How To Inspect Combat Archery Fiberglass Ammunition Rev. March 29, 2016

This is a quick reference guide for inspecting combat archery fiberglass ammunition. This is not a replacement for the information in the Combat Archery Fighter and Marshal Handbook or on http://www.35footspear.com/

As a Combat Archery Marshal in Training (CA-MIT) or a warranted Combat Archery Marshal, you must know the most current inspection standards. There may have been additions or alterations to the standards since this was published. It is YOUR responsibility to keep up to date on all changes to the Middle Kingdom Combat Archery inspection standards on the Marshal's website and the 35-Foot Spear website

The following process has been written to help you make sure that you remember to check all of the standards along the way. Start at the beginning and go through in order to the end. Make sure you address all of the questions in each section. Some essential details are included after many questions, though you may come up with more.

General advice when inspecting ammunition-

Make sure you have a good place to work, especially if there will be a lot of inspections that day. Having a chair/stool and shade (or rain shelter) can go a long way toward having a pleasant day.

Have all your equipment ready. A rules binder (hard copy or digital), bow scale, draw length gauge, tape measure and tip diameter gauge are required. Recommended items include: calculator (for calculating inch-pounds of crossbows); pen and paper; red duct tape if limbs need to be marked; inspection stickers or paint for larger events; bowstring wax.

Start with a "to be inspected" pile on to one side of you. As you inspect each piece, put it in a "passed" pile on your other side or a "failed" pile somewhere separate (between your feet or under the chair/stool sometimes works well).

If another CA Marshal or a CA MIT is working on the same batch of ammunition with you, they may want to sit facing you, so you can share the same piles and consult with each other easily.

As you inspect, feel free to ask the archer for additional information about their ammunition.

For example... Did you make the ammo? If not, who did? What kind of glue? (Plumbing or Marine GOOP) Has the archer checked their ammo since its last use?

Confirm that the archer remembers... fiberglass-shafted ammunition may be shot <u>only once</u> before it needs to be re-inspected by a CA Marshal. No gleaning is allowed for fiberglass ammo! If the scenario allows it for tubular ammo, make sure they know how to do it properly. (If it will fit in their LIGHT bow/crossbow, they might pick it up!)

MINORS- (16 & 17 year-olds) If they don't have a parent or legal guardian present, they must show their "Medical Authorization Form for Minors" at the list table. It is not our job to check it, but remind them to do it anyway.

Passed Ammunition-

At smaller events, the archer can pack up the passed ammunition as soon as you are done with it.

If the event is large enough to paint inspected ammunition, have the archer lay it out in the designated area so you can spray it. The archer can pack it up as soon as it is dry enough.

If the event is collecting data on how much ammunition is getting inspected, get all the information before you let the archer pack up their ammunition.

Failed Ammunition-

If the failure is minor (just tape) and the archer has time/materials, encourage them to make the repairs for immediate re-inspection. (Loose heads/APDs must be re-glued later so the glue has time to cure before using.)

Make sure the archer keeps any failed pieces separate from the rest of their ammunition! One easy method is to tape the failed ammunition into a bundle. Ask them to put the bundle somewhere separate from their other ammunition. Note- if an APD is loose, ask the archer if you can pull it off and slide the loop onto the shaft (to keep track of it) to make the needed fix obvious later.

The Process:

1. Look at the basics.

Is the head a Baldar Fathead blunt? Is there a wrap of red electrical tape around the base?

Made from a three-piece mold – should show a seam and a shoulder in the middle.

Is the APD a Baldar Asgard? Is there a wrap of red electrical tape around the base?

Does the ammunition have a lot of yellow color or other disallowed markings?

Maximum 10% yellow allowed.

6 inches of alternating red/green bands of tape are not allowed. They are <u>only</u> for experimental weapons... which these are not!

Is there fletching?

NONE allowed. APDs are not considered fletching.

2. Look at the shaft.

Is it the correct diameter and material?

1/4 inch diameter fiberglass rod.

Is it covered in fiberglass-reinforced (strapping) tape, lengthwise?

One piece, from APD to blunt.

Electrical tape is not allowed!

Is the label complete?

Machine-printed in English in a readable font.

Owner's Name and Kingdom. If it lists a Group Name as owner, it must <u>also</u> have an individual listed as a point of contact.

Covered in clear wrapping/shipping tape. (No reinforced or strapping tape!)

Note – it is suggested to put the label towards the tail end because when ammo is spray-painted to show it has been inspected, the paint is normally towards the head.

Is it the correct length?

Maximum 28 inches from string-acceptor/nock to base of head. Bolts should be obvious; arrows need to be measured.

Is it structurally sound?

No cracking sounds or odd deformations when bent gently.

3. Check if the head and APD are secure.

IMPORTANT- Remember, the goal is **NOT** to break the head or APD loose from the shaft. You are checking to see if the head or APD is **ALREADY LOOSE**.

Using 2 fingers and the thumb of each hand, hold the head in one hand and the APD in the other hand...

<u>Pull gently</u> apart. Is there any lateral movement (along the shaft)?

NO movement allowed.

Twist **gently**. Does the head or APD move?

NO movement allowed.

Watch the wrap of red electrical tape at the bases of the head and APD for deformation. (The APD's flexibility can make movement difficult to determine without seeing the tape.)

4. Check the APD.

Does the APD have only allowed modifications?

Weep-hole drilled for glue (required construction standard)

Cut off nock (not required construction standard)

Note- There are three types of Asgard APDs. There are right- and left-handed split nocks for use on arrows; the other has a solid nock for use on crossbows with roller nuts. The solid nock can NOT be modified to have a split for a string.

Is the APD structurally sound?

Check for cracks/splits in the tube where the fiberglass shaft is inserted.

Check for cracks between the shaft tube and the main loop of the APD.

Look on both outside and inside surfaces!

No cracks or missing chunks are allowed anywhere.

Fiberglass shaft does NOT stick through or show through the APD at the end of the shaft hole.

Is the APD round?

If not, ask the archer to fix it (make it round). Make sure the archer hands it back to you or puts it in the "to be inspected" pile, <u>not</u> the "passed" pile.

If there seem to be a lot of flattened APDs, ask the archer to check and fix them all before putting them into the "to be inspected" pile.

5. Check the head.

Is there any structural damage?

Check for slits, missing chunks of rubber, etc.

Are there 2 pieces of crossover tape?

Crossed over the tip in an "X" pattern.

Only 2 pieces. The entire head cannot be covered.

Ends of tape extend at least 3/4 inch down the shaft.

At least 3/8 inch wide fiberglass-reinforced (strapping) tape OR ³/₄ inch red electrical tape.

Electrical tape <u>on top of</u> strapping tape is NOT acceptable for ammo made or repaired after January 2014. Ammunition made this way will fail after January 1, 2017.

A square of red duct tape on the tip to protect the crossover pieces is acceptable.

Is the tape structurally sound?

Both crossover pieces must be sound.

No crack/break in the tape can be more than ½ the width of the tape. This applies to both fiberglass-reinforced (strapping) tape and red electrical tape that cross over the tip.

Note- any repair to a broken piece of crossover piece of tape must replace the <u>entire</u> length of the crossover piece; a patch is not acceptable.

Is there red electrical tape around the base?

NOTE- The first piece wrapped around the shaft then up onto and around the collar may not be visible under the crossover tape.

One piece wrapped around the shaft and collar on top of the crossover tape, with half of the width of the tape on the shaft and half on the collar.

6. Put it in the "passed" or "failed" pile.

Additional Notes-

The most important and crucial part of inspection involving ammunition is answering the questions "is it safe?" and "does it meet the rules and construction standards of both the Society and the Middle Kingdom?"

The more ammunition you have checked and the more familiar you are with the rules and construction standards, the easier it is for you to determine if ammunition is safe. If in doubt, consult another CA Marshal, especially someone more senior or higher in the chain of command.

If the ammunition is extremely short, you may need to fire the ammunition out of the bow/crossbow of the owner to determine if it flies straight or if it wobbles and/or tumbles.

All ammunition must have the complete pre-battle inspection described above to make sure it is safe and has been constructed correctly. Later inspections during the same event are primarily looking for safety issues that may have occurred during use.

Gleaning is when a combat archer picks up a piece of ammo from the ground to reuse it during a battle. Gleaning is NOT permitted for fiberglass ammunition! All archers should know the proper gleaning process.

Field Inspections (performed by the archer on the battlefield) are NOT permitted on fiberglass ammunition!

A **between-battles Inspection** (if permitted by scenario rules) must be performed by a Combat Archery Marshal. Ammunition must be checked for safety (secure head/APD, round APD, etc), label and, if paint is used, make sure the ammo has the proper paint color(s) for the day/battle.

If you are ever in doubt, ask the most senior Combat Archery Marshal on site for guidance.