COMBAT ARCHERY EQUIPMENT AND AMMUNITION INSPECTION SPECIFICS

1) Bow

- a) Loops in bow string ends made by compressed metal / plastic clips are not allowed.
- b) Ensure that the string is not showing excessive wear.
- c) Measure the draw weight of the bow with a calibrated scale to ensure it is within appropriate specs for the combat ammo it will shoot. The handbow must be designed/constructed to draw @28" or it cannot be used in SCA combat.
- d) Check the bow itself for cracks or gouges, as well as for significant limb twist that could permit the string to leave the limb tip.

2) Crossbow

- a) Loops in crossbow string ends made by compressed metal / plastic clips are not allowed.
- b) Ensure that the string is not showing excessive wear
- c) Check that the lock mechanism releases smoothly under simulated pressure
- d) Check that the lock mechanism is solid and will not accidentally release.
- e) Ensure the stock has no failures between the prod/bow and lock
- f) Measure the draw weight (in inch-pounds) of the crossbow with a calibrated scale and ruler to ensure it is within appropriate specs for the combat ammo it will shoot.
- g) Check the prod for cracks or gouges, as well as for significant prod twist that could permit the string to leave the tip.

3) Ammunition

- a) Neither Fellwalker nor solo Tennis Ball ammo will be permitted at Pennsic.
- b) Ammunition cannot be more than 10% yellow (as yellow is reserved for Siege).

4) Fiberglass-Shafted Ammunition

- a) DO NOT cover the entire head of any style Baldar head being used on fiberglass shafts with tape. The type of head must be inspected by observation to insure the proper head is being used and the condition of the head. This cannot be done if the head is completely covered with tape.
- b) NO form of plastic or feather fletching will be permitted on fiberglass shaft ammunition.
- c) Fiberglass-shaft arrows and bolts must be equipped with a Society approved antipenetration device (APD).
- d) Solid-style nock ASGARD (APDs) anti-penetration devices are permitted to be used ONLY if the nock remains solid or is completely cut off. Cutting any type of slot into the solid nock is not a Society approved modification and will not pass inspection.
- e) Absolutely no wooden shafts are permitted. Metal is NOT allowed in ANY part of the ammunition construction.
- f) Fiberglass-shaft arrows/bolts must be covered from behind the blunt, to the front of the Anti-Penetration Device (APD), in a sturdy tear-resistant tape, such as strapping, electrical, or duct tape.
- g) Holding both head and APD, pull gently away from each other. If either head or APD moves longitudinally, the ammunition fails.
- h) Holding the head and APD gently with two fingers and the thumb, twist gently in each direction using only minor torque as not to overly stress any existing glue seal. If any rotation occurs, check the head and APD separately.
- i) To check separately, hold the shaft and either the head or the APD. Twist gently. If any rotation of the APD occurs, the ammunition fails. If greater than slight rotation of the head upon the shaft occurs, the ammunition fails.
- j) "Slight rotation" has been roughly defined by previous KEM's to mean no greater than 1/8" lateral movement around the shaft.

- k) If ammunition is a type using foam on the tip, check that the foam tip cannot be forced more than ½ inch into a legal faceguard. If penetration COULD occur more than ½ inch inside a grill, the ammunition fails.
- I) Check the shaft for signs of cracking or other failure.
- m) Check that ammo is properly labeled and taped.
- n) Length
 - i) Arrows have a maximum length of 28 inches. This is measured from where the bow string touches the APD to the base of the head. The 28 inches length is the maximum length; a shorter length may be used for those having a shorter draw length.
 - ii) Crossbow Bolts have a maximum length of 28 inches. This is measured from where the prod string touches the APD to the base of the head. There is no minimum length for a crossbow bolt. Past history has shown crossbow bolts around 14 inches fly well and work on most crossbows.

5) Tubular Ammunition

- a) Shafts
 - i) Combat archery arrows and bolts must be made out of 100 PSI OR 125 PSI irrigation/water pipe or tubing (Sil-o-Flex or equivalent) with a one inch ID or 1.25 inch OD.

 If 100 psi pipe the material must be manufactured from plastic formula PF
 - If 100 psi pipe the material must be manufactured from plastic formula PE 3408, PE3608 or PE3710.
 - If 125 psi pipe the material must be manufactured from plastic formula PE4710.
 - ii) Tubular shaft ammunition is NOT permitted to have any slits or cuts into the shaft. A ½ inch nock is permitted on the end of the shaft.

b) Length

- i) Arrows have a maximum length of 28 inches. This is measured from where the bow string touches the end of the tube or the nock to the base of the head. The 28 inches length is the maximum length; a shorter length may be used for those having a shorter draw length.
- ii) Crossbow Bolts have a maximum length of 28 inches. This is measured from where the prod string touches the APD to the base of the head. There is no minimum length for a crossbow bolt. Past history has shown crossbow bolts around 14 inches fly well and work on most crossbows.

c) Tips

- i) There are only three (3) approved tips for use on tubular (sil-o-flex or equivalent) combat shafts: Modified Baldar Blunts, Rubber Stoppers (6.5 size) and tennis balls.
- ii) Modified Baldar Blunts
 - (a) Any classic style of Baldar Blunt can be used in this manner, whether 1 or 2 piece mold or designed for fiberglass or wood.
 - (b) Older or newer style "egg" shaped Baldar Blunts are not approved for use on tubular (sil-o-flex or equivalent) combat shafts.
 - (c) The modified Baldar Blunt must be slipped 1/2 inch over the tubular (sil-o-flex or equivalent) shaft.
 - (d) Baldar Blunts should be modified by separating / cutting the fins from the outer collar, but the outer collar must remain intact.
 - (e) The modified Baldar must be securely taped to the tubular shaft.
- iii) Rubber Stoppers
 - (a) A rubber stopper, size 6.5 should be used (preferably with a 1/4" inch hole in the center to allow greater compression into the shaft).

- (b) The stopper must be inserted ½" inch into the shaft.
- (c) It is suggested to use the white/off-white rubber stoppers that are gum rubber because they are softer and compress better than the neoprene.
- (d) The Rubber Stopper Head must be secured in the Shaft (2 Methods)
 - 1. Fiberglass-reinforced (strapping) tape: suggested best method:
 - a. The rubber stopper must be secured with several pieces of fiberglass-reinforced (strapping) tape that will cross each other on the top of the stopper.
 - b. Each piece of tape must start from at least 1 inch down the shaft, go up over the tip and then back down the other side of the shaft at least 1 inch.
 - 2. Traditional Lacing Method for rubber stoppers: method permitted but not as good as taping method
 - a. Four small holes must be drilled in the shaft just below the stopper.
 - b. The rubber stopper must be attached with 1/8 or less diameter strong cord.
 - c. Two pieces of cord must be crossed through the shaft underneath the base, over the stopper then tied securely. The knots must be located on the side of the blunt and not on the tip. (A touch of glue on the knots helps keep them from loosening up)
 - d. The cord must be securely taped to the rubber stopper.
- iii) Tennis Balls
 - (a) Tennis balls are not permitted to have any slits or holes.
 - (b) The tennis ball must be secured to the shaft with small strong cord.
 - (c) Four small holes must be drilled in the shaft approximately ½ inch from the end.
 - (d) Two pieces of cord must run through the shaft and cross over the tip of the tennis ball.
 - (e)The cord must be tied securely with the knots on the side (not the tip) of the tennis ball.
 - (f) The cording and tennis ball must be securely taped in place.
 - (g) The entire head must be covered with duct tape.
- d) Foam
 - Resilient Foam: The Society Definition is: dense, plastic, closed-cell foam such as ethyl polymer.
 - ii) Both rubber stopper and Baldar Blunt heads must have resilient foam padding secured on the tip.
 - ii) Rubber stopper heads must also have a side wrap of foam.
 - iv) Resilient foam approximately the diameter of the stopper must be secured to the tip so that there is at least 1/2 inch and at most 1 1/4 inches thickness after taping.

Round disks of foam are strongly suggested instead of square pieces which have caused problems with the square corner of the foam and the helmet grill.

- v) The resilient foam must be securely attached.
- vi) Side Wrap Required for Rubber Stopper (Note: Modified Baldar Blunt tips do not require side wraps.)
 - (a) The side wrap of resilient foam must extend from the tip of the padding to at least ½ inch over the tubular (Sil-o-flex or equivalent) shaft and be securely taped.
 - (b) The side wrap of resilient foam must be wrapped around the padding/stopper/shaft so that the ends meet without a gap and be secured with.
 - (c) The side wrap must be securely taped to the tubular (Sil-o-flex or equivalent) shaft.
 - (d) The total diameter of the final head assembly must be at least 1 ½ inch.

- (e) It shall not be possible to force the head of any combat archery ammunition more than 1/2 inch into a legal face guard.
- e) Nocks
 - i) A nock may be cut into the tail end, but may be no deeper than ½ inch.
 - ii) No wooden nocks, wooden plugs, corks, pool noodles, tape or anything that closes off the end of the tubular ammunition will be permitted and are not legal to be used with tubular (Sil-o-flex /equivalent) ammunition at Pennsic.
 - iii) Nothing may be inserted into the shaft of tubular ammunition.
- f) Fletching
 - i) NO form of plastic or feather fletching will be permitted on tubular ammo.
 - ii) Tubular shaft ammunition may have duct tape fletches as long as they are under ½ wide and securely attached.
- 6) The Pennsic Combat Archery Marshal In Charge, his Deputy and approved designees may inspect all combat archery equipment and ammunition to the enclosed "Pennsic Standard" which supersedes any Kingdom level. Any decision may be appealed utilizing the proper chain of command.

RULES SPECIFIC TO COMBAT ARCHERY

- 1) On the Field
 - a) All bows, crossbows, ammunition and conventions shall meet, at minimum, all Society standards for construction. They must also meet any additional restrictions described in this document, or restrictions declared by the Pennsic Combat Archery Marshal In Charge as needed.
 - b) Combat archers need only a half gauntlet made to the standards for gauntlets but without finger protection.
 - c) As with any weapons form, an archer may yield to an opponent, and archers should feel free to loudly express their "dead/yield" status. Courtesy taps delivered by an opponent should be accepted by the Combat Archery combatant as the gift they are. Likewise an opposing fighter throwing excessive or repeated blows into a "subdued/dead" opponent will face disciplinary action.
 - d) Minimum range for a shot is "clears the bow".
 - e) Targeting of the back of an individual (alone or in an organized unit) is prohibited. A cluster of folks may be targeted in THEIR situation 180 degrees and a rearward facing opponent shot thusly should accept the strike. This applies equally for an opponent who has rotated after release. But the actual specific targeting of the back side of any individual is prohibited.
 - f) There is no limit on the amount of ammunition an archer may carry unless defined in a specific battle scenario.
 - g). For Pennsic 47 gleaning of tubular combat archery ammo will be not permitted.
 - h) Pavises shall follow the rules set forth in the current Society Combat Archery rules revision. A combat archer may carry and use shield or pavise; however, as long as they are carrying such, they cannot span (cock a crossbow or draw a handbow) nor loose their weapon.
 - i) Archers may have a backup weapon on them, but MAY NOT draw it until their bow has been safely disposed of (taken off the field, discarded in a low traffic area, handed to another combatant, etc.). A crossbow must be placed outside the combat area or in the keeping of another combatant who will accept it before drawing a back up weapon. Upon drawing a backup weapon to enter combat, both hands must be appropriately armored.
- 2) Bow/Crossbow Using Fiberglass Shafts

- a) A hand bow shooting fiberglass arrows must have a minimum 20-lb. pull to a maximum 30-lb. pull at 28 inch draw.
- b) The handbow must be designed/constructed to safely draw 28 inches or it cannot be used in SCA combat.
- c) A crossbow shooting fiberglass bolts must have a minimum 400"# to a maximum 600"# rating.
- d) Any bow/crossbow that is allowed to shoot fiberglass ammunition may also use any tubular ammunition approved for use at Pennsic.
- 3) Bow/Crossbow Using Tubular (sil-o-flex or equivalent) Arrows
 - a) A handbow that measures over 30 lbs. and less than 50 lbs. is considered a heavy handbow and may only shoot tubular ammo. A heavy handbow must be marked with a 4-inch wide band of red material (tape, cloth, etc) that goes completely around the upper limb of the bow.
 - b) A crossbow that measures greater than 600"# and less than 1000"# is considered a heavy crossbow and may only shoot tubular ammunition. A heavy crossbow must be marked with a 4-inch wide band of red material (tape, cloth, etc) that goes completely around the right hand side of the prod as viewed by the archer.
 - c) Only tubular arrows or bolts may be shot from heavy bows and crossbows.

POST BATTLE SORTING

After ANY Pennsic sponsored battle, ALL Combat Archery participants are required to help collect ALL arrows/bolts (not simply their own) and bring them to the designated area for reinspection (likely SOUTH of Battlefield just outside boundary).

<u>The Process</u>: After each battle, all fiberglass ammunition shall be placed in one pile & the tubular ammunition in another to facilitate re-inspection (by the marshals). The piles should then be subdivided by bolts & arrows forming 4 piles. Combat Archers (not marshals) will then divide the piles by owner (so cooperative help is appreciated at this critical juncture). Once an owner claims a pile is likely complete, marshals will begin the re-inspection process for ammunition integrity as quickly as available. Be sure you do not remove your arrows/bolts from the field until they have been inspected and marked for the next battle, as it is <u>vitally important</u> that we ensure the safety of all ammunition as well as obtain incidents of failure, if any. This process should also reduce loss due to theft as any ammunition noted as heading "away" should be suspect and questioned.

Note - If you are unable to help with the sorting/inspecting process, you must designate someone to take care of your ammo in your place. Scheduling occasionally requires you to be elsewhere, but do not abandon your ammo; it will not get inspected without someone claiming it.

Editorial: Patience is needed and anything you can do to aid the process is welcome; the marshals have protocols to follow to insure the safety and integrity of the ammunition being inspected. Anyone not able to assist can be promptly moved rearward in the inspection process to allow those "more helpful" be on their merry way faster.

OVERPOWERED AND NON-INSPECTION WARNING

Anyone using fiberglass-shafted ammunition in a heavy bow or heavy crossbow will be banned from all fighting activities for the rest of Pennsic and will be subject to other disciplinary action via the proper Armored Combat violation inquiry procedure.

Likewise, ANY use of uninspected ammunition or weapons on the battlefields of Pennsic will prompt immediate removal from the battlefield and will be subject to other disciplinary action (including potential fighting ban) via the proper Armored Combat violation inquiry procedure.

ETCETERA:

- 1. Play safe and fair. We have a specialized weapons form that requires specialized skills, understanding and accommodations play responsibly.
- 2. Help clear the field after battle many hands make light work.
- 3. Thank the marshals, both CA and otherwise. They give freely of their time so YOU can play.
- 4. Lastly, consider becoming a Marshal-in-training. You can find no better place to "see it all" than Pennsic. As our community grows, so too must its CA marshallate and you are welcome to be a part of that growth. Come to Inspection Point to volunteer!