



WORLD ARCHERY BEGINNERS MANUAL

Introduction:

This "WA BEGINNER MANUAL" is a guide for beginner archers and their Level 1 archery Coaches.

To the Level 1 Archery Coaches:

Thank you for promoting archery!

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

We encourage you in using the WA Level 1 Coaching manual and/or audio-visual document.

To the Beginner Archers:

Congratulations for taking Archery!

This guide presents the curriculum of each of the 7 levels of the WA Beginner Awards Program. It will help you to develop your general shooting skills, knowledge of archery and performance. Your progress will be encouraged and awarded with the gain of the WA Beginner Award pins.

After the completion of the Entry level program, you will be encouraged in taking part in some WA tournaments, through which you will be allowed to win other WA awards specific to each archery discipline.

WA wishes you a life of enjoyment within the world archery family.

The WA Beginners Awards Program at a glance:

The WA 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, which is dependant on age;
- to the shortest Indoor distance - 18 meters, but on a bigger target face than the FITA official one for this distance;
- and even further - close to first WA Outdoor distance on an 80 cm target face, which is 30 meters.

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



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OVERALL PRESENTATION



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Goals:

WA has produced this manual to guide the beginners in assessing their progress during a long period covering the Entry level program before competing in official tournaments.

Evaluation principle

To get any of the WA Beginner Awards, you have to reach a minimum level of:

- score;
- skills development;
- Knowledge and/or know-how's.

SCORE

Your performance is evaluated at reduced shooting distances and number of shots.

15 arrows are shot at an 80cm target face

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

SKILLS DEVELOPMENT

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

For each development level, some skills are expected to be acquired. Their assessment is based on some key elements described in the WA Entry Level 1 Coaching Manual. If you need help in evaluating these skills, do not hesitate in consulting this reference manual.

To help with your training, collaborating with an archery coach is strongly recommended; also do not hesitate in consulting this reference manual.

KNOWLEDGE AND/OR KNOW-HOW'S

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

- play safe; hence knowing the safety rules;
- know the specific terminology;
- look after their equipment = To brace the bow - To maintain and repair the equipment (arrows, string, arrow-rest etcetera);
- learn the rules;
- ...

You will find in this manual the knowledge's and know-how's that are expected from you.



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Delivery of the WA Beginners Awards

The following organizations are entitled to order the WA Beginner Awards from the WA office:

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

Caution! In some countries, only the National Archery Federation is entitled to sale/distribute the WA Beginner Awards to its Clubs and Regional Archery Associations.

In most cases, clubs make a stock of WA Beginners Awards, which they order either to their National Archery Federation, or directly to the WA office.

Types of Awards

2 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 your coach (or person in charge of the entry level) to decide the archer's eligibility to challenge for these awards. WA does not ask for any proof of age or disability. This group of awards is entitled "**FEATHERS**"
- **One set for the pre-teenagers, teenagers and adults:** This group of awards is entitled "**ARROWS**"

All awards have a pin design; they can be displayed on the quiver (for instance)

Recommended examination guidelines for both awards.

To develop a schedule of specific sessions for challenging the WA Beginners awards. This requires a minimum of attendance to the Entry Level practice sessions to be eligible to take part in an evaluation session.

For instance:

Schedule every 2 months a specific session for challenging the WA Beginners awards; the evaluation session is only open to those who have attended at least 7 practice sessions.

For challenging a WA Beginners award, those who have attended less than 7 practice sessions will have to:

- * complete their 7 practice sessions, and;
- * wait until the next specific session for challenging a WA Beginners award.

To allow the beginners who failed some components of the evaluation to re-challenge these items only, the beginner must retrain on all the modules failed and the reassessment/evaluation cannot be retaken until a full successful program is completed



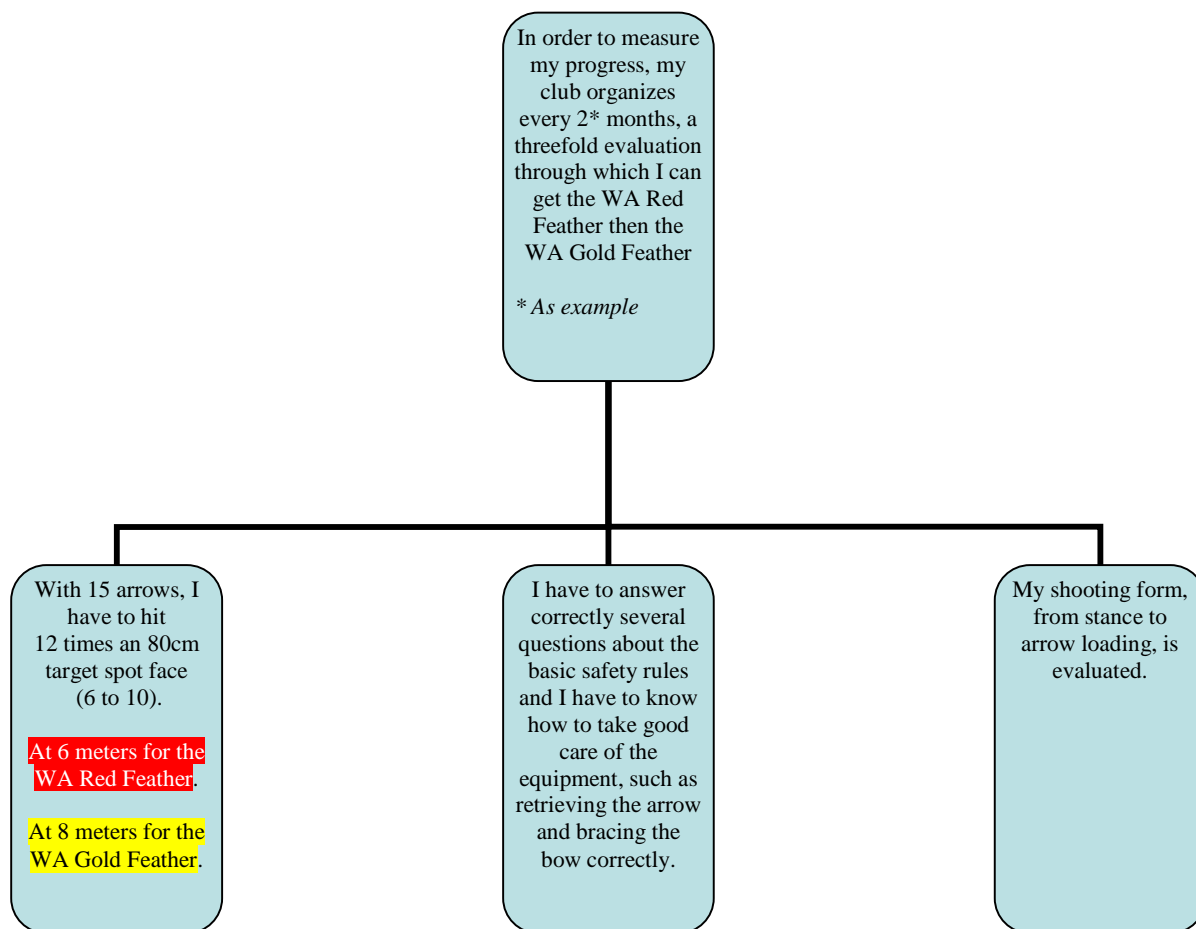
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The novice can only start by challenging the Red Feather or the White Arrow. Starting at any other level would make it difficult to evaluate the skills and knowledge/How's that were supposed to have been learnt previously.



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WA Feather Awards at a glance.

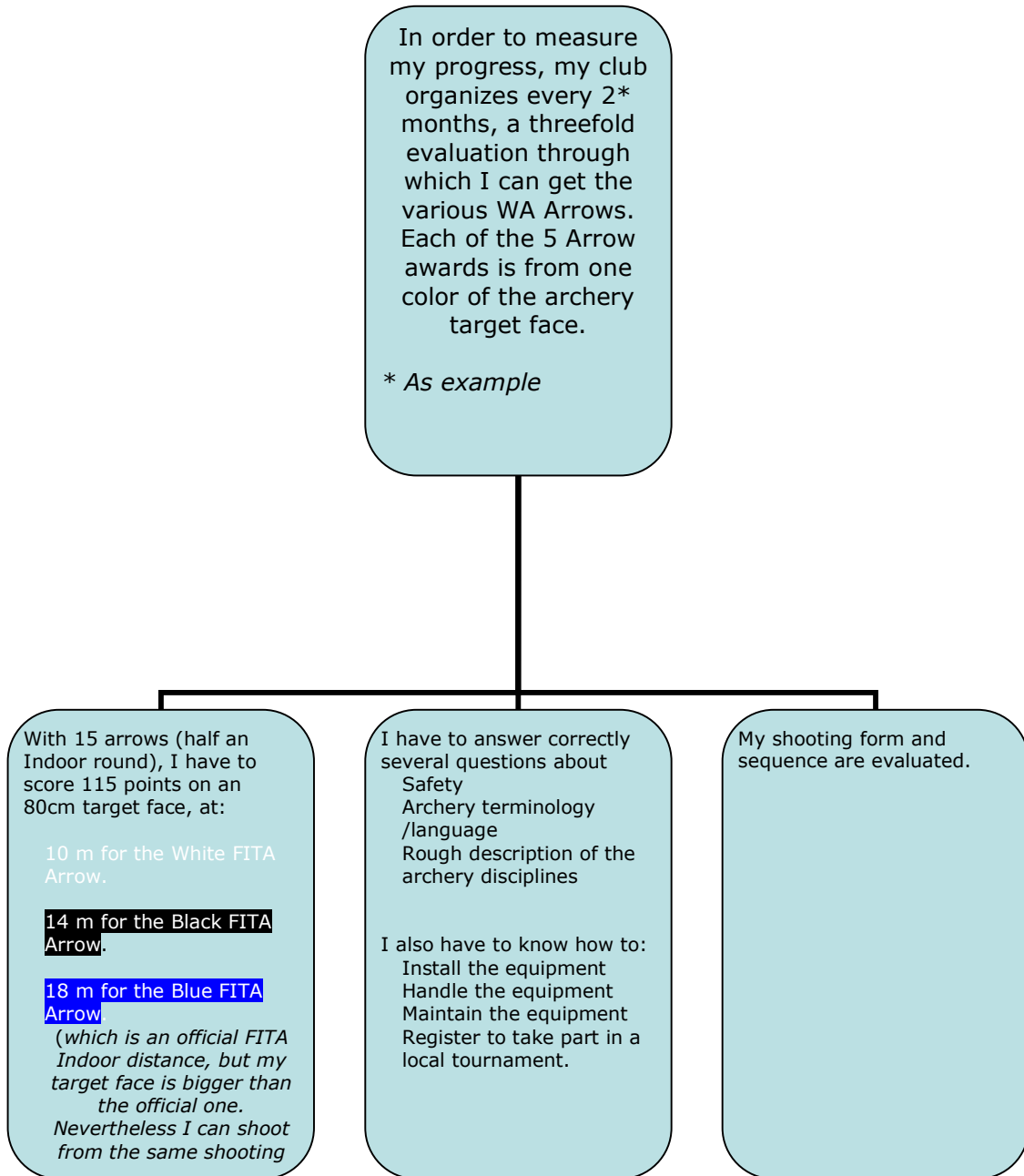


After the WA Gold Feather I will challenge the WA Arrow Awards, starting with the White one at 10 meters



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WA Arrow Awards at a glance.



Now I am able to attend some local tournaments shot at short distances.



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THE FEATHERS





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RECOMMENDED GUIDELINES FOR THE "FEATHERS"

1. SCORE EVALUATION (for Feather awards)

Where:	Indoor or Outdoor.
Warm-up:	Not limited. Up to the coach
Target face:	80cm spot target face (6 to 10 ring). <i>Alternately a full 40cm target face can be used (tougher to aim at).</i>
Target height:	80 cm to 1 meter for the centre of the target face from the 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, which is half a 30 arrow round.
Scoring:	A simplified scoring system is proposed in order to allow the youngest to score them selves. An arrow inside or touching the peripheral line (of the "6" zone) is worth one hit. <i>Alternately a 40cm target face can be used where the scoring zone covers the 1 to 10 ring and scores 1 point.</i> 12 hits are required.

Below is a blank scorecard sample:

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



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2. SKILLS EVALUATION (for Feather awards)

See Chapter "Skills" of the program related to the level that you are challenging.

3. KNOWLEDGE & KNOW-HOW'S EVALUATION (for Feather awards)

See Chapter "Knowledge and Know-How's" of the program related to the level that you are challenging.



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Red



Feather

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CURRICULUM FOR THE WA RED FEATHER AWARD

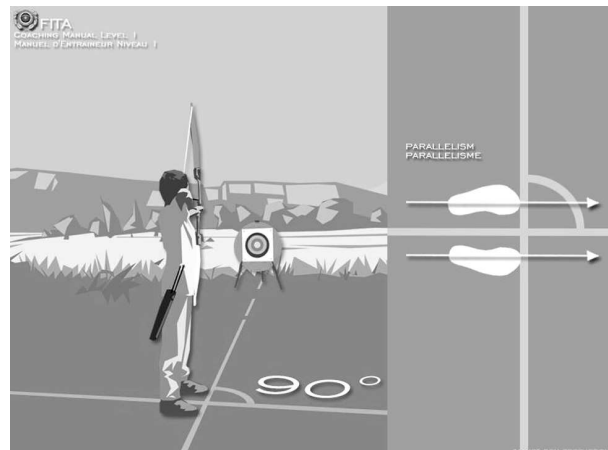
PERFORMANCE:

From a shooting distance of 6 meters, you must achieve a minimum of 12 hits, out of 15 arrows (5 ends of 3 arrows) shot at an 80cm target spot (6 to 10 zones).

SKILLS – Your shooting technique should include the following:

Feet position (Stance)

- **Objective:**
Consistency and spatial relationship to the target, achieving optimal stability.
- **Form:**
Feet parallel on the shooting axis, set at approximately shoulder width.
- **Rationale:**
Gives archers the opportunity to repeat actions easily and accurately. Provides sound support to the pull and push efforts in the flight plane. Gives consistent direction to the body in the flight plane. Avoids back problems.

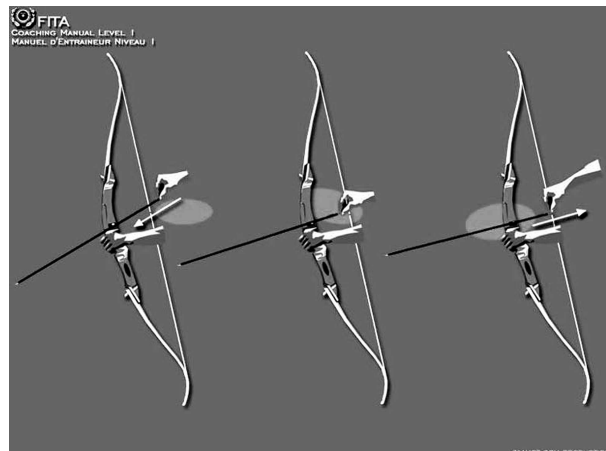
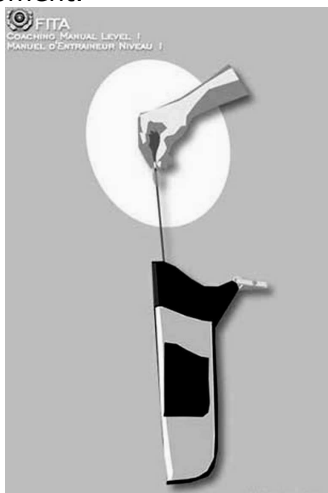


Stance, how to stand on the shooting line.

Safe and proper arrow loading

- **Objective:**
Identical placement on the bow. The action must be performed in a safe manner to protect the archer, other archers, and equipment.
- **Form:**
Hold the arrow by the nock, place the arrow on the rest, correctly turn the arrow, and nock it onto the string.

Pulling an arrow out of the quiver.



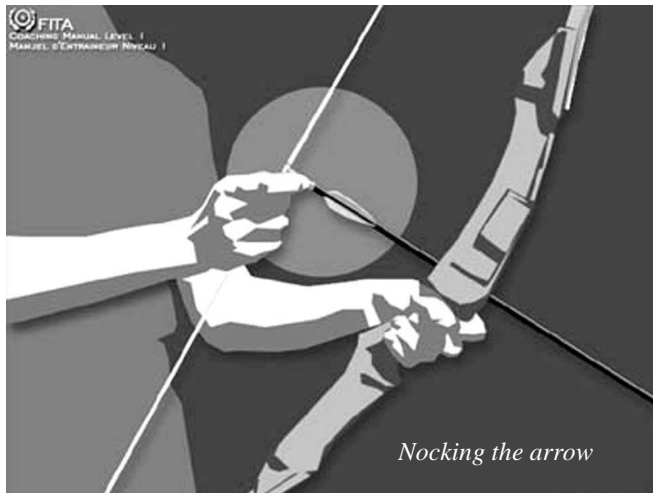
Arrow loading

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• *Rational:*

Taking hold of the arrow in front of the vanes becomes more difficult to nock, and the fletching could be damaged if the hand slips during nocking process. The arrow rest does not endure strong vertical pressure. If nocking is done incorrectly, it could damage the arrow rest.

Arrows with four vanes are also successfully used at entry level.



KNOWLEDGE &/OR KNOW-HOW

You must know the following the subjects below:

Bow -safety

- Releasing the bow without an arrow on the string could cause breakage and injury.
- When the end is over put the bow on the bow stand or rack located in the equipment lane;
- Bow stands located behind the waiting line are ideal for placing the bows when they are not being used during the training session.

Equipment to be stored in the equipment lane





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When shooting few arrows at a shorter distance than usual (for an exercise for instance), you can lay your bow on the floor/ground 3 m behind the archers. If so, once return to the regular shooting distance, your bow is stored on a rack behind the waiting line or on the floor.



Movable and collective bow stand.

Arrow loading safety:

- The arrow should be placed on the string only after standing on the shooting line and a clear signal has been given (meaning that everyone is behind the shooting line).
- You must straddle the line, or have both feet on the line, before loading the arrow.

Safe arrow retrieval/collection:

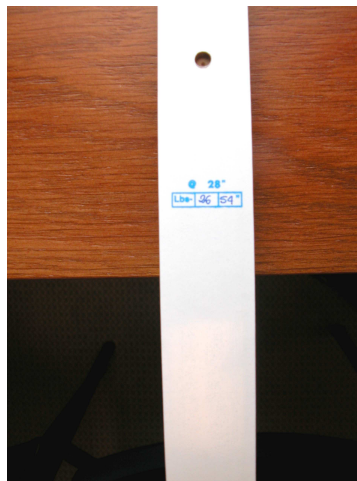
- When approaching the targets, care must be taken not to walk into arrows sticking into the ground or target. Nocks are very sharp, pick up all arrows that have fallen short of the target, whoever is their owner.
- Care must be used when drawing arrows out of the target, to see that no one is directly 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; you should wait beside the target to collect arrows.
- For pulling 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 right in the shaft axis, without bending the arrow shaft.
- For pulling an arrow out of the grass: Do NOT pull the arrow up! You could bend or break the arrow shaft. But move the grass out of the fletching, especially of natural feathers. Then pull the shaft back in the axis of the arrow shaft and along the grass. Only when the point is getting out of the grass, you can raise the arrow up.



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Bow assembling:

You must learn from your coach how to properly assemble and disassemble the limbs on/from the riser (if you use a take down bow). A no braced assembled Recurve bow has the tips of the limbs towards the target (not to you). Due to a former WA rule, on most of the bows, the internal part (facing you) of the top limbs is blank, while the limb specifications (height and weight) are written in the internal part of the bottom limb, as shown on the illustration on the right.



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

ON THE NEXT PAGE THERE IS THE FORM FOR YOUR EVALUATOR



Red Feather award.



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EVALUATION FORM FOR RED FEATHER CANDIDATES

Name of the beginner: _____ Form A

Date: ____ / ____ / 20__

Make up date: ____ / ____ / 20__

PERFORMANCE Shooting distance	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result)
6 meters	12 hits			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA level 1 coaching manual.
Feet position (Stance)	Feet each side of the shooting line			#7.1.2.1
	Feet at shoulder width apart			#7.1.2.1
	Line of feet square to the shooting line			#7.1.2.1
	Feet parallel			#7.1.2.1
Safe and proper arrow loading	Implemented with bow <u>vertical</u>			#3.2 Point 5 & #7.1.2.2
	No finger pressing the arrow on rest			#7.1.2.2
	Arrow properly rotated cock feather away from bow window			#7.1.2.2
KNOWLEDGE &/or KNOW-HOW	Required knowledge's or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Bow safety	No dry fire (dry loosing)			#3.3. Point 2
	Set the bow in equipment lane after shooting the end			#4.4.5. Step 7 - #11.3 #9.2
Arrow loading safety	Load the arrow on the bow only when everyone is behind the shooting line.			#3.2 Point 2
	To be done only when both feet are set each side of the shooting line.			#3.2 Two first points
Safe arrow retrieval/collectio n	Walk carefully to target (do not run – Watch your step)			#3.3 Point 8
	Stand to the side of the target (not behind arrows)			#3.2 Point 12
	Properly pull the arrow out of the target (or grass).			#4.4.1. Step 8
Bow assembling	Know how to properly assemble and disassemble the limbs on/from the riser.			This assessment can be removed if there is no take down bow
TOTAL	16 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: _____



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Gold



Feather

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CURRICULUM FOR THE WA GOLD FEATHER AWARD

PERFORMANCE:

From a shooting distance of 8 meters, you must achieve a minimum of 12 hits out of 15 arrows (5 ends of 3 arrows) shot at a 80cm target spot (6 to 10 zones).

SKILLS:

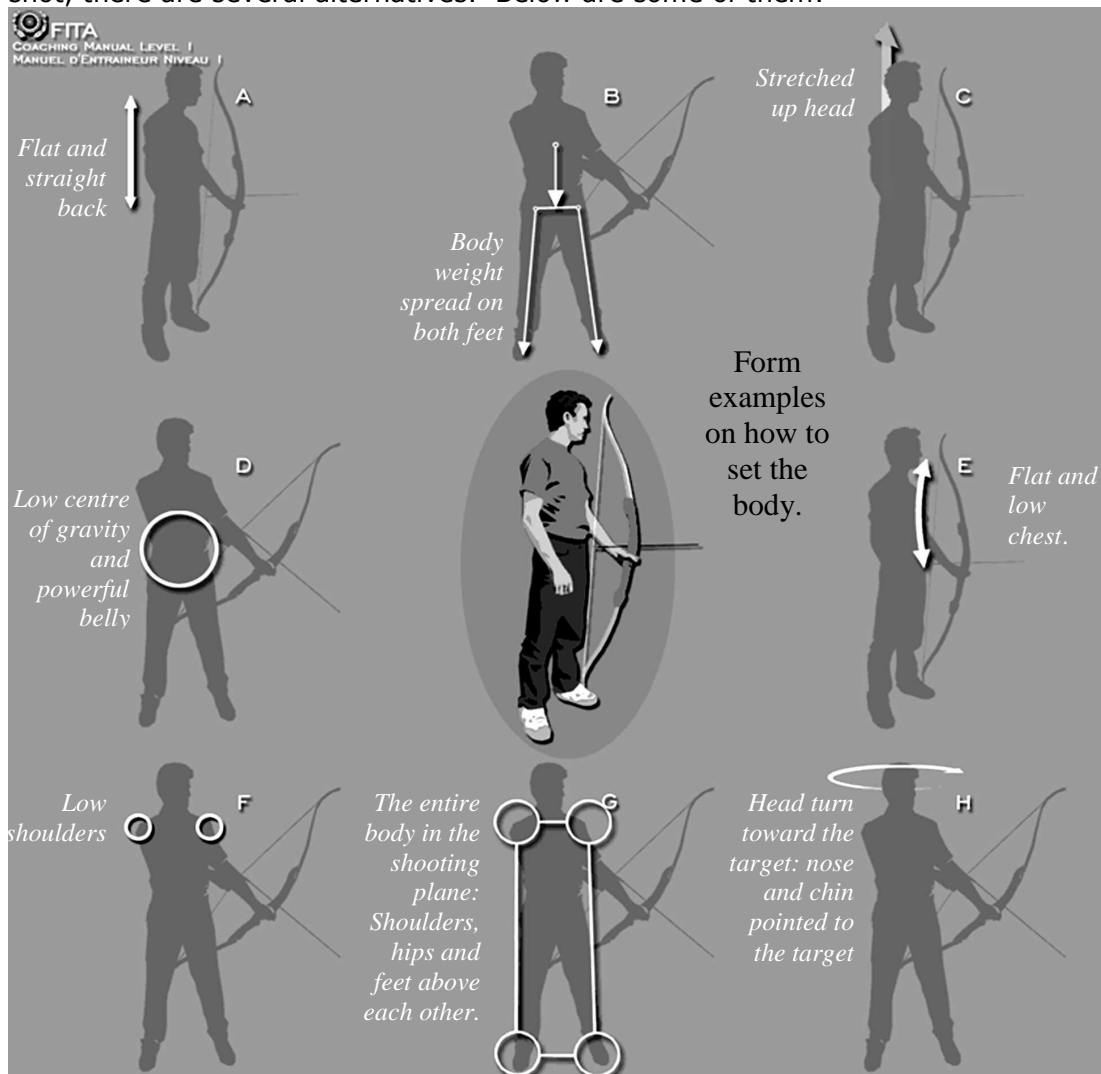
Body setting (from before drawing until full draw)

• **Objective:**

Provide an identical, stable foundation permitting a similar repetition of upper body actions, as well as optimal general balance. It should also allow re-positioning the aiming eye at the same stable spot in the space. We can imagine the aiming eye at the top of the "main pyramid" (your coach will instruct you the pyramids).

• **Form:**

While gripping the string and the bow (see the 2 previous steps of the shooting sequence), most of the archers are bent over. To move from a bent position to an upright one and set a good body base to engage the execution process of the shot, there are several alternatives. Below are some of them:



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1. Legs

• *Form:*

Up-side-down "V" symmetrical to the vertical axis going through the summit. Weight is placed equally on both feet.

• *Rationale:*

The body weight is approximately distributed equally on both legs. Because body weight is slightly forward (toward toes), the front/back swaying is reduced. As shown page 20, 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 down ward pressure, providing a solid foundation for upper body work and a good stability. For the shooting process, the pelvis is usually "tilted" (flat lower back), thus only the upper body requires positioning.



*Flat chest – Powerful belly and
Body weight equally shared on two feet*

2. The Upper Body

• *Objective:*

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

• *Form:*

Turn or tilt the pelvis backwards (flat lower back), the spine is stretched up with the shoulders in the same plane as the hips. The shoulders are lowered and chest is flattened. A slight stretching in the trapezius is often felt. Turn head toward the target (whilst maintaining the stretching up action) until nose being directed toward the target.

• *Rationale:*

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

Body setting (end of draw)

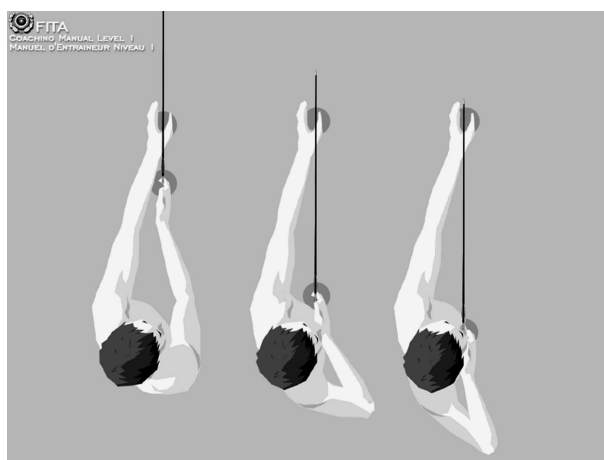
• *Objective:*

Draw the bow without disturbing the pre-set position achieved through the preliminary elements. This body maintenance lasts until after the shot.

• *Form:*

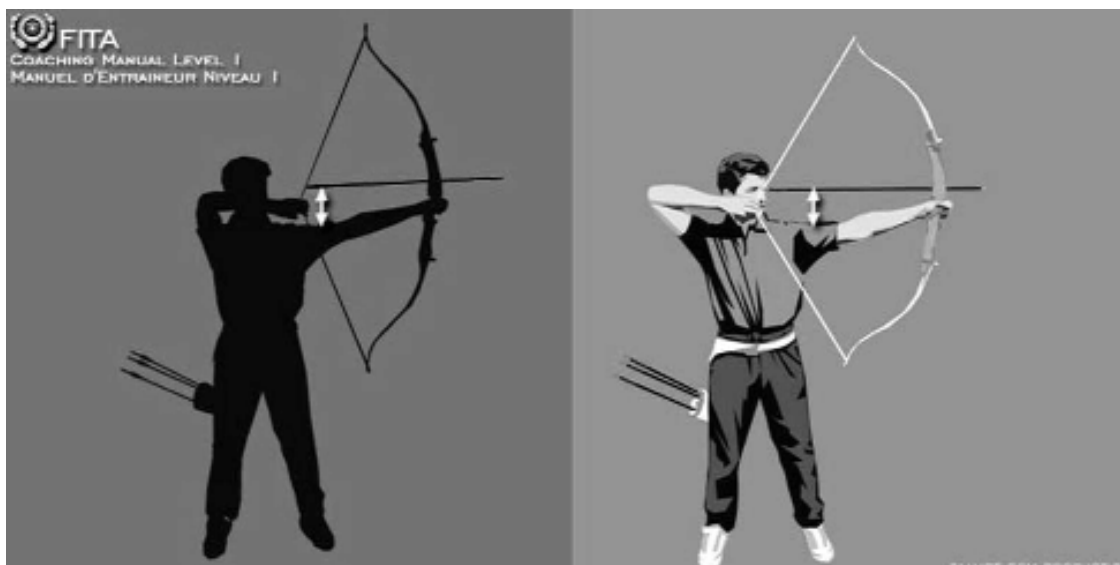
Always stay in control. Momentum movements are minimal, or nonexistent. Desired movements diminish in speed as they near the face, but do not stop! The torso is almost immobile. If no pre-draw has been achieved, only a slight rotation of the chest exists, leading the shoulders from the shooting plane.

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Draw made in the shooting plan

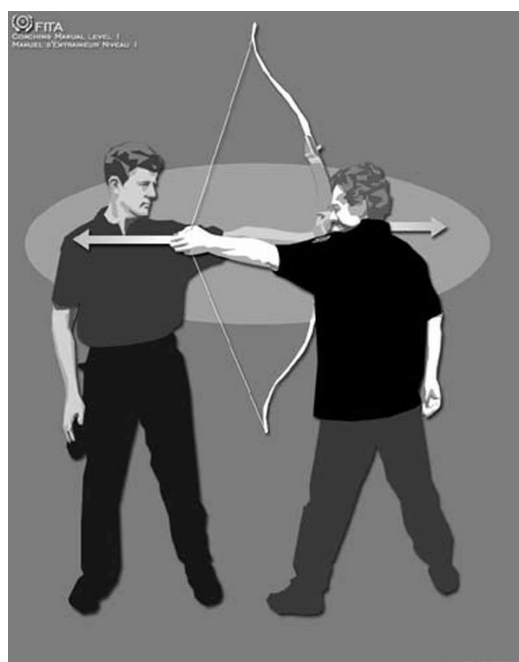
The body is vertical or remains at a slight inclination toward the string leg. The shoulders remain lowered. The head remains in place and extended up; it should not move toward the string during the last few centimeters of drawing. The arrow always remains parallel to the ground. The string moves straight to the face within the shooting plane.



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

A balance between the production of traction and repulsion (pull & push) forces must be introduced during the draw. As the following illustrations demonstrate, the pull and push efforts are supported by the legs.

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String (right) leg assists the push effort Bow (left) leg assists the pull effort.

● **Rationale:**

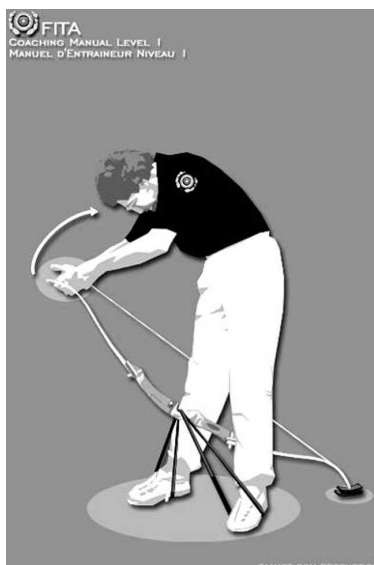
Easy to duplicate because the foundation is hardly disturbed and the movement is simple, control is easily achieved. Striving for symmetry will avoid the balance being upset. The production of effort is not centralized, but dispersed. It facilitates achieving symmetry, reduces local fatigue effects, and minimizes the risk of injury. The major muscles are used to generate this production. Full drawing effort is attained as soon as the speed of the draw decreases on approaching the face, allowing the control to be maintained. Because the beginning of the draw is faster, the archer saves energy.

KNOWLEDGE&/OR KNOW-HOW:

Bow bracing:

Your coach will certainly have your bow strung before the start of the first two or three practice sessions. Stringing and unstringing of the bow will probably be taught to you at the third or fourth session when you will be more familiar with the equipment. Below we recommend some of the safest methods for the bow and the archer.

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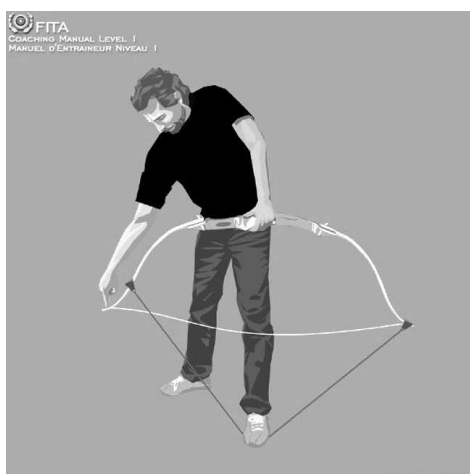


Use of a string loop with 2 feet.

A loop stringer is inexpensive and easy to use. It makes the task of stringing the bow almost effortless. Like any other stringing methods, it is necessary to check the exact 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 serve this function and even help secure the string.

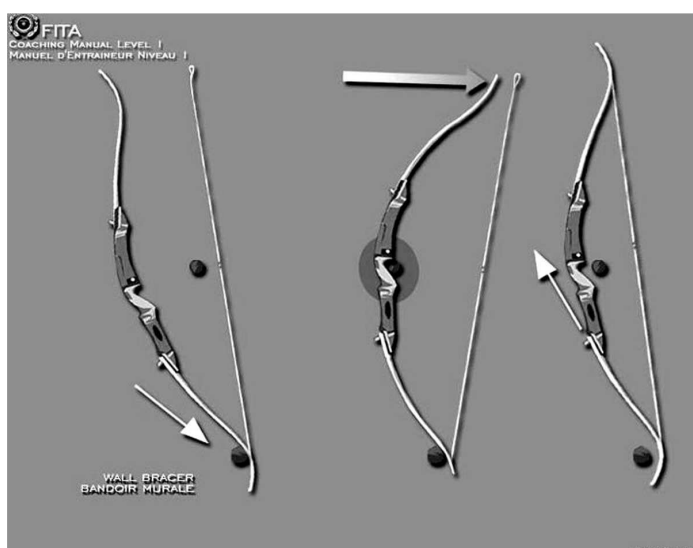


Use of a string loop with 1 foot.



Finally the fix 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 for protecting the limbs and affixed to a wall or pole.

You also can buy a bow stringer like the one on the left from any archery shop. At the beginning, you will probably have a tough time to use it properly. Nevertheless It will come friendly with experience.



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Shooting direction:

- Under no circumstances should anyone shoot if someone is on the field near the targets. 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 do not shoot from the same distance, the safest method is having the targets at different distances and all the archers on the same shooting line.



Safety and etiquette on the shooting line:

- You can only draw your bow back on the shooting line. You should not draw the bow having the bow hand higher than the drawing hand, and you should not draw diagonally (toward a target that is not straight ahead).
- Don't talk on the line or distract other archers during the shooting of the end;
- Only the coach can make comment about an archer who is shooting; nevertheless encouraging remarks are welcome at any time;
- If your bow or arrow falls in front of the shooting line, you must wait until the archers on either side have finished shooting before retrieving your equipment. Any arrow which cannot be retrieved without moving feet on the shooting line should be retrieved after shooting has stopped;



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EVALUATION FORM FOR GOLD FEATHER CANDIDATES

Name of the beginner: _____

Form B

Date: ____ / ____ / 20__

Make up date: ____ / ____ / 20__

PERFORMANCE	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result).
Shooting distance				
8 meters	12 hits			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA level 1 coaching manual.
Body setting (before drawing and at full draw)	Vertical body			#7.1.2.4 & 7.1.2.5
	Balance on 2 feet			#7.1.2.4 & 7.1.2.5
	Spine and shoulders making a cross shape.			#7.1.2.4 & 7.1.2.5
Body setting (end of draw)	Let the string hand land on face (chin &/or lips do not reach forward to the string)			#7.1.2.7
KNOWLEDGE &/or KNOW-HOW	Required knowledge's or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Bow bracing	Able to brace their own bow.			#4.3.1.1.
Shooting direction	Only draw towards the a clear target butt from the shooting line (not toward anyone or the sky)			#3.2 Chapters 2 & points 2 & 3
Safety and etiquette on the shooting line	Do not disturb (touch or talk to) other shooting archers			#3.2 Bullet 3 #3.5Bullets 1&2
	How to retrieve an arrow that dropped on the floor			#3.2 Bullet 11
Total	9 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: _____



Gold Feather Award

THE



ARROWS



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RECOMMENDED EVALUATION GUIDELINES FOR THE "ARROWS"

1. SCORE EVALUATION (for the Arrow awards)

Where:	Indoor or Outdoor.
Warm-up:	No more than 4 ends (recommendation only)
Target face:	80cm (a full one)
Target height:	1 meter to 1.3 meter for the centre of the target face
Arrows per end:	3
Number of ends:	5
Time per end:	2 minutes.
Total number of arrows:	15 (half a 30 arrow round)
Scoring:	As per FITA Indoor and Outdoor scoring rules

2. SKILLS EVALUATION (for the Arrow awards)

See Chapter "Skills" of the program related to the level that you are challenging.

3. KNOWLEDGE & KNOW-HOW'S EVALUATION (for the Arrow awards)

See Chapter "Knowledge and Know-How's" of the program related to the level that you are challenging.

White arrow candidates: Caution to your current level!

Three cases are possible:

- You have *not earned any Feather awards yet*, but your coach wishes that you challenge the White Arrow (suggested for beginners of 12 years old or more).
For preparing this level, you must learn the chapters "Skills" and "Knowledge & Know-How's" of the programs for the Red Feather, Gold Feather and White arrow.
Your evaluator will use form C1.
- You only *have the Red Feather* award
You should complete the Feather awards program with the preparation of the Gold Feather (suggested to most of the "youngest"; i.e. under 12 years old).
Only after getting the Gold Feather you will be allowed to challenge the White Arrow.
- You already *have the Gold Feather* award.
The following is right for you. Your evaluator will use form C2.

White



Arrow



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CURRICULUM FOR THE FITA **WHITE ARROW** AWARD

PERFORMANCE:

Shooting distance: 10 meters

Minimum required score: 115 points

SKILLS – Your shooting sequence should include the following:

Feet position: For candidates having earned no WA Feather awards yet, see chapter “Skills” of the Red Feather curriculum.

Arrow loading: For candidates having earned no WA Feather awards yet, see chapter “Skills” of the Red Feather curriculum.
(*Safe and proper*)

Body setting (before drawing and full draw): For candidates having earned no WA Feather awards yet, see Gold Feather

Body setting (end of draw): For candidates having earned no WA Feather awards yet, see Gold Feather

Raising the bow:

- **Objective:**
Perform the preliminary movements with as little unnecessary motion and initial positioning disruption as possible. This initial positioning must allow for an effective draw.
- **Form:**
Synchronized rising of the two hands towards the target until that both hands are at the nose level.

Throughout the process long:

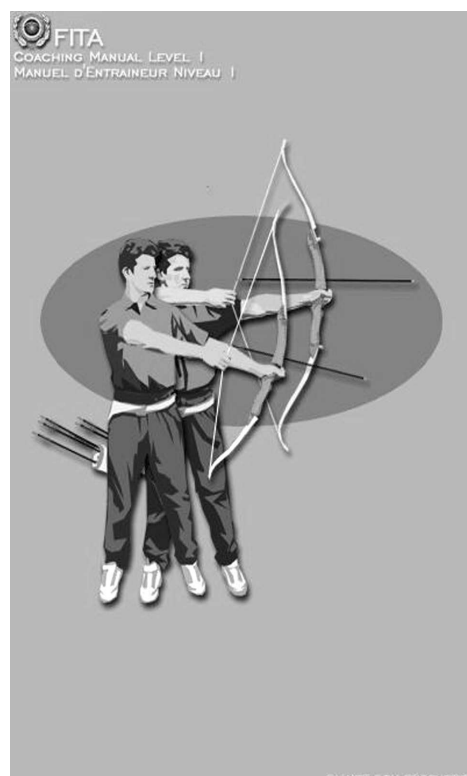
- the bow shoulder must stay as low as possible;
- the upper body (shoulders, chest and centre of gravity) is maintained in its lowest position;
- the arrow must be moved up in the shooting plane;
- the head and spine are still extended.
- the pelvis remains tilted (if this position is chosen).

Toward the end of the raising:

- both hands are moved up at 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 axis;





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- 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:*

Simplicity of the movement is easy to repeat. It is a safe pre-position to the draw, even if an arrow slides out from the beginner's fingers. The elements already in place are hardly disturbed, and are finalized following the action. The forces exerted on the upper limbs facilitate the low positioning of the shoulders. The body's inclination toward the string foot counter balances the weight of the bow moves the archer's centre of gravity towards the target (the use of bows with light mass weight will reduce this inclination).

KNOWLEDGE&/OR KNOW-HOW – you must know the following:
--

Bow safety: see chapter "Knowledge &/or Know-how" of the Red Feather curriculum.

Arrow loading safety: same as above.

Safe arrow recuperation: same as above.

Bow preparation: same as above. But see also chapter "Knowledge &/or Know-how" of the Gold Feather curriculum.

Shooting direction: see chapter "Knowledge &/or Know-how" of the Gold Feather curriculum.

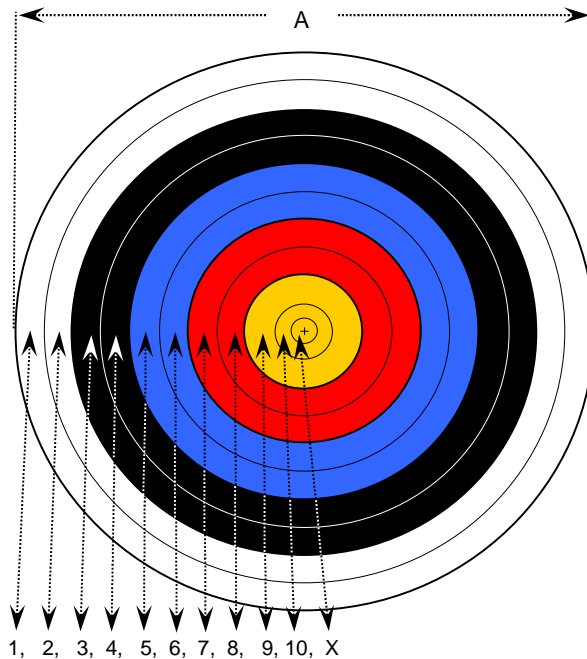
Safety and etiquette on the shooting line: same as above.



WORLD ARCHERY BEGINNERS MANUAL

Scoring:

- You should be able to identify the arrows value.



Diameter A = 80 cm for this program

- You should know how to complete a scorecard for a complete round/distance "Arrow". The value of each arrow scorers must be entered on the scorecards in descending order as called out by the athlete to whom the arrows belong. 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 Arrow round only):

15 Arrows				
1	2	3	End	Total
10s		Xs		



WORLD ARCHERY BEGINNERS MANUAL

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	
10 s	3	Xs	2		

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



WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR **WHITE ARROW** CANDIDATES HAVING EARNED NO FEATHER AWARDS YET.

Page #1 (start /front page)

Name of the beginner: _____ Form C1

Date: ____ / ____ / 200__

Make up date: ____ / ____ / 200__

PERFORMANCE	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result).
Shooting distance				
10 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA Level 1 Coaching manual
Feet position (Stance)	Feet each side of the shooting line			#7.1.2.1
	Feet at shoulder width apart			#7.1.2.1
	Line of feet square to the shooting line			#7.1.2.1
	Feet parallel			#7.1.2.1
Safe and proper arrow loading	<i>Implemented with bow <u>vertical</u></i>			#3.2 Bullet 5 & #7.1.2.2
	<i>No finger pressing the arrow on rest</i>			#7.1.2.2
	<i>Arrow properly rotated (cock feather away from bow window)</i>			#7.1.2.2
Body setting (before drawing and at full draw)	Vertical body			#7.1.2.4 & 7.1.2.5
	Balance on 2 feet			#7.1.2.4 & 7.1.2.5
	Spine and shoulders making a cross shape.			#7.1.2.4 & 7.1.2.5
Body setting (end of draw)	<i>Let the string hand land on face (chin &/or lips do not reach forward to the string)</i>			#7.1.2.7
Raising	Synchronized hands			#7.1.2.5
	Raise hands while keeping the shoulders down			#7.1.2.5
	Hands at same height and at nose or eye level once raised			#7.1.2.5
	Arrow parallel to the floor once rose.			#7.1.2.5



White Arrow award



WORLD ARCHERY BEGINNERS MANUAL

KNOWLEDGE &/or KNOW-HOW	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Bow safety	No dry fire (dry loosing)			#3.3. Bullet 2
	Place the bow in the equipment lane after end			#4.4.5. Step 7 - #11.3 #9.2
Arrow loading safety	<i>Load the arrow on the bow only when the Field of play is empty and</i>			#3.2 Bullet 2
	<i>To be done only when both feet are set each side of the shooting line.</i>			#3.2 Two first bullets
Safe arrow recuperation	Walk carefully to target (do not run – Watch his/her step)			#3.3 Bullet 8
	Stand to the side of the target (not behind arrows)			#3.2 Bullet 12
	Properly pull the arrow out of the target (or grass).			#4.4.1. Step 8
Bow preparation	<i>Know how to properly assemble and disassemble the limbs on/from the riser.</i>			<i>This evaluation can be skipped if no take down bow is available</i>
	<i>Can brace his or her bow.</i>			#4.3.1.1.
Shooting direction	Only draw towards the a clear target butt from the shooting line ((not toward anyone or the sky)			#3.2 Chapter 2 and Bullets 2 & 3
Safety and etiquette on the shooting line	<i>Do not disturb (touch or talk to) other shooting archers</i>			#3.2 Bullet 3 #3.5Bullets 1&2
	<i>How to retrieve an arrow that dropped on the floor</i>			#3.2 Bullet 11
Scoring	Be able identify the arrows value.			WA C&R Appendix 1 Book 2
	Can complete a scorecard for a complete round			WA C&R #7.6.1.4 & Appendix 3 Book 2
TOTAL	30 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: _____

EVALUATION FORM FOR **WHITE ARROW** CANDIDATES
HAVING NO FEATHER AWARDS YET.

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



WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR **WHITE ARROW** CANDIDATES HAVING EARNED THE **GOLD FEATHER** AWARDS **PREVIOUSLY**.

Name of the beginner: _____ Form C2

Date: ____ / ____ / 200__

Make up date: ____ / ____ / 200__

PERFORMANCE Shooting distance	Required minimum score	Achieved *	*Not yet achieved	Number of hits (result).
10 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	Comments &/or references to the WA Level 1 Coaching manual
Raising	Synchronized hands			#7.1.2.5
	Raise hands while keeping the shoulders down			#7.1.2.5
	Hands at same height and at nose or mouth level once raised			#7.1.2.5
	Arrow parallel to the floor once rose.			#7.1.2.5
KNOWLEDGE &/or KNOW-HOW	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments &/or references t
Scoring	Be able identify the arrows value.			WA C&R Appendix 1 Book 2
	Can complete a scorecard for a complete round			WA C&R #7.6.1.4 & Appendix 3 Book 2
TOTAL	7 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: _____



White Arrow Award.



WORLD ARCHERY BEGINNERS MANUAL

Black



Arrow



WORLD ARCHERY BEGINNERS MANUAL

CURRICULUM FOR THE WA BLACK ARROW AWARD.

PERFORMANCE:

Shooting distance: 14 meters

Minimum required score: 115 points

SKILLS – Your shooting sequence should include the following:

Draw process: See chapter "Top Body" 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 weight.

• *Form:*

The torso is immobile. The body is in an up-right position. The chest and shoulders exert a constant pressure towards the ground while seeking to spread out the shoulders. Spine and head are erect. A balance must be found between the push and pull forces. These efforts are supported by the legs, causing a slight compression of the abdominal area. The constants are:

- the spacing 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 (hence vertical plan);
- the height of the shoulders;
- the bow's vertical position;
- the torso, and the head.

• *Rationale:*

Reduces the spring effect of the bow, may cause the archer to collapse. Draws-in the chest, facilitating string displacement. Avoids asymmetrical form. The production effort is not centralized, but dispersed, facilitating symmetrical form, reduce local fatigue effects, and minimizes the risk of injury. Moreover, major muscles are trained to generate this production. Stretching the spine helping to stay erect and vertical. Flattening the chest and lowering the shoulders lower 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. A weak muscle is likely to collapse under the spring effect. This is why muscle tone is necessary.

Learning tools

It would be difficult to list all the usable archery teaching tools since their usefulness varies depending on the theme and teaching method used. However, below are two tools that we suggest to your learning:



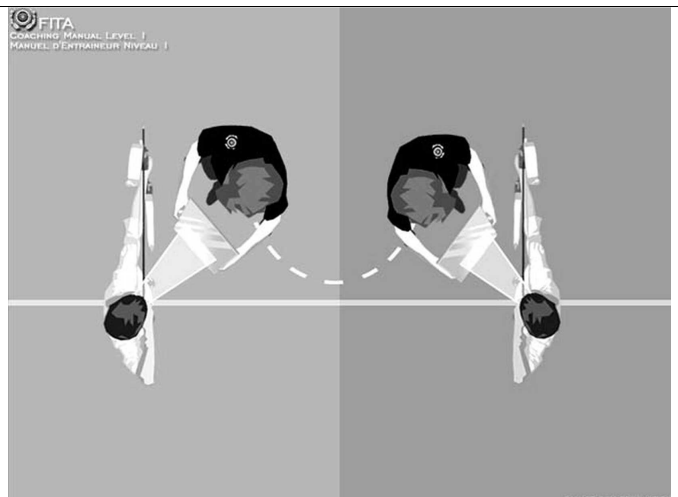
WORLD ARCHERY BEGINNERS MANUAL

- a bow strung with an elastic string to give the archers a chance to execute an action with greater ease. You even can release the string without harming the bow.



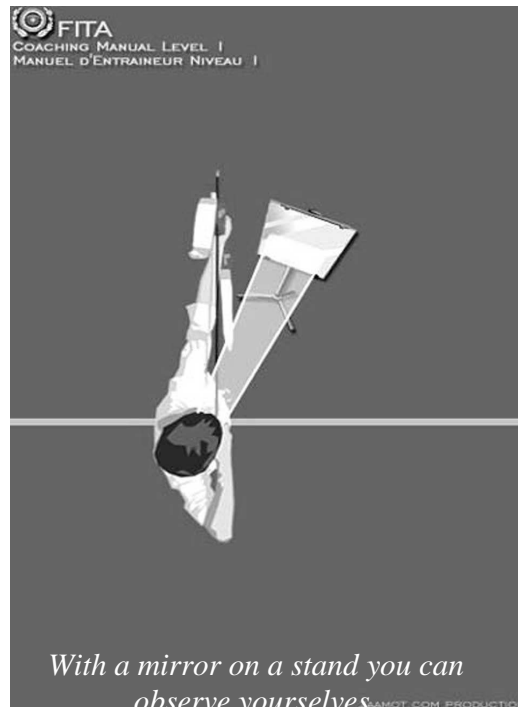
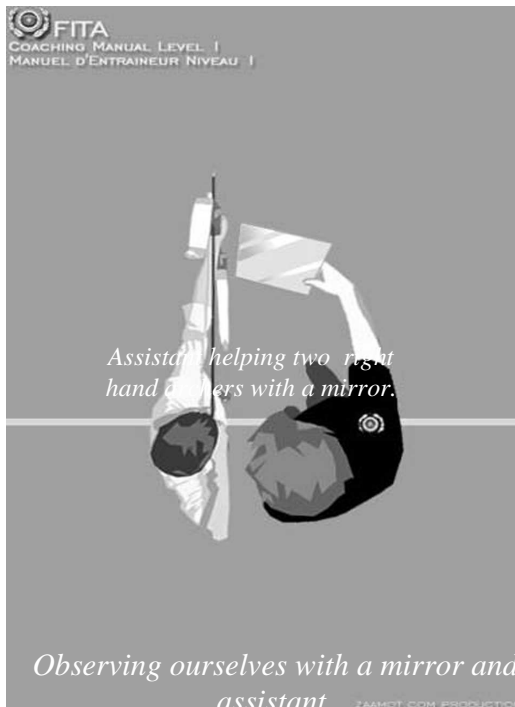
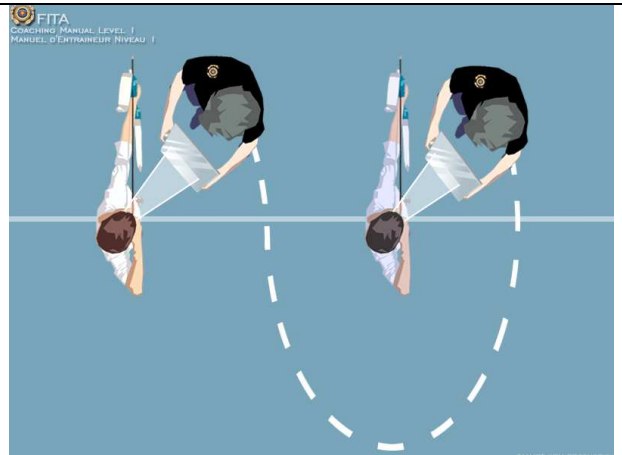
- a mirror, to see your form during execution, or your position in comparison to the demonstration.

If using a portable mirror, work with the grouping illustrated on the right. It allows two archers to alternate. One archer shoots an arrow while watching in the mirror while the other gets ready.



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If grouping a left-hander with a right-hander is not possible, additional travel, as shown in the illustration beside, is required.



Shooting rhythm and shooting lines

Try not to organize two distinct lines since this would involve too much downtime between lines. Promote shooting in one line to maximize the time allocated to your practice. If several lines are needed, do something when you are not shooting. For example, chose a partner and hold the mirror so that the other can see his/her reflection, then change roles (see the above illustrations).

Shooting rhythm and equipment rotation

If your club has not one equipment set per beginner, then two archers have to share the same equipment set and shoot at different times, forming lines A and B



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(even C, if three beginners share the same equipment kit). Even though this situation is to be avoided, it happens.

When there are not enough arrows to equip everyone in the class, it's preferable for the shooter to retrieve the arrows, giving opportunity to see the arrow grouping first-hand, while allowing the other archer the chance to prepare to shoot.

In all other situations (one bow for two archers, for instance), it's preferable for all the archers to shoot before retrieving the arrows. Then everyone goes to the targets together.

Shooting line and target face changes

Still to protect your practice time, keep shooting line movements to a minimum. Try to regroup the exercises near the targets, and all shots at the designated distances. Lines marked on the ground guarantee easy, quick, and safety conscious archer alignment. Mark a second line 3 m to 5 m behind the shooting line, creating a secure zone. You should stay behind it when you have finished shooting.

Target faces should not be handled too often because of the time lost in putting up and taking down

Equipment moving

Bow stands are usually placed behind the shooting line. When shooting at a shorter distance than usual, these stands will may not be so close; hence you will be allowed to lay your bows on the floor, 3 m behind the shooting line.

Archer groupings

There are some basic grouping rules to take in consideration for the exercises to be performed in pairs:

- by similar height in order to work at your height;
- by level of performance or development, allowing understandable exchanges for both of you.
- by age, if the two above criteria allow it;
- local social sensitivities could sometimes be taken in consideration.

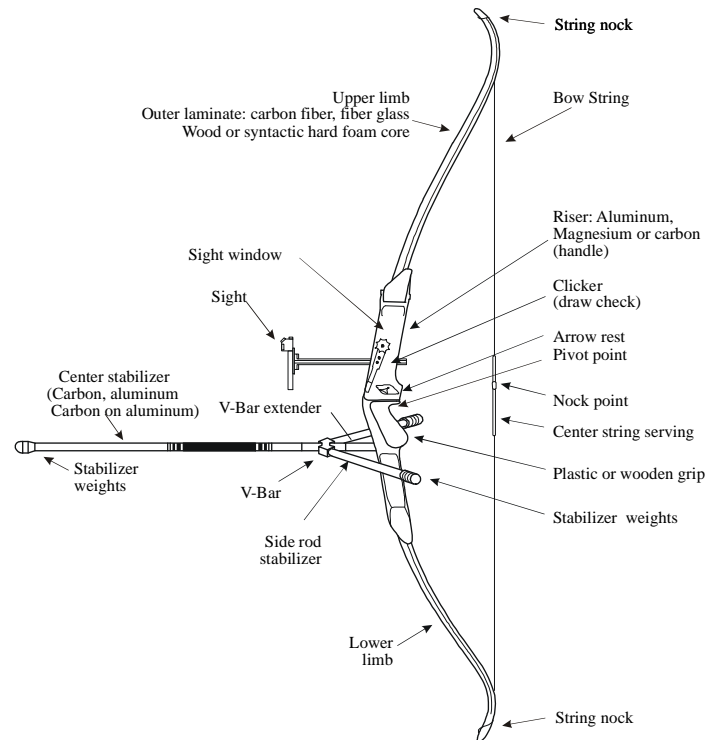
KNOWLEDGE&/OR KNOW-HOW

Equipment terminology

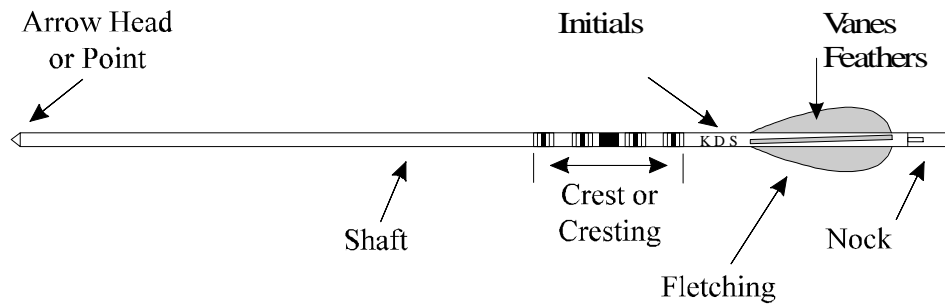
You should know the names designating the various parts of your equipment. During the evaluation you will have to name five parts or components of the bow.

- 1) Recurve bow:

WORLD ARCHERY BEGINNERS MANUAL



2) Arrow



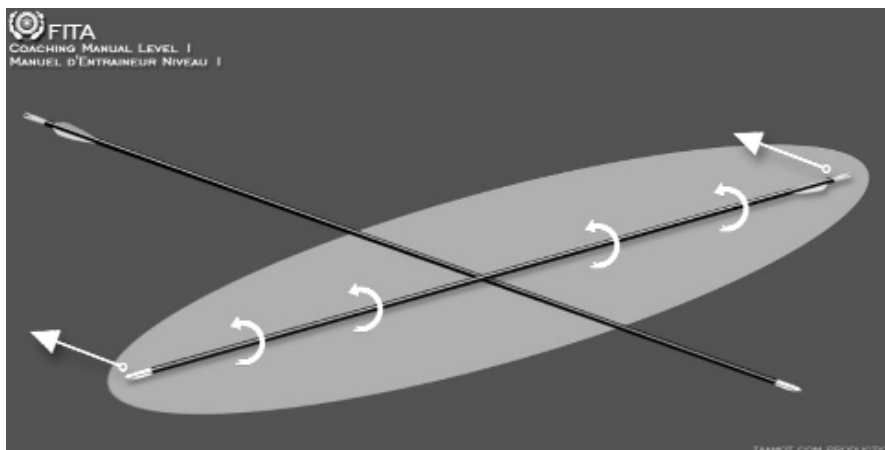
3) Compound Bow



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Arrow safety and checking:

- When shooting, an arrow may not fully stick into the target and may hang loose from the point of the arrow and lay down along the target face. If shooting continues before the arrow is retrieved other arrows may hit this arrow 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 aluminum arrows do not affect a beginner's accuracy. Check by eye, down the shaft, or rotate and note wobble or vibration. Rolling the shaft along a table can also be used to check straightness.



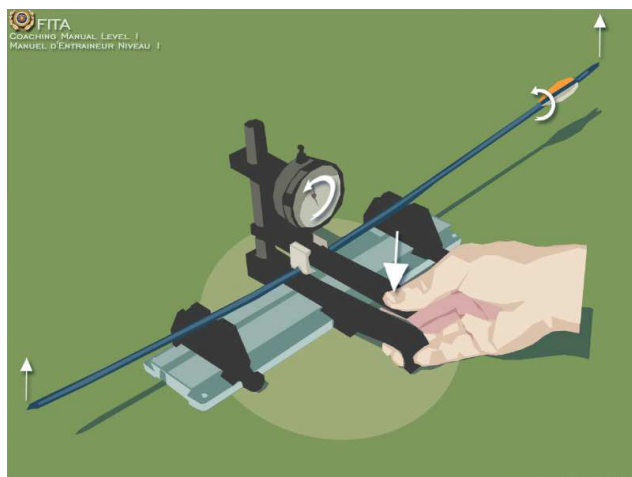
Always check shafts for damage such as splits, chips or compression lines as these make the arrows dangerous to use and inaccurate.



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

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If there are no splits in a wooden or aluminum shaft, a shaft straightening tool can be used. Straightening can be done by hand, but requires much experience. Be careful because sometimes a shaft can break during the process.





WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR BLACK ARROW CANDIDATES.

Name of the beginner: _____ Form D

Date: ____ / ____ / 200__ Make up date: ____ / ____ / 200__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Final number of hits.
14 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA Level 1 Coaching manual
Draw process	Done with two hands always at the same level (or arrow always parallel to floor)			#7.1.2.7
	Draw in shooting plane			#7.1.2.7
Main action (What is happening at full draw).	Stationary arrow point (no draw creeping) - or better - arrow point constantly moving back			#7.1.2.9
	Consistent distances between arrow and bow shoulder (vertically and horizontally).			#7.1.2.9
Visual attention	Can observe himself (or herself) in a mirror while releasing			#9.1 teaching tools and end of #9.2
Subjects 3 evaluations	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Equipment terminology	Can name 5 parts or components of the bow.			C&R Appendix2 Book 2
Arrow safety and checking	Know what to do in the case of a hanging arrow on the target.			#3.4 Point 1
	Can check the straightness of an aluminum arrow or the integrity of a carbon arrow.			#11.4.2
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: _____



Black Arrow award



WORLD ARCHERY BEGINNERS MANUAL

Blue



Arrow



WORLD ARCHERY BEGINNERS MANUAL

CURRICULUM FOR THE WA BLUE ARROW AWARD

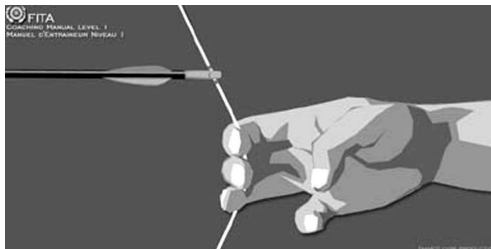
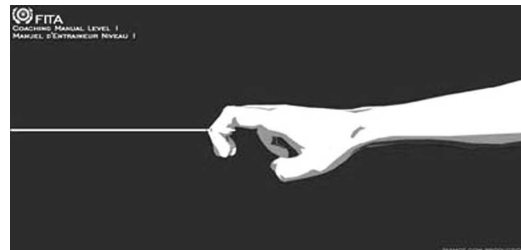
PERFORMANCE:

Shooting distance: 18 meters
Minimum required score: 115 points

SKILLS – Your shooting sequence should include the following:

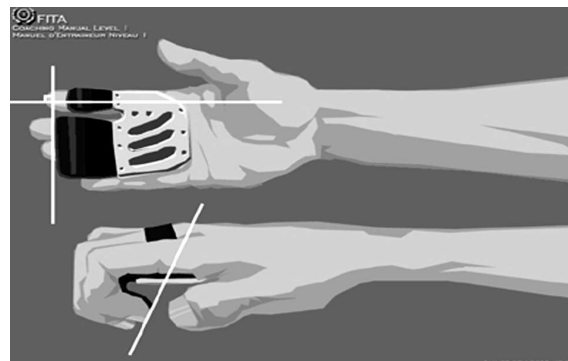
String hand: String Hook

- **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.



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, depending on facial bone structure & size of string fingers.

The three fingers share the workload equally. Afterwards, 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 plan as the forearm and arrow.



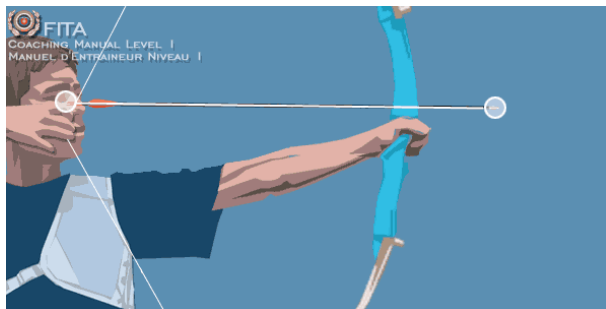
*With a proper string hook, the back of the hand and the wrist are flat.
(Example for sight use.)*

- **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 string constraints there is, and the string releases cleanly from the fingers.

WORLD ARCHERY BEGINNERS MANUAL

Facial marks:

- Straight line:
Simplification of the quadrilateral to a simple line (see further down in this chapter).



No :

- need to repeat the facial marks at full draw (see triangle and quadrilateral methods described further down); a simple visual alignment of the arrow shaft on the centre of the target is enough.
- eye positioning in reference with the shooting plan (hence no need of string alignment);
- worry about applying a vertical finger pressure on the arrow (upward or downward) with the string fingers.

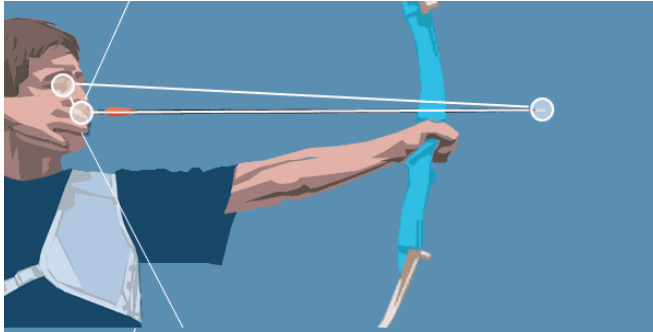
- Triangle:



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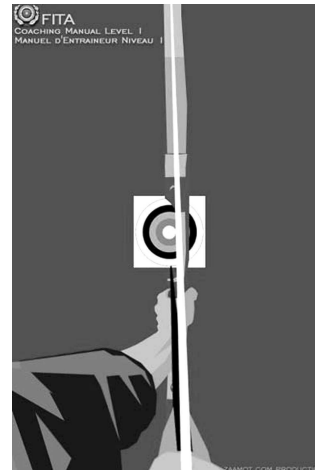
The arrow is positioned by two reference points.

- arrow point, by visual placement on the target;
- arrow nock, through contact of the string hand and the face.



To ensure the triangle reproduction, the archer has

- maintain a constant draw;
- place the eye for string alignment.



on

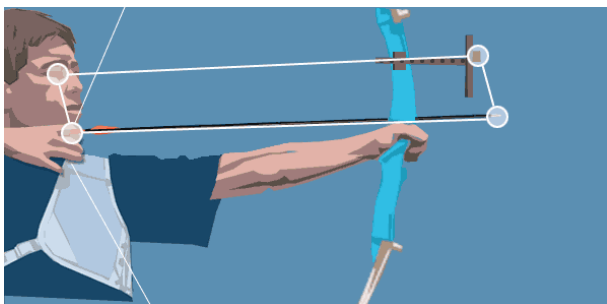
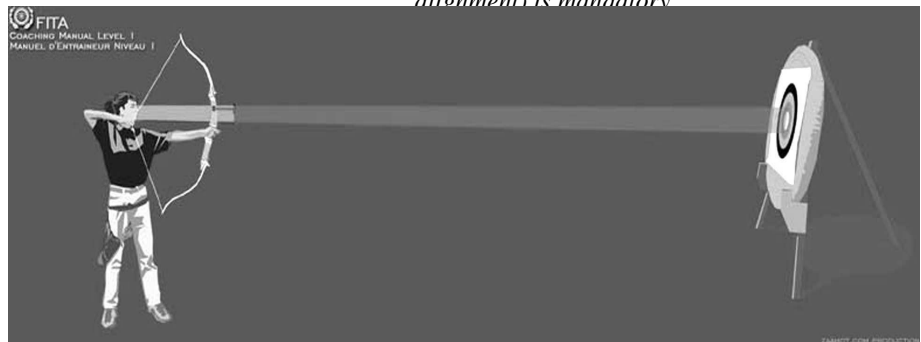
to:

In the triangle method, the aiming eye positioning (for string alignment) is mandatory

● Quadrilateral:

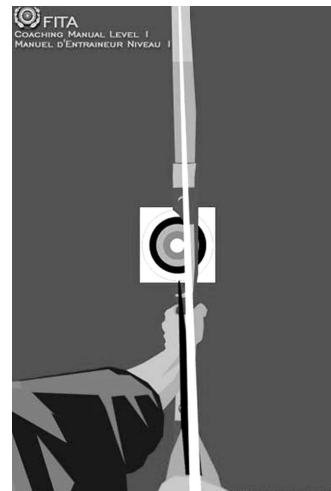
The arrow is positioned by two reference points:

- the arrow point, by visual placement of a sight on the target. Hence a sight should be introduced when teaching this method;
- the arrow nock, through tactile placement of the string hand on the face.



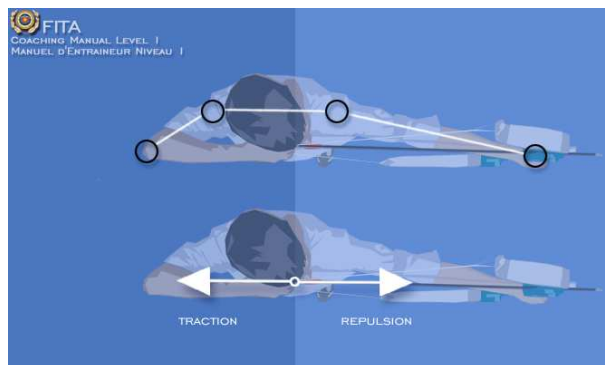
Furthermore, to ensure the repetition of the quadrilateral method, the archer must maintain:

- the bow in the vertical plane, or constantly canted the same amount;
- maintain a constant draw;
- place the eye for string alignment.



Arrow- String forearm alignment:

- **Objective:**
Find out the body position allowing a minimum of effort and a maximum of stability during the "full draw ».
- **Form :**
Your string forearm should be as much as possible in the vertical plan passing through the arrow.
- **Rational :**
Physically wise this is the position requiring fewer efforts. Furthermore it allows to keep relax the muscles of the string arm, forearm and wrist. This relaxation of the top body limb facilitates the use of the muscles located in the back and behind the string shoulder.



Feeling attention:

In order to better feel your physical (or kinesthetic) perception related to the skill and hand, we suggest to you to shoot at a very short distance (about 3 meters) with eyes closed. Shooting at an empty buttress (noting to aim at 9 also ease the physical perceptions).

KNOWLEDGE&/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 Standard bow.

- **Recurve:**
a bow of any type provided it subscribes to the accepted principle and meaning of the word bow as used in target archery, that is, an instrument consisting of a handle (grip), riser (no shoot-through type) and two flexible limbs each ending in the tip with a string nock. The bow is braced for use by a single string attached directly between the two string nocks, 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.
- **Compound:** A compound bow, which may be of a shoot-through type, is one where the draw is mechanically varied by a system of pulleys and /or cams. The bow is braced for use by bowstring(s) attached directly between the two string nocks of the bow limbs, or attached to the bow cables, as may be applicable to the particular design.



WORLD ARCHERY BEGINNERS MANUAL

- **Standard bow:** The bow will be of a simple design, either a take-apart type (which wooden or metal riser, no shoot-through type) or of one-piece construction. In both types of bow the limbs will be of wood and /or fiberglass construction.

Arrow reparation: Arrow nocks reparation.

1. Remove the remaining part of the broken nock, if any. For an easy removal you can slightly warm the remaining plastic part of the nock with a flame.
2. Clean the area where the new nock will fit with 91 % isopropyl alcohol. Beforehand, you can use a fine paper sand on the cone of the aluminum shaft. Con carbon and Aluminum shaft you can clean the area that will receive the new nock
3. Put a drop of glue on the area where the new nock will fit, see picture.



4. Present the nock on the shaft and rotate it for spreading the glue.
5. Orientate the groove of the nock square to the leading vane, see picture.





WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR BLUE ARROW CANDIDATES

Name of the beginner: _____ Form E

Date: ____ / ____ / 200__

Make up date: ____ / ____ / 200__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Final number of hits.
18 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA Level 1 Coaching manual
String hand	Flat back of hand (no knuckles pointed out)			#7.1.2.3.a
	3 fingers are used for gripping the string			#7.1.2.3.a
	Vertical back of hand			#7.1.2.3.a
	Consistent grip			#7.1.2.3.a
Facial marks	<i>Are consistent</i>			#7.1.2.8
	<i>Provide "decent" alignment between arrow and string forearm.</i>			#7.1.2.8
	<i>Can align the string.</i>			#7.1.2.8
Feeling attention	Can shoot with eyes closed			#9.5 third step
Subjects 3 evaluations	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments & 7or references
Bows knowledge	Can give the overall description of 3 types of bow.			C&R #4.3 related book and articles
Arrow reparation	<i>Know how to replace a nock</i>			#11.4.2
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: _____



Blue Arrow Award



WORLD ARCHERY BEGINNERS MANUAL

Red



Arrow



WORLD ARCHERY BEGINNERS MANUAL

CURRICULUM FOR THE WA RED ARROW AWARD

PERFORMANCE:

Shooting distance: 22 meters
Minimum required score: 115 points

SKILLS – Your shooting sequence should include the following:

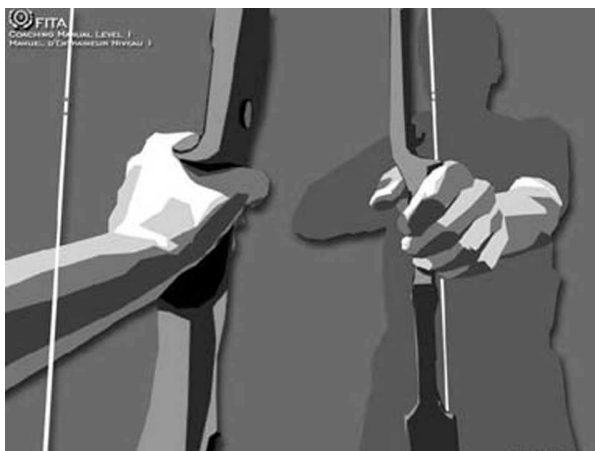
Bow hand and arm.

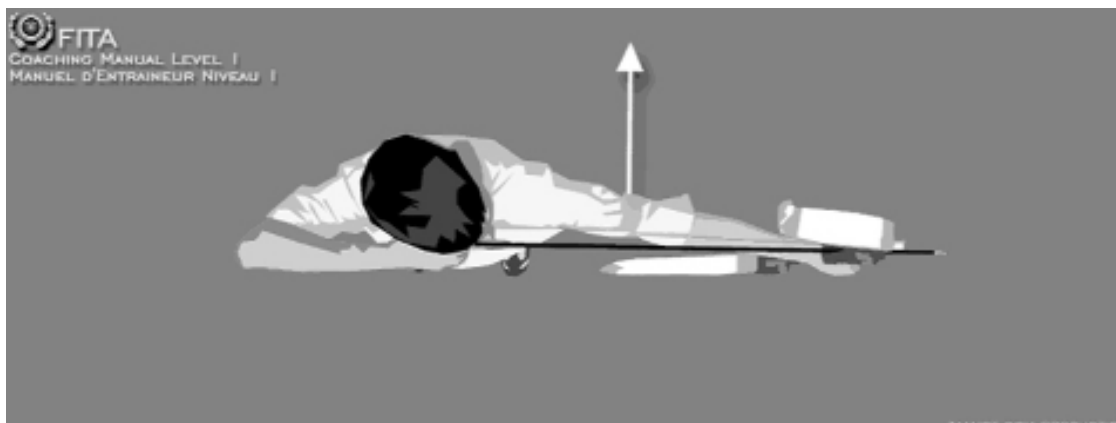
● *Objective:*

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

● *Form:*

Fingers are relaxed, a bit folded they do not grip, or choke the bow. The wrist is flexed. The "V" between forefinger and thumb is centered on the forearm axis. The bow pushes on the centre of the "V" made by the thumb axis and the life line. The main pressure zone is at about 1 to 2.5 cm lower than the "V" point. The other side of the palm from the life line should not press on the centre of the grip.





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

- **Rationale:**

The bow hand grip requires very little muscle contraction promoting relaxation. The more relaxed the archer is, the better they can perform, and are less likely to produce a counter axis pressure on the bow.

Release – What happens on the string side of the archer:

- **Objective:**

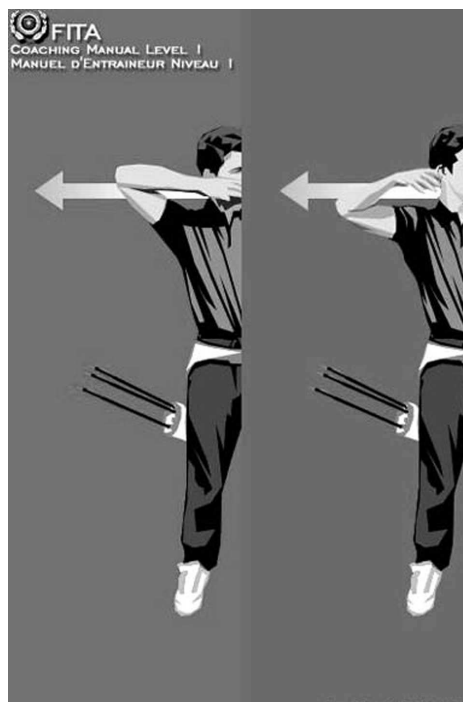
Continue all on-going activities, but release of the string.

- **Form:**

Upon the string release, the string hand immediately runs off backwards, in the shooting plan. It moves along either the jaw (in the "Straight line" and "Triangle" methods) or neck (in the quadrilateral method). The string hand stops at a vertical axis passing by and usually against the string ear. The area where the string hand ends is called the "back end." The string arm ends in the shoulders axis.

- **Rational:**

Because the muscles of the back part of the string shoulders and of the back pursuit their contractions, the entire string arm pursues its backwards motion that it was implementing during the « full draw ».



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Release – What happens on the bow side of the archer:

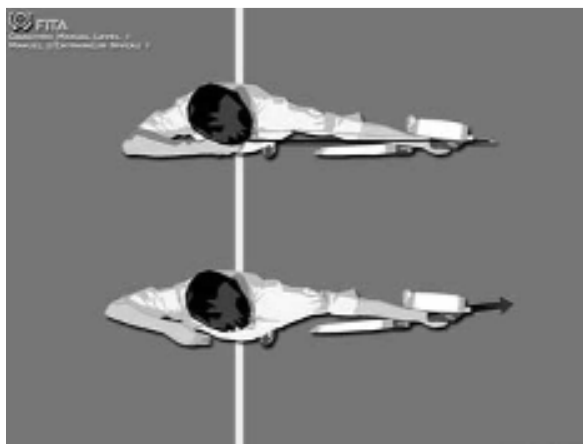
* About your bow arm.

• *Objective:*

Continue all on-going activities, but release of the string. The bow arm and even the whole body move slightly forward.

• *Form:*

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



• *Rational:*

The deviation of the bow arm towards your back side is mainly due to the continuous action of the posterior muscles of the bow shoulder. The forwards motions to the target are due to the continuous push effort produced during the "full draw" by all the whole body from the bow arm to the string leg.

* About your bowhand.

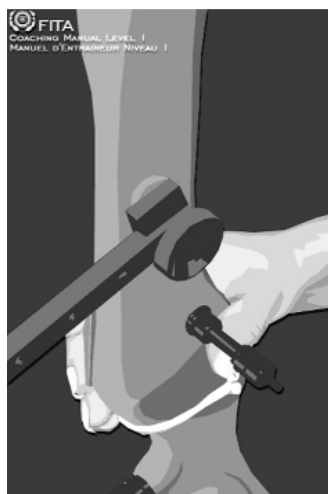
• *Objectives :*

- * Continue all on-going physical activities during the arrow propulsion period (just after release).
- * Develop a passive bow hand and fingers, to get the propulsion of the arrow be done without any force being applied to the riser which could create torque in the bow at full draw and during the arrow propulsion period (just after release, during the arrow propulsion).

• *Form:*

When the bow is propelled forwards after the release, your wrist gets inflexed; it is stretched carried by the sling. Then when the bow cants forward and drops down, your wrist gets flexed down.

Example of a bowhand that has been well kept relaxed until the end of the shot. The use of a sling helps a lot to achieve this.

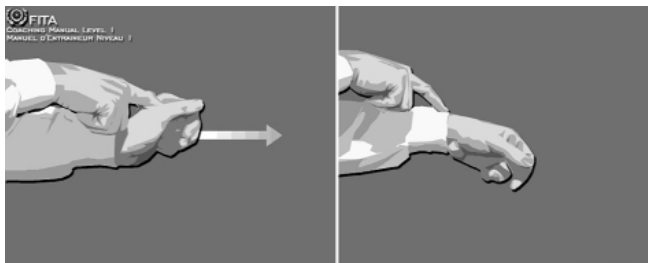




WORLD ARCHERY BEGINNERS MANUAL

• Rational:

The bow presses on your relaxed hand and wrist. When the support of these latest disappears (when the bow is propelled forwards due to end of the string run), the hand remains totally relaxed and follows the motions of the bow.



Simulation of the explanation on the left.

KNOWLEDGE&/OR KNOW-HOW

Archery disciplines.

• Outdoor Target Archery:

The WA Outdoor Target Archery rounds may be shot by both the Recurve and Compound Division in separate division. In the Olympic Games only the Recurve division may compete. The WA standard Round may only be shot by athletes of the WA Standard Bow Division.

The WA 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;
- 30,50,60,70 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 shall be used for the 50 (other than Cadet Women), 40 and 30m distances. The 80cm multiple centre set-up may be used at 30m. The 80cm triangular triple centre set-up is mandatory at WA Championship.

• Indoor Target Archery:

WA Indoor Target Rounds may be shot by both the Recurve and Compound Divisions in separate Division.

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

The 18 meter WA Indoor Round consists of 60 arrows on a 40cdm diameter daces or 40cm triple faces for all classes.

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

• Field Archery:



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The WA Field Archery Rounds may be shot by the Bare-bow, Recurve and Compound Divisions, in separate divisions.

The WA Field Round consists of any number of targets totaling between 12-24 targets which is divisible by four (4), and three (3) arrows to be shot per target. These targets will be 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 distances for target butts are set 5 meters to 50 meters for Bare-bow and 10 meters to 60 meters for Recurve and Compound. The course may be marked or unmarked and be shot with any number of walk-ups or fan targets.

The WA Arrowhead Round consists of any number of targets totaling between 24-48 targets which is divisible by four (4), that is, two complete WA Field Rounds. The rounds may be shot on marked and unmarked courses or one of each.

Arrow reparation

Removing points (or/and inserts)

When removing a metal point (insert and point in one piece) or an insert and point in two pieces, you must:

- 1 - Lightly heat the exposed end of the point for 3-5 seconds over a small gas flame.
CAUTION: Do not overheat the component or the shaft.
- 2 - Immediately grip the point with a pair of pliers.
- 3 - Twist and pull out the point (and insert if any).
- 4 - If the point or insert cannot be removed, reheat for 3-5 seconds and try to remove again.
- 5 - Repeat procedure step 4 until adhesive softens enough to remove the component.

Installing points and insert in the shaft

Material needed for installation:

- 91 % isopropyl alcohol paper towels.
- Cotton swabs.
- Hot-melt (special for archery)
- Torch or burner.

The instruction that follow can be used for one piece points or for aluminum inserts with a screwed point in.

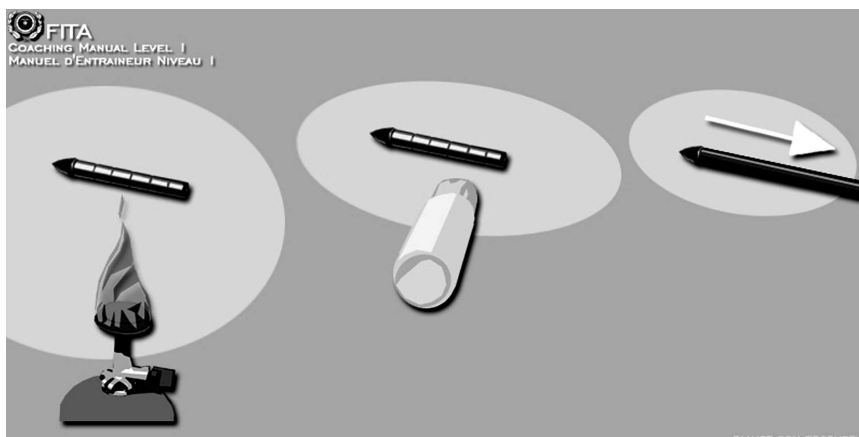
After cutting your shaft to length as described, follow the point installation procedure carefully to prevent overheating the point. Overheating points can destroy the shaft's epoxy bond between the carbon and the aluminum tube (in an aluminum/carbon shaft), or change the endurance of the aluminum in this area (if there is an aluminum shaft) or destroy the epoxy bond that glues the carbon fibers (in a carbon arrow). For gluing the points and insert, use hot-melt adhesive.

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1. Clean approximately two inches inside the point end of the shaft using a cotton swab dipped in 91 % alcohol. Repeat the process until a fresh cotton swab 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 inside of the point-end of the shaft.

CAUTION: Do not apply heat directly to the 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 during the frictional heating caused when the arrow penetrates the target mat. Arrow points can come out in the target mat if lower melting temperature hot-melt adhesives are 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 exposed portion of the point shank or insert until you feel it getting warm. It should be just hot enough Hot-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. Without delay, 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 adhesive, rotate the point 2 more revolution 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. With a paper towel quickly wipe off excess adhesive while it is still hot.

CAUTION: Do not apply heat directly to the shaft of any type because it could destroy the carbon fibers and change the endurance of the aluminum in this area. Do not overheat the points, because it could also cause damage in the shaft.

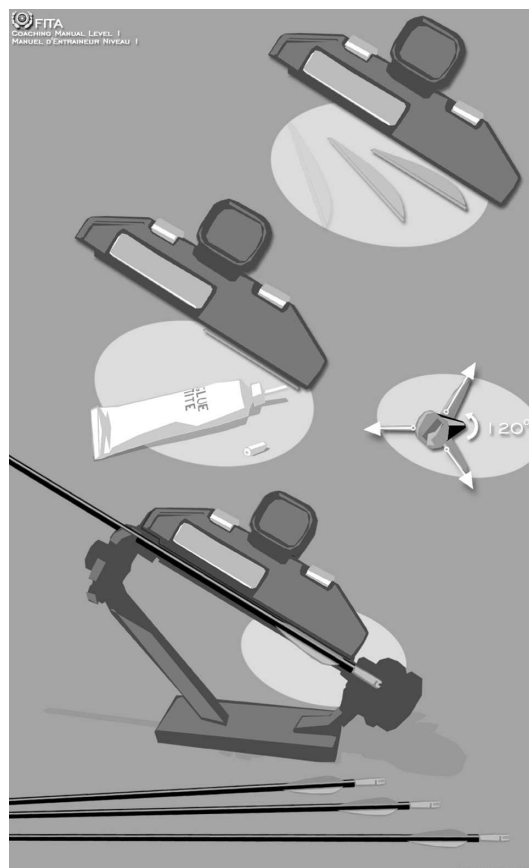
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If the head of the shaft is damaged on the point side, you will may be able to use this arrow again, if its initial length before the “problem” was enough long. If so, it is advisable to cut all your arrows down to the new length.

Fletching a shaft

Feathers or vanes can be 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.

Fletching a shaft.





WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR RED ARROW CANDIDATES.

Name of the beginner: _____ Form F

Date: ____ / ____ / 200__

Make up date: ____ / ____ / 200__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Final number of hits.
22 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA Level 1 Coaching manual
Release	Along jaw or neck.			#7.1.2.10
	Backwards motion generated by the follow-up contraction of the back and posterior string shoulder muscles			#7.1.2.10
Bow hand	<i>Consistent bow hand on grip</i>			#7.1.2.3.b
	<i>Relaxed bow hand allowing the use of a sling</i>			#7.1.2.3.b & #10 Exercises "Bowhand" & "Test for finger relaxation"
Bow arm	Elbow properly orientated			#7.1.2.3.b
	Stationary upon release or moving a little toward the back due the follow-up contraction of the back and posterior bow shoulder muscles.			#9.5
Subjects 2 evaluations	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Archery disciplines knowledge	Can give the overall description of 3 archery disciplines.			WA C & R #4.1 et #4.5
Arrow reparation	<i>Know how to fit and glue a point, and fletch an arrow</i>			#11.4.2
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: _____



Red Arrow award



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Gold



Arrow



WORLD ARCHERY BEGINNERS MANUAL

CURRICULUM FOR THE WA GOLD ARROW AWARD

PERFORMANCE:

Shooting distance: 26 meters
Minimum required score: 115 points

SKILLS – your shooting sequence should include the following:

String clearance

- *Objective :*
Allow a free path of the string during the arrow propelling.
- *Form :*
See the two tests further down. You will have to successfully pass one of these tests.
- *Rational :*
Any string shock during the propelling step would:
 - * make difficult the repetition of the push axis and the propelling intensity;
 - * reduce the amount of kinetic energy transmitted to the arrow.

Test at the bow arm level.

With no hand on the string, raise your bow and check where your string is located on your armguard or forearm. About half an inch forwards of this spot affix a piece of adhesive tape which is raised about 2 mm in the middle (bridge shape). The bridge of tape should be affixed vertically, across your bow forearm/armguard, or if you prefer parallel to the string.

Identify with a pen, the side of the tape closest to the string (to be marked before sticking the tape on the armguard). This mark will help to identify if the string hits the tape while pushing the arrow or during its way back.

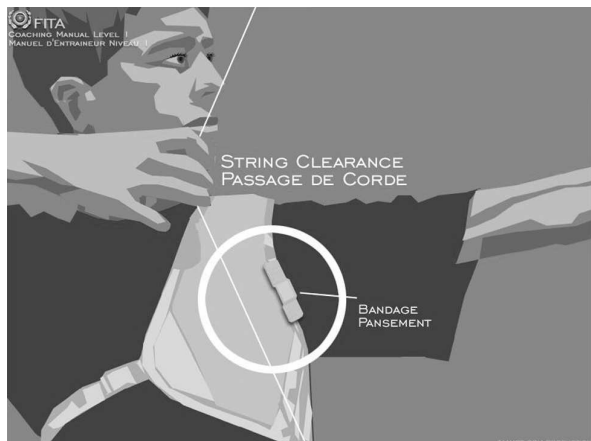
Shoot one arrow with this adhesive tape in place - make sure you not flatten out the bridge-tape before the draw! After the shot, watch the tape, and analyze the hit (if any). If you come to the conclusion that the string clearance is too poor, ask to your coach to help you in improving it.

Test at the bow side chest level.



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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 half inch forwards of this spot affix a piece of adhesive tape that has a bridge shape – 2 mm raised in the middle. See picture on the left.

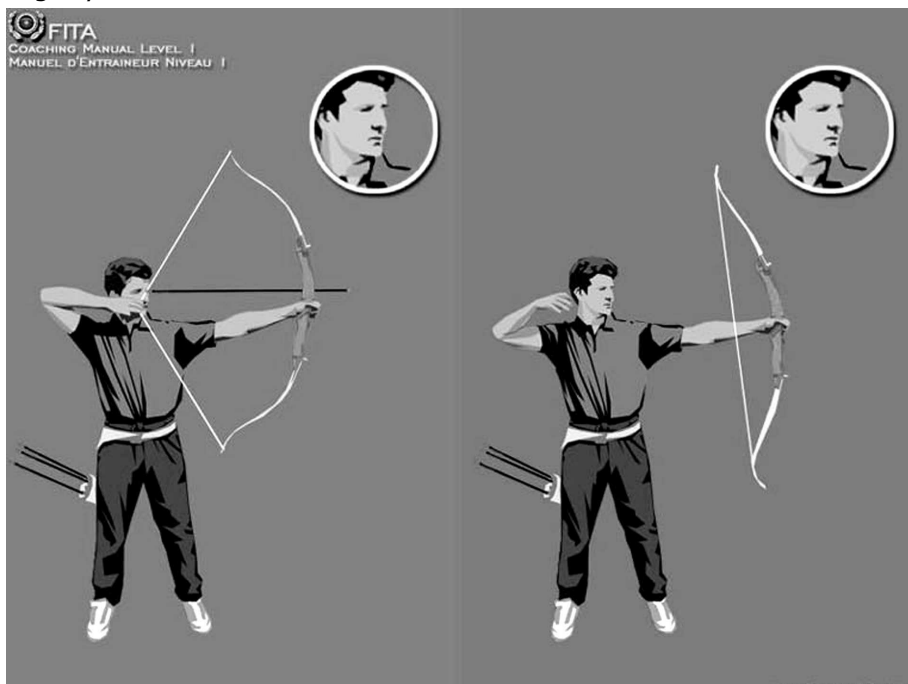


The most critical point is the edge (hem or trim) of the chest-guard surrounding your bow shoulder. The bridge of tape should be affixed parallel to the string on your chest-guard. Shoot one arrow with this tape in place – pay attention to not flatten out the "bridge" part before the draw. After the shot, analyze the hit (if any).

If you come to the conclusion that the string clearance is too poor, ask to your coach to help you in improving it.

Follow-through

- **Objective:**
Continue all on-going activities – not only the physical ones, but also the visual and mental ones - but release of the string.
- **Form:**
The shot must take the observer by surprise; no telltale signs of impending shot must be seen. The body, face and "gaze" remain impassive before, during, and slightly after the action.

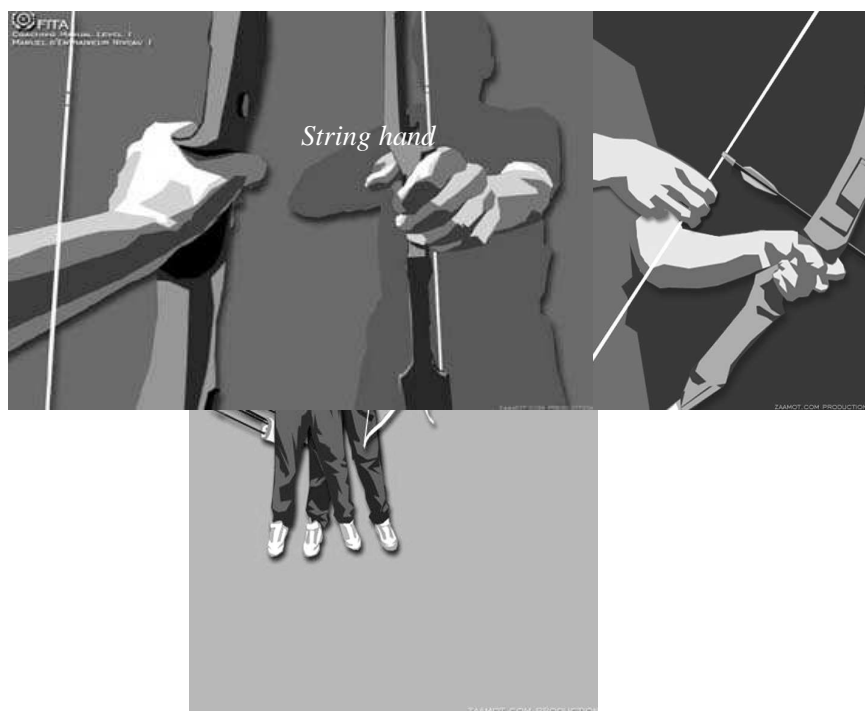
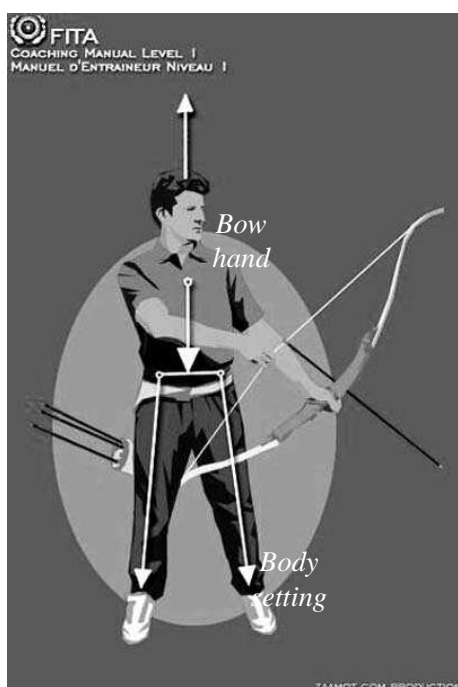
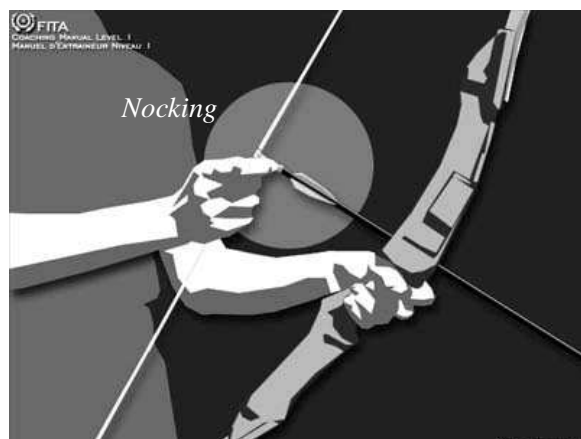


Your face should remain the same, before, during and after the release



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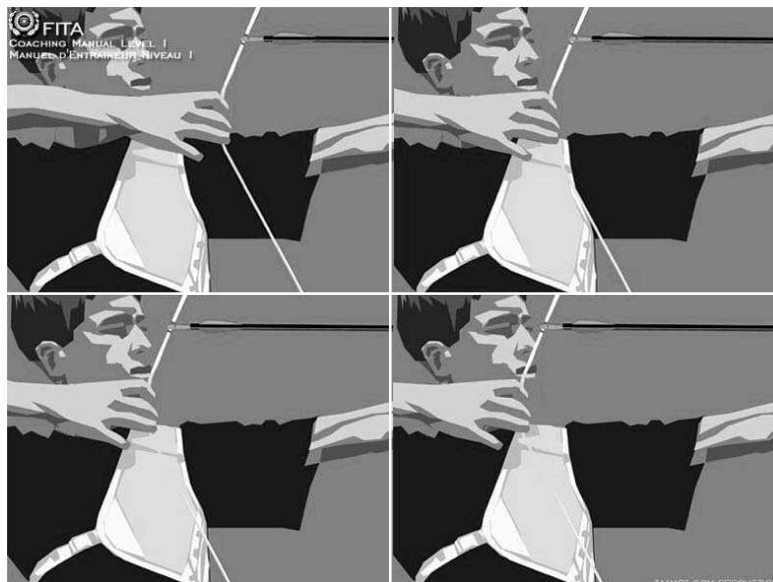
Sequence: repeat with consistency the shooting steps (they are below from left to right).



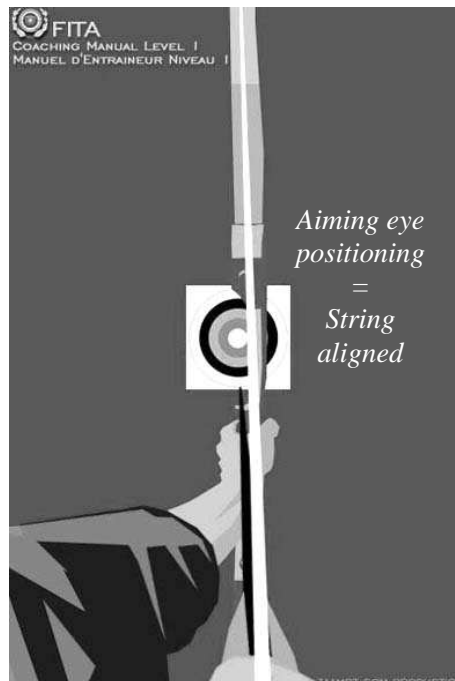
Raising



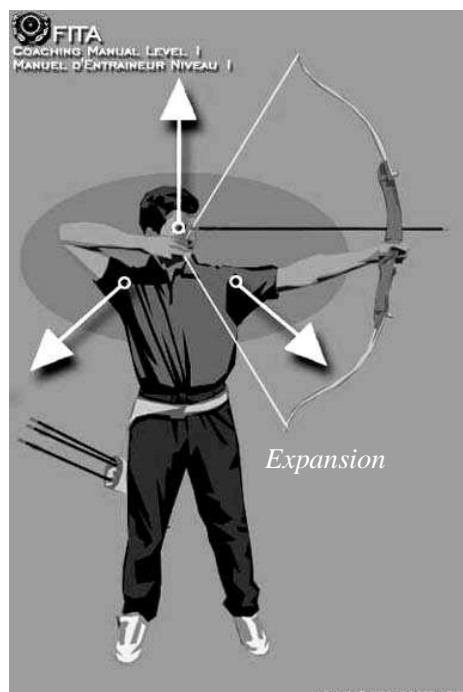
WORLD ARCHERY BEGINNERS MANUAL



Draw

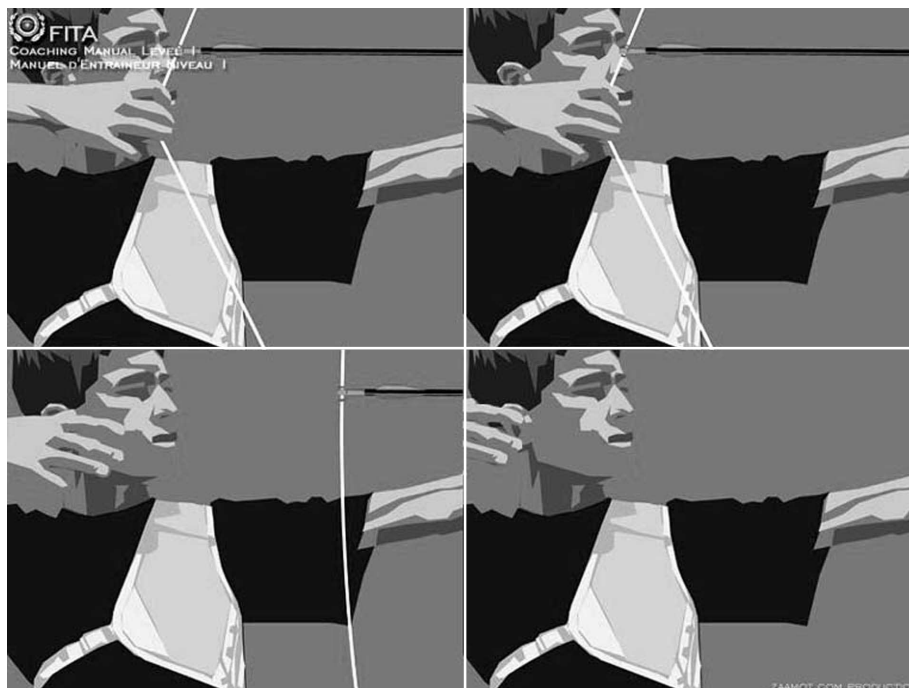


Aiming



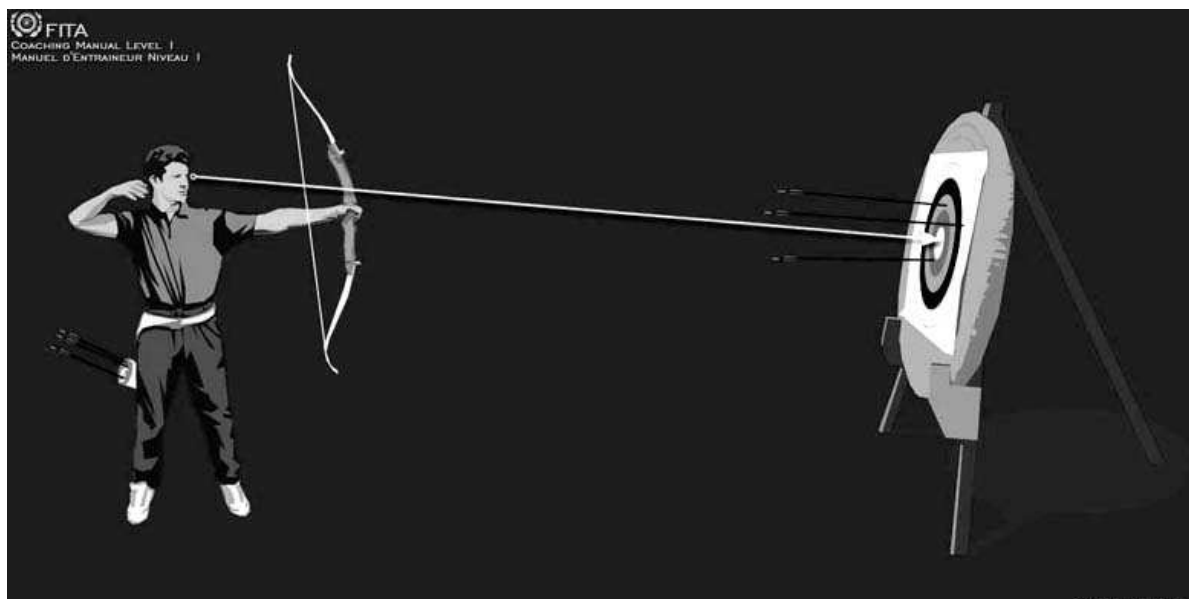
Expansion

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Release

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KNOWLEDGE&/OR KNOW-HOW

Tournament registration process:

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

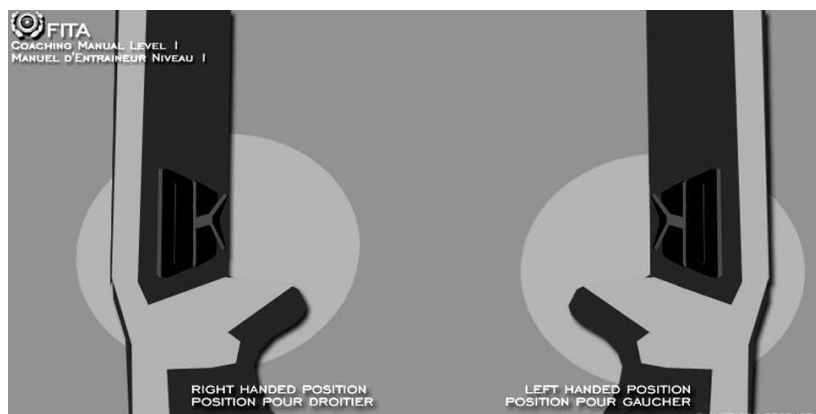
Arrow setting:

● Affixing arrow rests:

The use of an arrow rest is important as it reduces the area of the bow the arrow touches, creating the least amount of friction when the arrow begins to move as it is released. There are arrow rests made from wire and made from plastic.

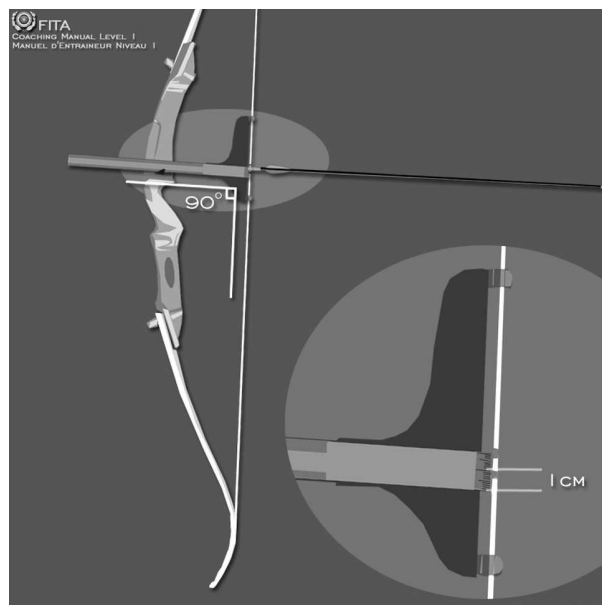
The arrow rest should be glued onto the window directly above the pivot point of the handle, and should be aligned squarely and perpendicular to the string.

There should be a space of at least 15mm between the arrow shaft and the window shelf.



● Making the nocking point:

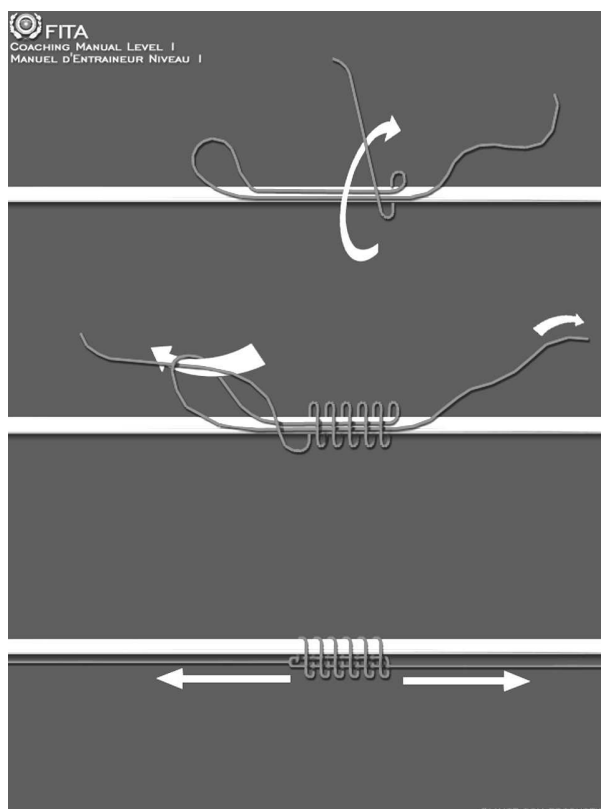
The correct height of the nocking point depends on many things. A suggested starting point is to have the nocking point maintain the bottom of the nock at about 1 cm higher than where the shaft makes a 90 degree angle with the string. This is valid if you start with the straight line method (recommended). 6 mm are enough with a "cigarette" tape of string grip.



Nock locators may be added in two ways.

- * A manufactured nock-set is available. Quite often it is made with metal and 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. The nock locators may be above and below the nock.

After shooting about 30 arrows, re-measure the brace height. It has most likely decreased. Adjust the nocking point if necessary.





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Brace height

The bracing height of the bow should be within the Bow manufacturers' 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.





WORLD ARCHERY BEGINNERS MANUAL

EVALUATION FORM FOR GOLD ARROW CANDIDATES.

Name of the beginner: _____ Form G

Date: ____ / ____ / 20__

Make up date: ____ / ____ / 20__

Shooting distance for score evaluation	Required minimum score	Achieved *	*Not yet achieved	Final number of hits.
26 meters	115 points			
SKILLS	Key elements (What should be done)	Achieved *	*Not yet achieved	References to the WA Level 1 Coaching manual
String clearance	Successful string clearance test (bridge of tape for instance)			#10 "String clearance"
Follow-through	Impassive face upon release			#7.1.2.10
	Impassive aiming upon release			#7.1.2.10
Sequence	Repeat the shooting steps with consistency			Chapter 2 & various exercises of chapter 10.
	Consistent shooting time (+/- 10 seconds)			
Subjects 2 evaluations	Required knowledge or know-how's	Achieved *	*Not yet achieved	Comments &/or references
Tournament registration process	Know the registration process (of the club) at a local tournament.			
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: _____



Gold Arrow award