

# **KINGDOM OF NORTHSHIELD**

## **ARCHERY HANDBOOK**

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## **Rules and Conventions**

Please refer to the most current edition of *The Target Archery Handbook*, SCA, Inc., for the Society rules and conventions.

## **Rules for Archery Participation in Northshield**

In addition to the rules and conventions of the SCA, Inc., the following are the rules of the Kingdom of Northshield.

### **Rules of the Line**

- Each archer shall recognize that his/her equipment is a potentially lethal weapon, and understand the possibilities of physical injury to him/herself or others, and shall assume onto him/herself all risk and liability for harm.
- A warranted archery marshal must be present at all SCA, Inc. shoots and practices.
- All bows, and a representative sample of either arrows or bolts must be inspected by an archery marshal [or by a supervised archery marshal-in-training] before the archer steps to the line.
- Archers shall approach the shooting line only when instructed to do so by a marshal.
- Archers shall straddle the line. Prone and seated archers must assure that the point of their projectiles are in front of the line before shooting.
- Archers shall nock arrows only at the command of the marshal. Whenever any person is in front of the line of archers, no arrows will be nocked!
- Nocked arrows and loaded bolts must always point downrange.
- When retrieving arrows: while pulling an arrow from the target, an archer should place one hand on the target face and one hand on the arrow shaft close to the target face. Only one archer should pull arrows at a time from a single target and all others should stand off to the side, not behind the archer pulling.
- Remember to approach the target from the side and not straight on. Some arrows appear to be invisible when viewed straight on.
- Archers are responsible for continuously ensuring that their equipment meets the Equipment Standards after its original inspection. Should any questionable damage occur – consult with the Marshal-in-Charge.
- Inappropriate behavior on the part of any participant or spectator may result in the Marshal-in-Charge removing that person from the shooting area.
- A copy of the “Rules of the Line” shall be posted near the archery range.

## Equipment Standards and Conventions

Please refer to the most current edition of *The Target Archery Handbook*, SCA, Inc., for the Society rules and conventions.

### Archery Equipment Standards of Northshield

#### Recurve or straight bows

Please see the rules and conventions of the SCA, Inc.

#### Crossbows

In addition to the rules and conventions of the SCA, Inc., the following are the rules of the Kingdom of Northshield

- a) A bolt clip or other device for keeping the bolt in place is required.
- b) Pistol crossbows are not allowed for Northshield Royal Rounds. Use in other competitions is at the discretion of the Marshal-in-Charge. Direct any commentary or questions to the Archer General. Note: pistol crossbows are illegal in Canada.

#### Arrows and Bolts

In addition to the rules and conventions of the SCA, Inc., the following are the rules of the Kingdom of Northshield

- a) Arrow shafts may be made of any type of wood or bamboo.
  1. This requirement may be waived for beginners who are not competing, at the discretion of the Marshal-in-Charge.  
**\*\*\*Must include this allowance in every event report when used\*\*\***
  2. Arrows 35 inches or longer may be made from fiberglass or aluminum.  
**\*\*\*Must include this allowance in every event report when used\*\*\***
  3. Arrows used for junior archery competitions may be made of fiberglass or aluminum
  4. However, the archer must be making efforts to secure arrows made of period materials (Direct any commentary or questions to the Archer General).
  5. Footed shafts (two kinds of wood spliced together) are allowed.
- b) Points must be target points, field points, blunts, bullet points, or bodkin points. Hunting points, broadheads and fish points are not allowed.
- c) Arrows may have self-nocks, plastic nocks, hardwood reinforced or horn nocks. Self-nocks are recommended (not necessary) to be reinforced by wrapping with thread.
- d) Should any archer have a repeated problem with losing points in the target or losing nocks off of their arrows, the archer should leave the line until their equipment has been properly repaired. Points lost in the target can damage other arrows. Loose nocks can cause misfires from the bow.

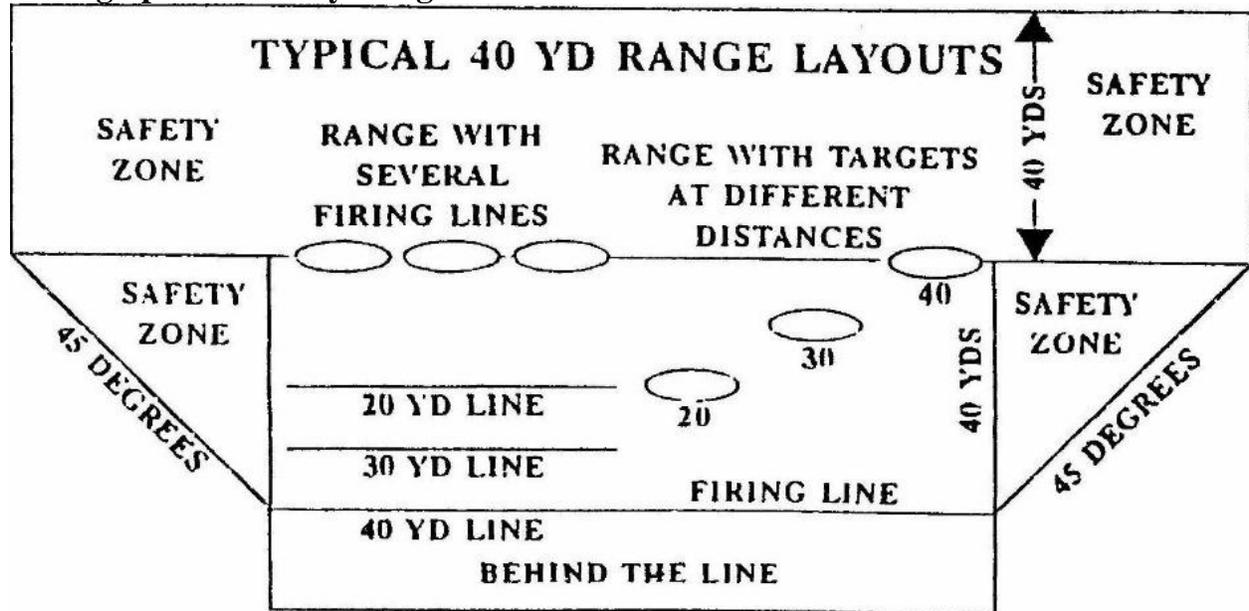
#### Strings

In addition to the rules and conventions of the SCA, Inc., the following are the rules of the Kingdom of Northshield

- a) Handbow string material should be appropriate to the bow. Loops in strings made by compressed metal clips are only allowed for bows that have low poundage (under 30 pounds)
- b) Crossbow string material should be appropriate to the bow and its poundage. Metal cable is not allowed.

## Marshal Field Duties

### Setting up the Archery Range



### Range Set-Up

In addition to the rules and conventions of the SCA, Inc., the following are the rules of the Kingdom of Northshield.

- a) Minimum distance needed:
  - i) For shoots under 50 yards:
    - (1) You need 2 times as much space downrange as you are shooting. Example: a 40-yard shoot will need 80 yards from the shooting line. The minimum distance from the shooting line to the back of the safety zone is 40 yards; more space is always better.
  - ii) For shoots over 50 yards:
    - (1) You need 1.5 times as much space downrange as you shooting. Example a 100-yard shoot you will need 150 yards from the shooting line. Take into consideration the heaviest bow/crossbow on the range; more space is always better.
  - iii) The distance of the safety zone behind the targets may be reduced if there is a hill, permanent backstop, archery netting, etc., that will safely stop stray arrows.
  - iv) The sidelines of the range need to be a 45-degree angle from the shooting line all the way back to the corners of the safety zone.
- b) So that no archer unduly endangers another by shooting from behind, all archers will straddle the line.
  - i) Archers shooting from prone, kneeling, or seated positions shall have the head of their arrow or bolt, at full draw, in the same line as the other archers on the line and should be placed together at one end of the line.
  - ii) If the archers have to move, or are shooting from unusual positions, make sure that no archer will be shooting from behind where another archer is standing.
- c) The required ratio is one line marshal to 10 or less archers.

- d) When youth/beginner shoots are being run, the ratio is one line marshal to 5 or less children/beginners.

**Range Considerations**

- a) Shade near or at the shooting line is needed on hot summer days.
- b) Look to protect the equipment as well.
- c) Bow racks help keep the gear off the ground, which helps reduce tripping hazards and prevents the gear from being stepped on.
- d) Check for physical obstructions that might cause unexpected deflection of arrows. This is especially of concern for clout shoots and woods walks where arrows may deflect off of low hanging branches or tree trunks. Arrange the target positions to minimize the hazard
- e) Look for any physical hazards to participants' safety: ditches, gopher holes, poison ivy, etc. It would be best if they can be eliminated, such as filling in hazardous holes. If this is not possible, then mark the hazard and/or continually warn participants about the dangerous conditions each time they must enter the hazardous area.
- f) Beginning archers and young archers are more likely to miss the target, especially by shooting too high. Their shots may go over any barrier. Marshals may need to be stationed close by to assist and teach, or targets may be moved closer for more focused practice

# Equipment Inspections

## Archery Equipment Inspection

As archers approach the inspection site, it should be made clear to them, either in writing, verbally, or both, that their equipment will need to be inspected. When a participant asks to have his or her equipment inspected, they should be greeted in a courteous manner and their equipment examined in a timely and efficient way.

### Inspection of Bows — Longbows, Recurves, and Other Straight Bows

- a. Ideally, the bow should be handed to the inspecting marshal unstrung. This ensures that the bow may be examined under all conditions, and also allows the marshal to evaluate the archer's competence at handling their own equipment. It may occur that the marshal will be given a pre-strung bow to inspect. In such an instance, the archer should not be required to unstring it solely for inspection.
- b. Hold the bow lightly and look it over as a whole to see if any major flaws or irregularities stand out.
- c. Get a general feel for the age and condition of the bow.
- d. Check for markings that might tell the strength or poundage of the bow.
- e. Closely examine the limbs of the bow, on both sides, both visually and tactilely by gently running your thumb and forefinger along the surface and edges of the bow. Make a detailed examination of the bow material, with a view toward checking for structural degradation, delamination, hairline fractures, points of impact damage, etc.
  - i. The bow should be free from any sections where layers can be lifted with a fingernail, or from deep cracks (extending beyond the first layer)
    1. Bows that have cracks that go across the limbs should be rejected as they are unsafe and will break.
    2. Laminated bows sometimes have small cracks in the fiberglass running up and down the limbs. This condition is not serious unless the crack goes through both the wood and the fiberglass.
    3. Small cracks should be marked at the ends and watched. If the problem has worsened after two to three test arrows, fail the bow. If it is stable, check the bow periodically throughout the competition or practice.
  - ii. Molded fiberglass bows, fiberglass, and laminate composite bows should be free from large (half inch or larger) or clustered air bubbles at or near the surface
- f. Check the nock ends for cracks, delamination, and worn nock channels.
  - i. The nock ends should not have cracks or delamination beyond the edges of the limbs.
  - ii. The nock channels should not be so worn that they may have difficulty keeping the string in place.
- g. Check to see that the bow has no illegal equipment on it. If it cannot be removed, the archer should find a way to make it unusable for the day.
- h. Inspect the string:
  - i. Strings should not have more than 2 broken strands.
  - ii. Strings should not be unraveling.

1. Waxing only addresses the issue cosmetically. It does not strengthen the string
2. Flemish strings may appear to be unraveling. However, if there is still 2 inches or more of twisted strands, the string is adequate. If there is less than an inch, the string fails.
- iii. The serving should be secure and not unraveling.
  1. Note: Flemish strings and other period strings such as linen ones usually do not have servings at the loop ends.
  2. Not all bows require serving (such as the Yumi)
  3. Youth equipment with nylon strings are not required to be served, but they do need to be checked for wear at the nocking point.
    - a. It should be encouraged for them to get new strings with serving.
- iv. No knots or kinks (expect for the archer's knot).
- v. Strings should be of the proper length.
  1. DO NOT fail a bow for an improper string length unless the bow is overstressed.
  2. DO advise the archer to replace with a new string of the proper length.
  3. DO inform the MIC about the bow/string.
- i. Inspect the nock:
  4. The nock should be tight and over the serving.
  5. Check to make sure the nock point has not cut into the string when installed.
- i. Have the archer string their bow.
- j. With the bow strung, repeat the above steps b and e. Structural flaws that were invisible when the bow was unstrung may appear when it is under tension.
- k. You should sight down the length of the bow to check for possible limb twist. This is particularly important with regard to recurve flat bows. If the twist is so excessive that the string will not line up with the bow limbs or is not centered on the nock channels of the bow, this is cause for concern. The string may twist out of position as the bow is pulled.
  - i. Note: Some self-bows contain natural twists. Examine the overall pattern of the string and the bow. In most cases the ends and the center will be in line regardless of what twists and turns occur in the limbs.
- l. Have the archer draw the bow. **Do Not Have an Arrow Near the String.**
  - i. First, have them draw perpendicular to you. Have them slowly release the tension. **Do Not Dry Fire the Bow.**
    1. With the bow drawn, observe the overall appearance of the drawn bow, checking for a uniform and symmetrical form.
      - a. With the exception of asymmetrical bows, there should be even stress on the upper and lower limb that shows even curvature.
      - b. There should be no "elbowing" effect on one limb and not the other.
  - ii. Have them draw straight towards you. Have them slowly release the tension. **Do Not Dry Fire the Bow.**

1. With the bow drawn, observe the overall appearance of the drawn bow, checking for a uniform and symmetrical form.
  - a. With the exception of asymmetrical bows, there should be even stress on the upper and lower limb that shows even curvature.
  - b. There should be no "elbowing" effect on one limb and not the other.
- iii. Watch the archer as they are drawing back the bow for any trembling in the arms and/or an inability to keep the bow steady. This is a sign that the poundage is too heavy. In such cases, strongly but politely encourage the archer to use a lighter poundage bow.
- iv. Watch the back of the bow and the sides for any cracks that may show up under tension.
  1. If necessary, place your finger lightly over the area. If you see or feel movement, then the damage is deeper than the surface. The bow should be returned to rest position, unstrung, and not used.
  2. Follow section e, above, for any cracks
- m. Check for any limb twist/ warping
  - i. After the bow has been drawn and let down, observe the position of the string loop in the nock ends.
  - ii. If the string is not in the grooves on the limbs, then the bow is twisted. On many bows the twisting is constant (the string returns to the same place on the bow after each shot); these bows are usable.
    1. If the string creeps closer to the edge of the bow with each shot, the bow is dangerous and must be failed.

### **Inspection of Crossbows**

- n. Crossbows should always be strung when presented for inspection.
- o. There are many different styles of crossbows, from very simple lever release forms to modern rifle-like forms with safety features.
- p. If the style is unfamiliar, get assistance from a marshal with more knowledge of that style and ask the archer to describe and explain its features.
  - i. Note: All heavy poundage crossbows should be treated with extra caution. A potential hazard is greatly increased with high poundage crossbows and can result in bolts going in unpredictable directions.
- q. Look over the crossbow as a whole to note its features
  - i. Make sure the crossbow does not have any features that are against SCA rules.
  - ii. Get a feel for the age and condition of the bow.
  - iii. Check if there are any flaws that stand out.
- r. Check the table of the bow (where the string slides and the bolt rests).
  - i. Inspect it closely for nicks, exposed screws/nails, roughness, or anything that might abrade the string.
  - ii. Check it for any cracks that might affect the flight of the bolt.
- s. Test the firmness of the prod attachment.
  - i. Hold the stock firmly, then grip the prod and gently attempt to move it.
    1. The prod should not slide back and forth.
  - ii. The prod should not move or wiggle excessively horizontally in its bindings.

- iii. If it can be moved, the binding system is too loose and needs to be tightened before the bow can be used.
- iv. For prods held in place with wedges or clamps, even a small amount of play indicates a need to tighten the prod since it will continue to loosen with each shot.
- t. If the prod is not wrapped:
  - i. Examine the surface material of the prod.
  - ii. The prod should be free from sections where layers can be lifted with a fingernail, or from deep cracks (extending beyond the first layer).
    - 1. Prods that have cracks that go across the limbs should be rejected as they are unsafe and will break.
    - 2. Laminated prods sometimes have small cracks in the fiberglass running up and down the limbs. This condition is not serious unless the crack goes through both the wood and the fiberglass.
    - 3. Small cracks should be marked at the ends and watched. If the problem has worsened after two to three test bolts, fail the bow. If it is stable, check the bow periodically throughout the competition or practice.
  - iii. Molded fiberglass prods, fiberglass, and laminate composite bows should be free from large (half inch or larger) or clustered air bubbles at or near the surface.
  - iv. Check for parallel cracks in metal prods that may indicate possible metal fatigue. Metal prods should be wrapped.
- u. Closely examine the nock ends of the prod to determine any stress damage and any fraying of the bowstring loops.
- v. Examine the rest of the string, checking for broken strands and frayed or unraveling servings. Damaged strings should be failed.
- w. Check the position of the string in relation to the table where the bolt will rest.
  - i. The prod should be oriented in such a way that the string should be pulled downward slightly on either side of the stock.
    - 1. If it is exactly parallel to the stock surface (just resting with little-to-no downward pressure), this is cause for concern since it may cause the string to jump over or deflect the bolt when fired.
- x. Examine the trigger mechanism.
  - i. A barrel mechanism depends on a cylindrical nut for its action and is usually notched in two places, one for the trigger and one for the string.
    - 1. The nut should rotate freely and evenly but should catch at one point, the set point for the trigger.
    - 2. Rotate the nut to that place.
      - a. While maintaining forward pressure against the string notches, gently pull the trigger.
      - b. The barrel-nut should roll suddenly but smoothly forward.
    - 3. Some cylindrical nuts are tied in place while others are designed to fit the socket made for them.
    - 4. If the inspecting marshal turns the bow upside down and the nut falls out, it fails.

5. If it pops out when the inspecting marshal pushes forward on it (as though under tension by a string), it fails
- ii. Spring mechanisms involve the dropping of a hook in response to pulling a trigger.
  1. These can be tested by passing a loop of heavy string (a bow stringer is a useful test string) behind the hook.
    - a. Then, gently pull the trigger while pulling forward on the test string.
    - b. The response should be smooth and fast.
    - c. If there is any major hesitation in the release mechanism, and it occurs consistently, it fails.
    - d. If it jams without releasing, it is a cause for concern and needs to be retested. If it jams again, it fails.
    - e. If it jams while on the shooting line, the archer must remove the bolt from the crossbow right away and be re-inspected.
  - y. If the crossbow has a safety lock, it should also be tested.
    - i. If the safety fails, the bow fails.

### **Arrow/Bolt Inspection**

- z. The marshal should inspect a sampling of each set of arrows or bolts.
  - i. Arrows/bolts must follow the rules and convention of SCA, Inc.
  - ii. Arrows/bolts must be spined correctly for the bow.
  - iii. The shaft should be free of cracks or deep gouges.
    1. Bend the arrow gently while rotating it between your fingers.
      - a. This will cause any cracks to open up that otherwise may not be visible.
        - i. If the paint or varnish is cracked, but not the wood, it is okay.
  - iv. The fletches should be securely attached.
    1. Missing fletching or fletching in disrepair should be noted and the archer informed.
    2. For Crossbows: Check to be sure that the fletching pattern matches the bow.
    3. Note—Missing fletching on bolts may cause them to veer upon release, as will loose fletching that gets caught on its way out of the bow. Bolts with these problems should not be used.
  - v. Nocks
    1. Nocks should be securely fastened.
      - a. Check by gently twisting them at each end. If they feel loose or come off, they should be re-glued before use.
        - i. It may also indicate that the rest of the points or nocks may have a similar problem if they were all put on at the same time. (Glues lose adhesive ability over time.) Check the rest of the arrows.
    2. Nocks should not be cracked or broken.
    3. Check self-nocks for splitting wood.
      - a. While self-nocks do not need reinforcement, it is encouraged.

vi. Points

1. Points need to follow SCA guidelines.
2. Points should be securely fastened.
  - a. Check by gently twisting them at each end. If they feel loose or come off, they should be re-glued before use.
    - i. It may also indicate that the rest of the points or nocks may have a similar problem if they were all put on at the same time. (Glues lose adhesive ability over time.)  
Check the rest of the arrows.
3. Target tips should have enough point to stick in the target without bouncing out.

## **Rules for Non-Combat Siege Weapons Participation — SCA, Inc.**

The utilization of Siege Weapons outside of combat in target or range scenarios and/or with ammunition that is not authorized for combat due to weight or configuration is beyond the scope of the current SCA, Inc., rules for participation.

### **Rules for Non-Combat Siege Weapons Participation — Northshield**

- a. All standard range regulations and conventions apply to siege weapon ranges except as specifically noted herein.
- b. Scenarios: NOTE: Siege weapons are used in two different and independent scenarios:
  - i. In combat where the siege weapons [engines] are limited by range and ammunition configuration. In these situations, Authorized Combat Marshals in lieu of Archery Marshals conduct the marshaling process.
  - ii. In scenarios where the weapons are being employed with greater distances and/or ammunition that is not approved for combat [i.e., bowling balls, water jugs, rocks, etc.], the marshaling is conducted by Authorized Archery Marshals.

### **Rules of the Line**

- a. Each engineer shall recognize that his/her equipment is a potentially lethal weapon and understand the possibilities of physical injury to him/herself or others, and shall assume onto him/herself all risk and liability for harm.
- b. A warranted archery marshal must be present at all SCA, Inc., siege weapon target shoots and practices.
- c. Engineers shall pay heed to the archery Marshal-in-Charge and follow their commands.
- d. All siege weapons and ammunition must be inspected by an Archery Marshal (or supervised Archery Marshal-in-Training) before the weapon is shot.
- e. When employing a crew or team to load, aim, or shoot a siege weapon — each member of the team must be familiar with the commands used to load or shoot the engine. They must be informed of any potential pinch points or other hazards. Additionally, they must know where they are to stand safely when the weapon is shot.
- f. Engineers will only “cock” or “load” their weapon when the Archery Marshal has cleared the line appropriately
- g. Once “cocked,” an engine may not be moved unless constructed with a pivot to allow for aiming.
- h. At the call of "HOLD!" engineers/crews shall immediately stop all activities and apply any safety mechanisms they may have. Depending on the circumstances, the marshal may further request that the weapons be unloaded or shot into the ground. As the word “HOLD” is exclusively used when safety issues are at hand, it should not be used to end timed rounds (use “stop” or “time”). Further, any participant, marshal, or spectator has the authority to call “HOLD” on the siege weapon range should they observe a perceived unsafe situation. However, the Marshal-in Charge will evaluate and will execute any required corrective action before allowing shooting to resume.
- i. The engineer must notify the Marshal-in-Charge when he/she is ready to shoot and wait for confirmation from the marshal that the line is clear before discharging the weapon.
- j. When finished shooting, the engineer shall step back from the siege weapon.

- k. Engineers shall retrieve their ammunitions only at the command of the marshal.
- l. Engineers are responsible for continuously assuring that their equipment meets the Equipment Standards after its original inspection. Should any questionable damage occur, consult with the Marshal-in-Charge.
- m. The engineer is responsible for returning the range to its original condition. Holes are to be filled, water jugs removed to the trash, etc.
- n. Inappropriate behavior on the part of any participant or spectator may result in the Marshal-in-Charge removing that person from the shooting area.
- o. A copy of these “Rules of the Line” must be posted near the siege engine line.

## **Non-Combat Siege Weapon Equipment Standards**

### **A. Non-Combat Siege Weapon Equipment Standards — SCA, Inc.**

At this time there are no SCA, Inc., equipment standards for non-combat usage of siege weapons. Although, several of the construction and equipment standards for Combat Siege Weapons provide useful information and should be referred to as guidelines.

### **B. Non-Combat Siege Weapon Equipment Standards – Northshield**

#### **1) Construction**

- i) Siege weapons are constructed in several configurations. This creates a situation where the engineer and marshal must exercise good judgment, as new designs are always evolving.

#### **2) When in Doubt — DON’T SHOOT IT.**

- a) The great amount of mechanical energy involved between the weapon and munitions demands caution at all times.

#### **3) Log**

- a) Each weapon is to be accompanied by a log. Said log is to include the following information in chronological sequence:
  - i) Name of the engineer
  - ii) Generic name for the engine
  - iii) History of the engine [where it’s been shot and what the ammunition was]
  - iv) Sequential list of any repairs or modifications involved
  - v) Evaluation
    - (1) The marshal will use the log to evaluate the weapons construction and safety record. Special attention will be given when the engine has been reconfigured for greater force or is using heavier ammunition. If a log hasn’t been prepared, the marshal will stop the inspection until one has been created.

#### **4) Stability**

- a) Each engine is to be stable. When the energy is transferred to the ammunition, the machine must not rock or otherwise show signs of tipping or collapse.

#### **5) Failure**

- a) A Siege Weapon, which frequently displays the same manner of failure, must be decommissioned until permanent and adequate repairs are made. The marshal must make the decision if the failures are simply a matter of “tuning” the siege weapon’s performance and design, which do not present any hazard, or are major workmanship or design flaws. These decisions are the sole responsibility of the Marshal-in-Charge. Failure descriptions are to be entered into the engine’s log. Said entries are to be signed and dated by the Marshal-in-Charge.