



World Archery Congress, September 2021

Technical Committee Congress Report

By Don Rabska, Chairman

Committee Members: Susanne Womersley, Kurt Nuenlist, Dr. Chiu, Ping-Kun, Jonathan Shales (co-Chairman) and Don Rabska (Chairman)

Technical Committee Report to Congress – Yankton, South Dakota

A. Technical Committee Decisions - Following is the list of interpretation requests submitted to the Technical Committee since last Congress held in – s’Hertogenbosch, Netherlands, 2019

1) Interpretation Request – Hearing Loop Submitted by – Archery GB

Decision: It is the majority decision of the Technical Committee that the Loop System is not legal in any bow division of World Archery. Although there may be a disadvantage some hearing-impaired athletes in receiving verbal communications from behind the shooting line, the Loop System would offer a much greater advantage to those athletes using such a system over non-hearing impaired athletes. The Loop Hearing System has the ability to transfer information directly into the ear of the athlete, which is not legal for non-hearing-impaired athletes. For this reason, the following rules must apply.

11.3. For athletes of all divisions the following equipment is not permitted:

11.3.1. Any electronic or electrical device that can be attached to the athlete's equipment.

11.3.2. Any electronic communication device, headsets or noise reduction devices in front of the waiting line provided that the use of software that simply allows the athlete to plot arrow impacts on the target as one would on printed paper used for the same purpose is permitted No software that aids in bow sight adjustments may be used anywhere on the archery field (which includes any space either in front of or behind the shooting line, up to the spectator area). Note: While an athlete is on the shooting line, they may receive non-electronic coaching information from the team management, provided that this does not disturb the other athletes.

2) Interpretation Request– Compound Sight/Scope Submitted by – Judges Committee

Decision: The bow sight/scope submitted by the Judges committee for interpretation is legal in the Compound Division of World Archery. The Compound Division is basically an unlimited division with few exceptions.

- 3) Interpretation – Fivics and other manufacturers of draw elbow joint devices
Submitted by – WA Executive Board Member

Decision - It is the majority decision of the Technical Committee that the FIVICS “draw elbow joint device/s”, and other companies’ similar products are not legal in any division of World Archery competition except for the Compound Division.

In summary, part of the device fits in the draw elbow joint and is secured to the draw side elbow with straps or by other means. The device is supposed to help the archer develop better back tension/expansion. Therefore, it is clearly a training aid that helps the archer in executing a shot, in turn violating rules that disallow the use of any device that helps the archer draw and release the string.

- 4) Interpretation Request – Bare Bow Riser with integrated weights in vibration dampeners
Submitted by – WA Secretary General

Decision: It is the unanimous decision of the Technical Committee that a riser with incorporated weights within vibration dampeners is legal in the barebow division of World Archery provided that the weights attached to the vibration dampeners are removed. Although a riser in the barebow division may incorporate vibration dampeners installed by the manufacturer, the rules state that stabilisers or weights may not be attached to or incorporated within the vibration dampener/s. Rules 11.4.6.1 and 23.3.6.1 state that stabilisers may not be attached to the manufacturer installed vibration dampeners and Rules 11.4.6.2 and 23.3.6.2 state that weights may not be attached to shock absorbing devices (also known as vibration dampeners). If the “vibration dampeners” installed in any riser are not flexible, then it is not considered to be a vibration dampener and is to be considered a “weight”, which is not legal if installed anywhere above the riser’s grip. Our examination of the riser discloses that there are weights attached to the vibration dampeners. Therefore, the riser is legal, but only if the weights attached to the vibration dampeners are removed. Current rules as follows: 11.4.6.1. and 22.3.6.1. Vibration dampeners fitted as part of the bow are permitted provided that they do not have stabilisers. 11.4.6.2. and 22.3.6.2. Weight(s) may be added to the lower part of the riser. All weights, regardless of shape, shall mount directly to the riser without rods, extensions, angular mounting connections or shock-absorbing devices.

- 5) Interpretation Request – Question: Can shock absorbers, vibration dampeners and limb dampeners be considered synonymous
Submitted by – Judges Committee

Decision: It is the unanimous decision of the World Archery Technical Committee that all of the references to limb dampeners, vibration dampeners and shock absorbers noted in the rules, most of which are provided below, are to be considered to have the same basic function, that of reducing felt shock or vibration. The function of these devices is the same, to reduce or displace residual vibration energy felt by the athlete. Therefore, the terms related to shock absorption, vibration damping and limb dampening devices are to be considered the same basic components that serve the same basic function.

Definitions: Shock Absorber – A device for absorbing jolts and vibration. • Vibration Dampener – vibration dampeners are used to absorb vibration emanating from machinery (in this case a bow, which is a machine). Vibration dampening is the process of absorbing or changing vibration energy to reduce the amount of energy transmitted to equipment, (or in our case to reduce vibration or shock that would be experienced by the user of the device).

- 6) Interpretation Request – Instinctive Bow limb adjustment with dampeners
Submitted by – World Archery Norway

Decision: It is the unanimous decision of the Technical Committee that the riser submitted by World Archery Norway may not incorporate a rubber dampener in the one limb pocket that must be locked down. The intent of the Instinctive Bow division was to have a simple bow, where one limb could be adjusted to set bow tiller, but without the ability to adjust limb poundage during a competition. Limb

“Saver” dampeners are allowed, but not in the location of the limb pocket that must be immovable for each competition the athlete participates in. The Technical Committee does not consider the rubber components to be simply “spacers” as they would provide some dampening capabilities for the limb that requires non-adjustment. To be legal, the rubber spacer/dampener will require replacement with a solid component on the limb that must be locked down. The other limb pocket does not require modification and may incorporate a rubber dampener in that limb pocket.

7) Interpretation – Subconscious Trigger

Submitted by – USA Archery

Decision: It is the majority decision of the Technical Committee that the device described in the interpretation request from USA Archery is not legal in the Barebow Division. Under rule 11.4.4. and 22.3.4, no draw check device may be used. Although the argument in the interpretation request differentiates between a “draw check” and a “subconscious trigger device”, the two have always been determined under the spirit of the rule as being the same thing. When the rule regarding draw checks was written, the device used in this rule determination was the commonly known “Clicker”. A standard clicker is both a draw check and a subconscious trigger device. It is well understood that the main advantage of a “clicker” is as a subconscious trigger device, not as a draw check. The common clicker was the only device at the time and was called a draw check, even though any experienced recurve archer knew the advantage of the device was that of the subconscious trigger action. What it was called in the rules and what it provided the archer was a dual-purpose device, with both aspects of the device being legal in the Recurve Division, and illegal in the Barebow Division. In the Barebow Division, it was specifically disallowed because this division is to be one of having far less “additional aids”. Additionally, there has been significant precedent set by the Technical Committee over many years in disallowing many similar devices, all geared toward limiting “subconscious trigger devices” for the Barebow Division of World Archery.

8) Interpretation Request – Placement of arrow rest on riser

Submitted by – Indonesia Archery Association

Decision: It is the unanimous decision of the Technical Committee that an arrow rest may be placed above the arrow shelf at any height within the sight window that the athlete desires. There are no rules restricting variations in arrow rest height. The only restriction on arrow rest placement is the distance toward the face side of the bow (i.e. creating an overdraw), and states, “the pressure point may be placed no further back than 2cm (inside) from the pivot point of the grip.

9) Interpretation Request – What constitutes an appropriate limb locking system

Submitted by – Field and 3D Committee

Decision: The question of what constitutes an appropriate limb locking system for the second limb in the Instinctive Bow Division is subjective. Article 22.4.1 states that the bow may not have adjustable limb pockets. However, as long as one pocket is locked down and cannot be adjusted during competition, the Technical Committee believes that this is an adequate solution for the Instinctive Bow Division. Adjustable limb pockets would not be allowable if we follow the absolute definition of the rule. However, and this is a critical point, there are almost no bows on the market that could truly follow this rule to the letter. We understand there is not any one best solution for locking down a limb on an adjustable limb pocket. The judges, at their discretion, will determine if the “fix” of one limb is adequately secured and cannot be moved during competition. In this case, ILF limbs would be legal as long as one limb is satisfactorily locked down to a point that the judges are satisfied it cannot be altered during competition. The concept is to place metal or hard plastic spacer/washers between the riser and the limb adjustment bolt flange (at the base of the pocket). The limb would then be tightened down on top of the spacer/washers until it can’t go any further, providing a hard, non-adjustable stop. If during competition a judge found space between the spacer/washers and riser or flange, then the judge would know that the bolt was tampered with. This solution gives the athlete the opportunity to set the bow weight he or she

wants, then find or make hard spacers that fill that section and lock the limb down securely. Or, the athlete could turn the one limb bolt to maximum with no spacer as long as it could not be adjusted further. If the judge requests, the athlete must demonstrate that the bolt cannot be tightened further on the spacer/washers. By using this application to lock down a limb, no bows are ruined, and it works as a solid, non-adjustable limb. Note: The spacers or washers must be made of a hard material that cannot be compressed when tightening down the weight adjustment bolt. The judges can test the spacers or washers with the tip of a pin to make sure they are not rubber or other material that can be compressed.

10) Interpretation Request – What sight windows are allowable.

Submitted by – Swiss Archery Federation

Decision: The Swiss Archery Federation provide a sketch of various bow window design and submitted those to the technical committee for review. All were legal except for the bow window designs with a 90-degree angle at the top of the sight window. The flat section at the top of the sight window is too easily used for aiming and ranging. For divisions which do not permit bow sights, the top of the sight window must incorporate a radius so not to provide any “flat” horizontal section that could be an advantage in aiming and or ranging. The Technical Committee does not see any need at this time to restrict the length of the sight window or the need to have only angled sight windows. Straight sided sight windows are legal.

11) Interpretation Request – Is a specific thumb hole bow grip allowable in various WA divisions

Submitted by – German Shooting Sport and Archery Federation DSB

Decision: The bow grip provided by the German Federation is legal in the Compound, Recurve and Barebow divisions of World Archery. The Technical Committee can see no advantage in using a grip of this particular thumb hole design. Additionally, grips of this type are not new to the world of archery. Several bow manufacturers offered thumb-hole grips back in the late 1950's and 1960's.

12) Interpretation Request – Bare Bow Weights

Submitted by – Field and 3D Committee

Decision: The Barebow weights submitted to the Technical Committee are all legal in the Barebow division of World Archery provided that the bow can pass through a 12.2 cm ring. The Judges Committee has decided that the 12.2 cm ring did not require the bow passing directly through the ring, but rather the bow is legal as long as the bow fits through the ring, even by shuffling the ring from side to side to fit extended weights.

13) Interpretation Request – Bamboo Arrows

Submitted by – Swedish Archery Federation

Decision: Bamboo may be considered the same as wood in the Longbow division of World Archery. The Technical Committee sees no advantage in using bamboo arrows over wooden arrows and are therefore allowed to be used in the Longbow Division. Both are natural materials that grow in nature and have been traditionally used in the practice of archery for hundreds of years.

14) Interpretation Request – Bare bow tabs, specifically “sear tabs”

Submitted by – USA Archery

Decision - It is the majority decision of the Technical Committee that the array of tabs shown in the original interpretation photos demonstrate the types of tabs that are legal and illegal in the Barebow Division of World Archery.

#1 tab is legal as long as it does not have moveable parts that create a tactile or audible response. The first tab appears to have a notch at the back of the plate that is possibly used as a “sear”.

#2 tab is likely not legal. There is a button at the back of the tab. If that button is moveable in any way and creates a tactile or audible response, it is not legal.

#3 tab is legal. The ground ridge/notch at the bottom of the tab is not moveable and is possibly just a thumb rest and is therefore legal.

#4 tab is a stock tab without modification and is legal.

For ease of interpretation, if a part of the tab is modified to create a springy or flexible piece that produces an audible or tactile response, or something moves on the tab in order to produce a tactile or audible response, it is not legal. If the tab sear is ridged, regardless if it is the tab plate or a solid piece screwed or bolted on to the tab and does not move, it is legal. Having a solid tab plate that has a notch, scratch, lip, screwed on ridged piece such as a thumb rest, should be allowed, as long as it is not moveable. Any device made for the specific purpose of creating an audible or tactile response that is produced by that mechanism is not legal in the Barebow division or any division other than the Recurve or Compound divisions.

15) Interpretation Request – Mantis Sight and other advanced electronic shot plotting devices

Submitted by – Judges Committee

Decision: It is the majority decision of the Technical Committee that the Mantis sight product or any advanced electronic shot plotting devices are not legal for use on the competition field or practice targets next to the competition field. If the Mantis sight and like devices are used on a fully separate practice field, which is not part of the competition field, it is acceptable to the Technical Committee. However, such devices may not be used at any time on the competition field, regardless if it is official practice or used on targets set to the side of the competition field for athletes to warm up just before a competition match. Athletes should not be allowed to use any electronics that would give them an advantage on the competition field or pre-match practice targets adjacent to the competition field. The device is clearly an advantage for developing exact sight marks and therefore is not legal on or adjacent to the competition field, during competition or any practice sessions official or otherwise.

Recommendation to better clarify the opening statement of Chapter 11. It currently reads, *“This article lays down the type of equipment athletes are permitted to use when shooting in World Archery competitions.”* Add- *including “Official Practice” and competition field practice on days of competition.”*

16) Interpretation Request – Arrow Wraps length Clarification and 9.3 mm diameter

Submitted by - Judges Committee

Decision: Hopefully the following reply will clarify the confusion concerning arrow wrap length and the 9.3 mm arrow diameter rule.

Basically, the two versions of the rule say the same thing. That is, an arrow wrap may not be longer than 22 cm, measured from the bottom of the arrow nock groove where the nock contacts the bowstring toward the arrow point, regardless of the diameter of the arrow. The arrows diameter has nothing to do with the 22 cm length restriction on the length of the wrap.

Concerning the arrow warp in reference in regard to the allowable 9.3 mm maximum arrow diameter, an archer may not add the thickness of an arrow wrap to an arrow shaft already measuring 9.3 mm in diameter. Example: an archer is shooting maximum diameter arrows of 9.3mm and has arrow wraps on their arrows that meet the 22 cm length rule. In a competition, the archer shoots an arrow close to the Ten ring line that may or may not be touching the line. However, the arrow has penetrated the target up onto the wrap. Since the arrow diameter is now larger where it contacts the targets Ten ring line due to the wrap diameter, the shaft now exceeds the maximum allowable diameter of 9.3 mm., it becomes a challenging call for the judge. The archer cannot include the thickness of the wrap when scoring the arrow if the arrow diameter and the combined thickness of the wrap exceeds 9.3 mm.

Concerning the warp in regard to an arrow diameter less than 9.3 mm, the wrap may be considered *as* part of the arrow's diameter because the diameter is under the 9.3 mm limitation. Example, an archer has arrow wraps on their arrows and they are following the 22 cm length rule. In a competition, the archer shoots an arrow close to the Ten ring line that may or may not be touching the line and the arrow has penetrated the target face to the wrap. As long as the arrow diameter does not exceed the maximum allowable diameter of 9.3 mm, the wrap may be considered as part of the arrow's diameter for scoring.

Miscellaneous:

- 1) Rule Change Request – Submitted by Technical Committee and Field and 3D Committee
The Technical Committee and Field and 3D Committees mutually request that vibration dampeners be permitted in the Barebow division of World Archery.
Current rules pertaining to weights and vibration dampeners:

22.3.6.1. and 11.4.6.1. Vibration dampeners fitted as part of the bow are permitted provided that they do not have stabilisers.

22.3.6.2. and 11.4.6.2. Weight(s) may be added to the lower part of the riser. All weights, regardless of shape, shall mount directly to the riser without rods, extensions, angular mounting connections or shock-absorbing devices.

22.3.10.1. and 11.4.10.1. Including arm guard, chest protector, bow sling, finger sling, belt, back, hip or ground-quiver. Devices to raise a foot or part thereof, attached or independent of the shoe, are permitted provided that the devices do not present an obstruction to other athletes at the shooting line/peg or protrude more than 2cm past the footprint of the shoe. Also permitted are limb dampeners.

Change to:

Vibration dampeners are permitted. They may be installed in the riser by the manufacturer, or by attaching aftermarket dampeners directly to the riser or to weight/s. Any combination of weight/s and vibration dampener/s must pass through a ring with an inside diameter of 12.2 cm (+/- 0.5mm) without having to flex vibration dampeners to fit through the 12.2 cm ring. A riser manufacturer's "angled" stabilizer insert/s are allowed, but angular brackets or connectors are not permitted. Weights and dampeners may be added below and above the riser's grip, but must not aid the archer in aiming or ranging in any way.

- 2) Interpretation Request (PENDING) – Kinesiology Tape and Reinforced Compression Shirts/Clothing
Submitted by – Judges Committee

Decision - It is the majority decision of the Technical Committee that Kinesio Tape and Compression type clothing is legal in all divisions of World Archery. However, these types of elastic support and compression clothing may not contain "stiff" members or ridged bracing that would support any joints of the shoulders, elbows, wrists, or any body joint. Kinesio tape has already been allowed for use in all divisions of World Archery, leaving only the actual interpretation regarding support compression clothing.

For ease of interpretation, it is simply not allowed to have stiff braces under clothing or tape or use so much tape as to brace any joints. Below please find the 2005 interpretation regarding taping. Following is the 2005 interpretation on taping:

Book 2, Art. 7.3.3 A question has been raised concerning supports and taping of various joints, especially referring to wrist, elbow and shoulder areas. Response from the C&R Committee, after consultation with the Medical Committee and the Technical Committee: The taping of human joints, i.e. fingers, wrists, elbows, shoulders, knees etc. is legal within the rules of FITA. Although no rule supports this question, in the same regard no rule disallows it. Furthermore, the taping of joints has been a long-time practice for many decades and therefore falls under a widely accepted and allowable framework of acceptable equipment. Within the last 50 plus years, no judge to our knowledge has proposed that taping is not legal. Therefore, we have to assume that under these circumstances, it is legal. However, it is to be stipulated that no such taping may contain a firm, "stiff" brace that would in any way help support the bow arm or drawing fingers in regard to any assistance in drawing and releasing the bowstring. C&R Committee, 28 August 2005

3) Rule Change Requests – Submitted by Field and 3D Committee and Technical Committee
Book 4, Chapter 22.4, Article 22.4.1 and 22.4.7.1
Change division name from Instinctive Bow Division to Traditional Division.

We are requesting a change only to rules pertaining to the bow used in the instinctive division, 22.4.1 and finger protection and anchor type 22.4.7.1.

Current Instinctive Bow Division rule

Change From -

22.4.1.

A bow of any type, which complies with the common meaning of the word bow as used in target archery, consisting of a handle/riser and grip (no shoot-through type) and two flexible limbs each ending in a tip with a string nock. The riser is produced of a natural or resin-based material (e.g. wood, bamboo, horn, cloth, fibreglass, and a portion of the riser may include carbon/graphite or metal). The riser must be of laminated construction or one piece of wood. The bow may be of a take-down type and may incorporate factory installed metal fittings in the riser for limb attachment, sight mount inserts, cushion plunger insert and stabilizer bushings only. The bow may include a single adjustable limb for tiller adjustment only, but may not have adjustable limb pockets for bow weight adjustment. The riser may include thin synthetic laminates up to 6 mm in width to use for limb/pocket protection for structural use within the riser, but no more than one quarter of the riser's construction may be produced of metal or synthetic material. The riser must contain some wood or bamboo. For non-takedown bows, limb laminates of any material that fade into the riser section are permitted. 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 and release the string.

The bow as described above shall be bare, except for an arrow rest as described in 22.4.3. and free from protrusions, sights or sight marks, marks or blemishes or laminated pieces (within the bow window area) which could be of use in aiming. Weights inside the bow riser are permitted if installed during the manufacturing process of the bow and not post construction. Any such weights shall be completely invisible on the exterior of the riser and be covered by laminates applied during the initial construction with no visible holes, plugged holes, covers or caps with the exception of the original manufacturer's inlay or insert logo.

Change to

Rule and Name Change: Instinctive Bow Division shall be eliminated and replaced with the Traditional Division.

New Proposed rule and name change for Instinctive bow division 22.4.1

New Name - Traditional Division 22.4

22.4.1

A bow of any type, which complies with the common meaning of the word bow as used in target archery, consisting of a handle/riser (no shoot-through type), a grip and two flexible limbs each ending in a tip with a string nock where a single string is attached directly between the two string nocks. In operation, the bow is held in one hand by its handle (grip) while the fingers of the other hand draw and release the string. The riser is of laminated construction and includes wooden laminates or made of one piece of wood. The bow may be a take-down type and may incorporate factory installed metal fittings in the riser for limb attachment, stabilizer bushings, etc. Bows may have adjustable limbs for poundage and tiller adjustment.

The bow as described above shall be bare, except for an arrow rest as described in 22.4.3. and free from protrusions, sights or sighting marks, blemishes or other reference marks within the bow window area which could be used for aiming. Weights inside the bow riser are permitted if installed during the manufacturing process and not post construction. Any such weights shall be completely invisible on the exterior of the riser and be covered by laminates applied during the initial construction with no visible holes, plugged holes, covers or caps with the exception of the original manufacturer's inlay or insert logo.

Finger Protection and Anchor Type

Change From –

22.4.7.1.

An anchor plate or similar device attached to the finger protection (tab) for the purpose of anchoring is not permitted. The bow must be shot using the "Mediterranean" loose (one finger above the arrow nock) or fingers directly below the arrow nock (index finger no more than 2 mm below nock), with one fixed anchor point. The athlete must choose either Mediterranean or fingers under nock, but may not use both. Finger protection when shooting with fingers under the nock must have a continuous surface or connected surface, with no ability to shoot split finger. When using the Mediterranean loose a separator between the fingers to prevent pinching the arrow may be used.

Change To –

22.4.7.1.

An anchor plate or similar device attached to the finger protection (tab) for the purpose of anchoring is not permitted. When shooting, the index finger or middle finger must be within 3 mm of the nock or touch the nock (split finger or 3 fingers under). When shooting split finger, a finger separator between the fingers to prevent pinching may be used. A single anchor or face walking is permitted. String walking is not permitted.

The Field and 3D Committee and Technical Committee mutually request that the Instinctive Bow Division of World Archery be eliminated and replaced with a new division, the Traditional Division. The name change is necessary for creating a fresh start. Additionally, the new name better describes the division.

The reasoning behind this decision is the unnecessary restrictions posed on the Instinctive Division equipment, particularly bows. The division is such that most archers must modify their standard purchased bow to comply with the rules. Bows that should be easily available on the open market and fully comply with the Instinctive Division rules are scarce at best. This situation significantly limits the divisions' participation. In contrast, every other division within World Archery has equipment that is readily available in the archery market.

By creating a similar but more inclusive division with easy to obtain equipment, it creates a more pleasant experience for the participants. Simplified rules also ease work for our judges and limits rule misinterpretation.

Note: Some of the official interpretations above have been slightly modified to better fit the report format. For photos of products and examples noted in the above interpretations, please see the original Technical Committee interpretations submitted to World Archery.

In conclusion I wish to thank all the members of the Technical Committee, Jon Shales, Susanne Womersley, Kurt Nuenlist and Dr. Chiu, Ping-Kun, for their hard work and dedication to the continued and future success of World Archery. It has been a pleasure working with these individuals as well as past members of the Technical Committee. I will miss the work I have done for FITA/World Archery and the opportunities of meeting up with friends from around the world.

Respectfully Submitted,

Don Rabska
Chairman, World Archery Technical Committee