow shaft of any type because it could destroy the carbon fibres and/or change the endurance of the aluminium in this area. Take care to not overheat the points, because this could also cause damage in the shaft.

If the head of the shaft is damaged on the point side, you may be able to use this arrow again, if its initial length before the "problem" was long enough. If there is enough shaft to safely do so, this arrow may be cut down a little to remove the damaged area. It is advisable to cut all your arrows down to the new length, for the sake of consistency.

FLETCHING A SHAFT

Feathers or vanes can be applied or replaced with a fletching jig. Without this device it is difficult to keep the vane straight on the shaft until the glue is dry. Most archery dealers re-fletch arrows, which is less expensive than buying new ones. Ideally your club should own a fletching jig.

For more information, refer to section 9.4.5.3. "Fletching the arrow" from the WA Level 1 Coaching Manual



Fletching a shaft

EVALUATION FORM FOR RED ARROW CANDIDATES.

Name of the beginner: _____ Form F

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Total score
18m on 60cm face (Indoor) Or 25m on 80cm face (Outdoor)	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual
Release	String hand moves along jaw or neck			#6.12.1
	Backwards motion generated by the follow-up contraction of the back and posterior string shoulder muscles			#6.12.1
Bow hand	Consistent bow hand on grip			#6.4.1
	Relaxed bow hand allowing the use of a sling			#6.14.2, many exercises
Bow arm	Elbow properly orientated			#6.4.1
	Stationary upon release or moving a little toward the back due the follow-up contraction of the back and posterior bow shoulder muscles			#6.14.2 - Follow-Through of the Bow Arm - Exercise
Subjects 2 evaluations	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Archery disciplines knowledge	Can give the overall description of 3 archery disciplines			www.worldarchery.org See Disciplines
Arrow maintenance	Know how to fit and glue a point, and fletch an arrow			#9.4.5.2 & 9.4.5.3
TOTAL				
TOTAL	9 positive evaluations are required			** Awarded ____ or Not awarded yet ____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the assessor/evaluator: _____

13.4.6. Gold Arrow



13.4.6.1. Performance:

Shooting distance:
Depending if you shoot in- or outdoor the shooting distance and the target varies as listed in the following table.

	Distance	Target
Indoor	18m	40cm
Outdoor	30	80cm

Minimum required score: 115 points

13.4.6.2. Skills – your shooting sequence should include the following:

STRING CLEARANCE

Objective:
Allow a free path of the string during the propelling of the arrow.

Form:
See the two tests further down in this section. You will have to successfully pass one of these tests.

Rationale:
Any string interference during the propelling step would:

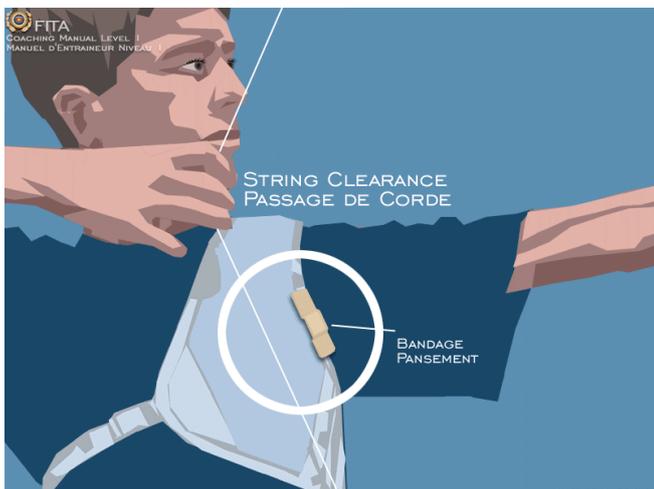
- make the consistent repetition of the push axis and the propelling intensity difficult;
- reduce the amount of kinetic energy transmitted to the arrow.

Test at the bow arm:
Make a mark with a pen on one side of a length of adhesive tape. With no hand on the string, raise your bow and note where your string is located on your armguard or forearm. About 1 to 1.5 cm forwards of this spot, affix the marked piece of adhesive tape, raised about 2 mm in the middle (like a bridge), with the mark closer to the string. The bridge of tape should be affixed vertically across your bow forearm/armguard, or if you prefer, parallel to the string.

The mark will help identify if the string hits the tape while it is pushing the arrow or on its way back after the arrow has left the string. Shoot one arrow with this adhesive tape in place, making sure that you do not flatten out the bridge before the draw. After the shot, look at the tape and analyse the hit (if any). If you come to the conclusion that the string clearance is too poor because the tape is damaged, ask to your coach to help you improve it.



Test at the bow side chest:
Either watch yourself in a mirror, or with the help of an assistant, observe where the string touches your chest at full draw (if at all). About 1 to 1.5 cm forwards of this spot affix a piece of adhesive tape that has a bridge shape – 2 mm raised in the middle. See picture below. The most critical point is the edge (hem or trim) of the chest-guard surrounding your bow shoulder. The bridge of tape should be affixed parallel to the line of the string at full draw. Shoot one arrow with this tape in place, making sure that you do not flatten out the “bridge” part before the draw. After the shot, look at the tape to analyse the hit (if any). If you come to the conclusion that the string clearance is too poor because the tape is hit, ask to your coach to help you improve it.



Step 1: Feet

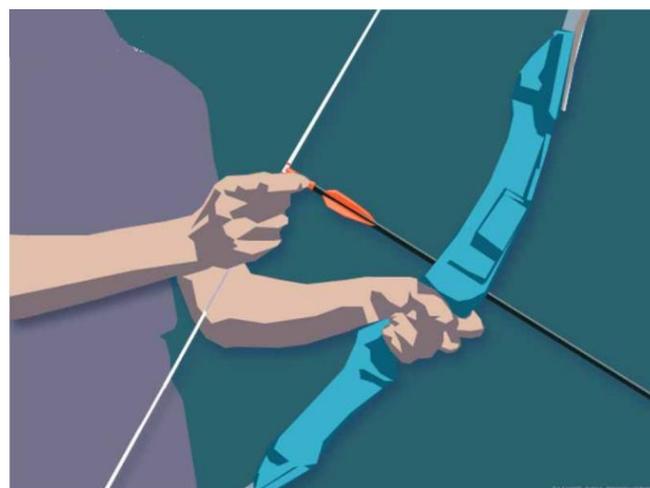
FOLLOW-THROUGH

Objective:

Continue all on-going activities – not only the physical ones, but also the visual and mental ones - and further refine the release of the string.

Form:

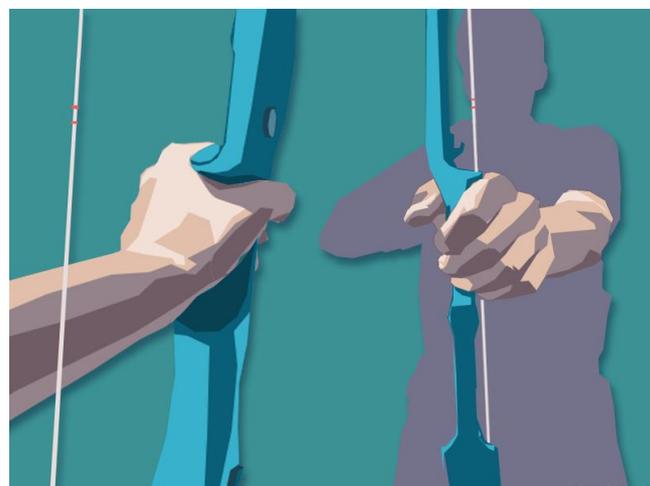
The shot must take an observer by surprise; no tell-tale signs of an impending shot may be seen. The body, face and gaze remain impassive before, during, and slightly after the action.



Step 2: Nocking



Your face should remain the same, before, during and after the release

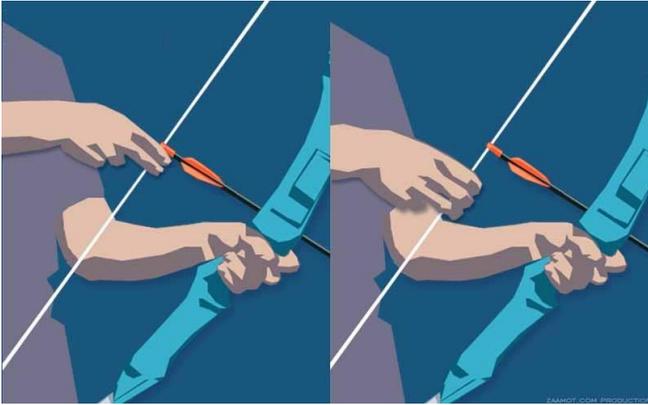


Step 3: Bow Hand

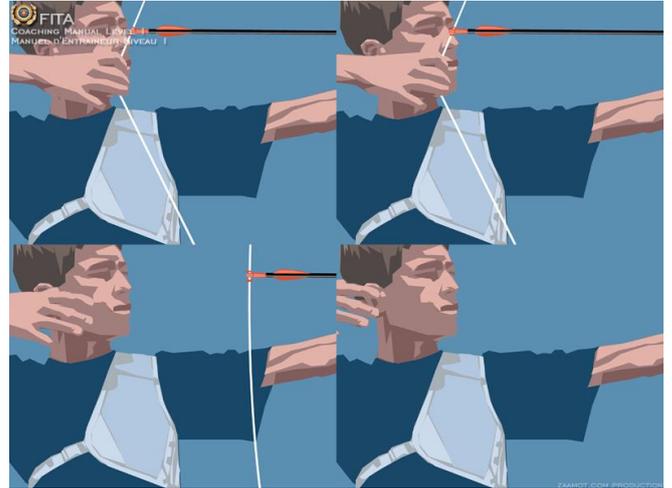
SEQUENCE

Objective:

Repeat with consistency the shooting steps (as listed below).



Step 4: String Hand



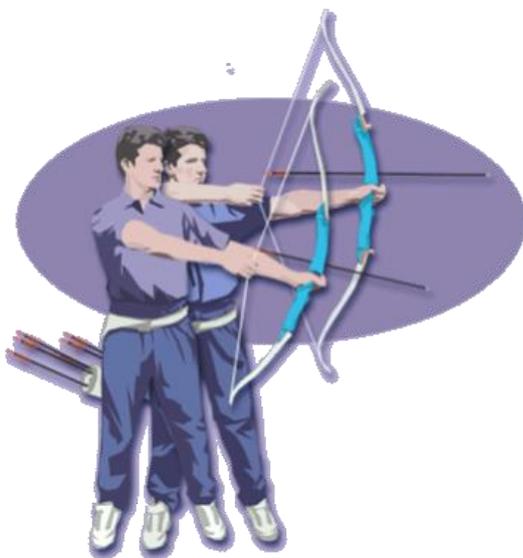
Step 7: Draw



Step 5: Body Setting



Step 8: Aiming eye positioned and string aligned



Step 6: Raising



Step 9: Aiming

13.4.6.3. Knowledge and/or Know-how

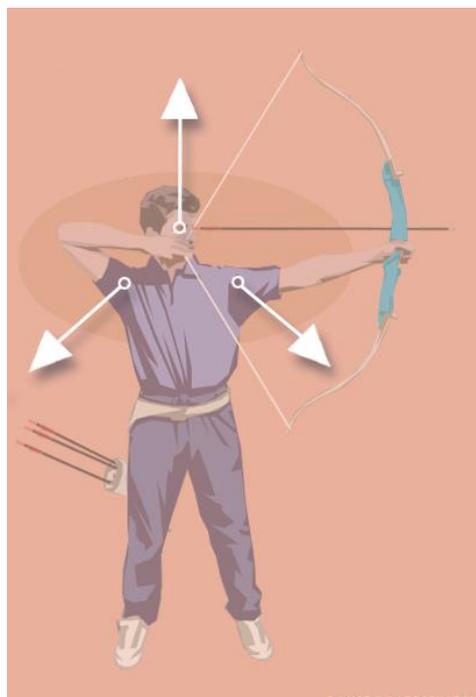
TOURNAMENT REGISTRATION PROCESS:

You should know the registration process (of your club) in order to participate in a local tournament; hence you have to ask your club, what this process is.

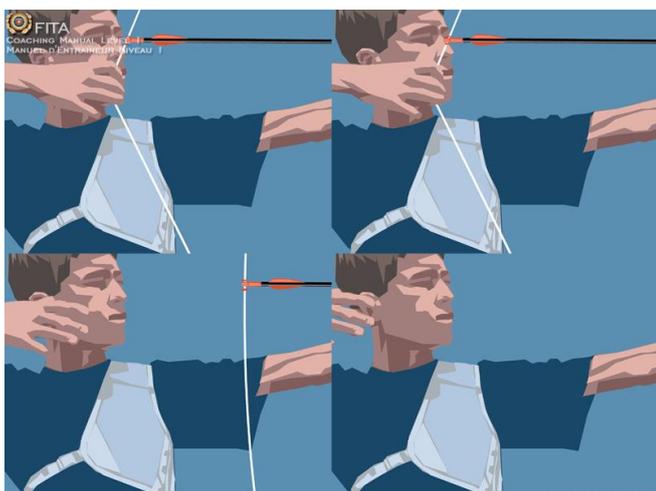
ARROW SETTING:

Affixing arrow rests:

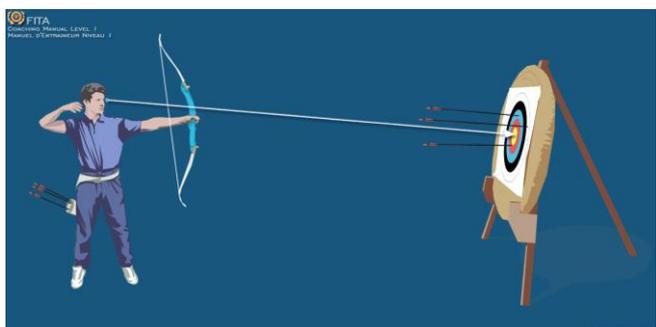
The use of an arrow rest is important as it reduces the area of contact between the bow and the arrow, thus creating less friction when the arrow begins to move upon release. Some arrow rests are made from wire and others are plastic. The arrow rest should be glued onto the window directly above the pivot point of the handle and should be aligned perpendicular to the string. There should be a space of at least 15 mm between the arrow shaft and the window shelf.



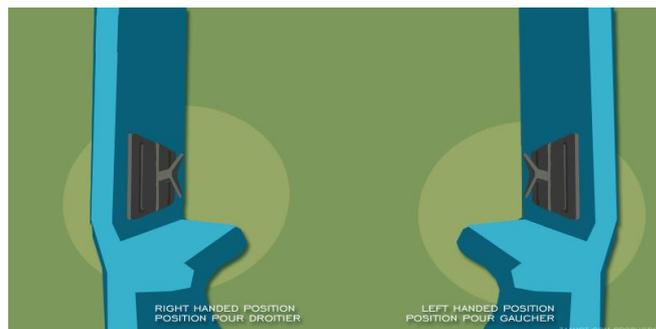
Step 10: Expansion



Step 11: Release



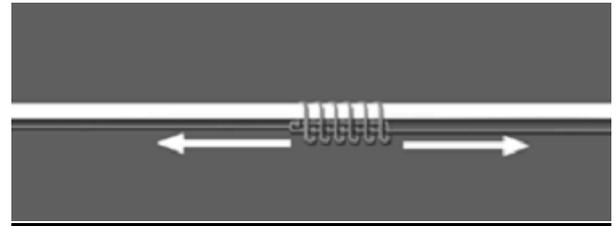
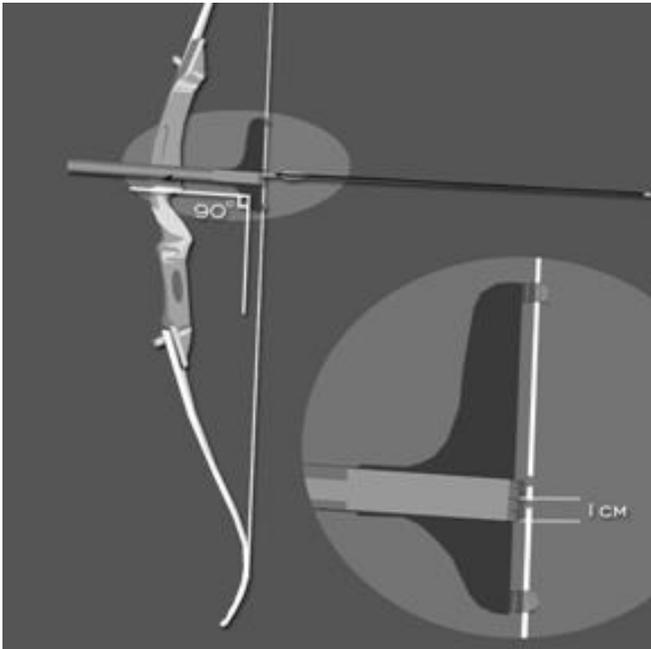
Step 12: Follow through and continued aiming



Making the nocking point:

The correct height of the nocking point depends on many things. A suggested starting point is to have the nocking point locate the bottom of the nock at about 1 cm higher above the level of the arrow rest, as measured with a bow square. This is valid if you start with the straight line method (recommended). 6 mm above the rest is enough if the archer uses a string grip where the arrow is between the fore and middle fingers.

The nock locators may be above and below the nock.



Cut both ends, then add some glue

BRACE HEIGHT

The bracing height of the bow should be within the individual bow manufacturers' recommended tolerances.

If necessary the string can have twists added to it to increase the bracing height, or conversely, have some twists removed to lower the bracing height.

Nock locators may be added in two ways.

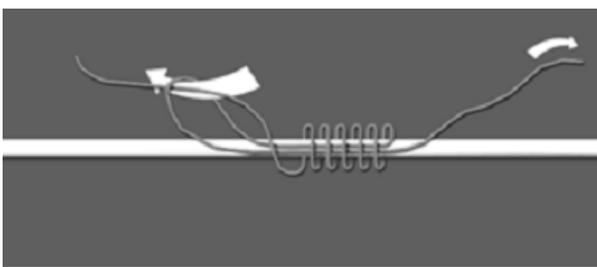
- Manufactured nock-sets are available. Quite often they are made of metal and are clamped on the string with special pliers.
- Another method is to use standard heavy thread with fletching cement to form a small neat ring around the serving. This knot must be firm and uniform. Apply another thin coat of glue over the entire nock locator, and then leave it to dry.



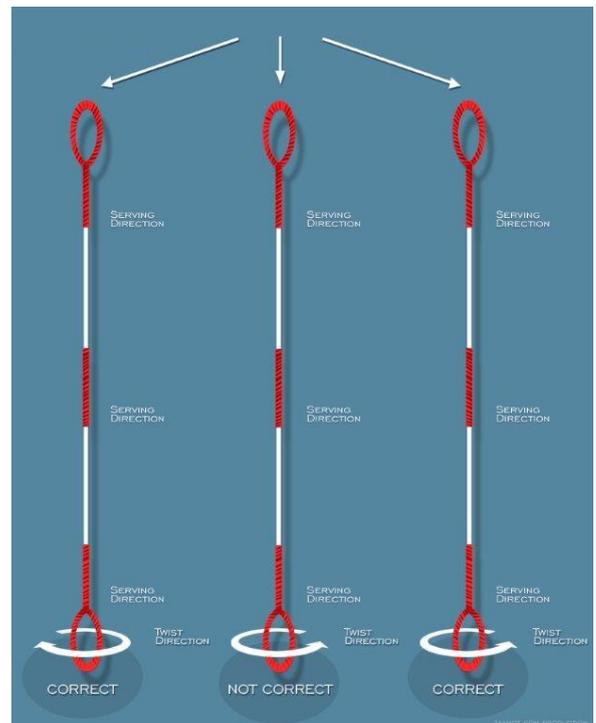
TYING A THREAD NOCK-SET ONTO THE STRING



Roll one end of the thread around the loop (made of the same thread) and the string body



Pass the end of the serving thread into the loop, then pull both ends of the thread



EVALUATION FORM FOR GOLD ARROW CANDIDATES.

Name of the beginner: _____ Form G

Date: ____ / ____ / 20__

Retake date: ____ / ____ / 20__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Total score
18 m on 40 cm face (Indoor) or 30m on 80cm face (Outdoor)	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the World Archery Level 1 Coaching Manual
String clearance	Successful string clearance test (bridge of tape for instance)			#6.13
Follow-through	Impassive face upon release			#6.14.1
	Continued aiming upon release			#6.14.1
Sequence	Repeat the shooting steps with consistency			# 4.2.2.2
	Consistent shooting time (+/- 10 seconds per end of 3 arrows)			Use of breathing #6.15
Subjects 2 evaluations	Required knowledge or know-how	Achieved *	*Not yet achieved	Comments and/or references
Tournament registration process	Know the registration process (of the club) for a local tournament			Internal process of the club
Arrow setting	Know how to affix an arrow-rest and make a nocking point			#11.3.4& 11.4.6
TOTAL	8 positive evaluations are required			** Awarded ____ or Not awarded yet ____

* Checkmark if the score / skill / knowledge is positively evaluated (Achieved) or not (Not yet achieved). Write in the TOTAL row of these two columns the accumulated number of checkmarks.

** Just checkmark the final result of this evaluation.

Name and signature of the assessor/evaluator: _____