

# **ARTILLERY**

## **SAFETY RULES**

### **Marching Through History Expo**

Release; 1 November, 2003

- Rev. 1. Add "worm" to II. 9
2. Modify to include Colonial, and cartridge cannons
  3. Change Mortar rule VII.4, Add VII.5
  4. Add: VII.6, limiting container size for filling touchholes/vents

## **General:**

These safety rules shall be in effect at all Marching through History Expo events for artillery. These rules have been developed to take into consideration procedures currently in use so that no or minor changes are required for artillery units to conform.

Safety rests with every member of the organization, therefore each member is bound to adhere to and enforce these rules. Common sense must also prevail, if something does not “look right” call a stop to the activity.

Any individual may call “**Cease fire**” if he sees a circumstance that may be unsafe. When called, all activities shall cease until the commander of the artillery investigates the problem makes corrections as required and orders the batteries to resume.

### **I. The following equipment in good order is required;**

1. Damp sponge, dry sponge, worm and ram.  
The ram head and shaft shall be constructed of hardwood.  
(All sponges shall fit snugly in the bore.)
2. Welder gloves for the #1, #2, #5 and #6 positions.
3. Thumbstall or light glove for #4.
4. Light gloves for #3.
5. Leather haversack for #5
6. Primer (fuze) pouch for #4
7. Sharp vent wire, a vent brush and gimlet.
8. Long nosed pliers for removing stuck primers.

### **II. Ignition systems;**

The following ignition systems are permitted

1. Cannon primers operated by pulling a lanyard.
2. Quills, lighted by a linstock.
3. Percussion caps operated by a lock at vent of muzzle loaders or on the cartridge.
4. Cartridges may also use modern primers.

### **III. Service of the Piece;**

Each unit shall have the detail for serving the piece documented. Service of the piece should not differ substantially from period manuals except for steps to remove foil and extra sponging.

Unit service of piece procedures are subject to review and must contain the following steps:

1. Prior to each battle, or demonstration, all guns will have their bores visually inspected. Cannons with bores too small to be

- properly inspected visually shall have a ramrod passed through the bore to the breach to ensure the bore is clear.
2. The vent will be "Stopped" whenever sponging, worming or ramming using a thumbstall or light glove.
  3. Charges will be loaded with force only enough to seat the charges. "Pounding" the charges will not be permitted.
  4. The ram is to be removed immediately after ramming the charge.
  5. Loaded guns will be indicated by #1 placing the ram on the wheel hub, on the top of the wheel for mountain howitzers, by hand, in the air for mortars.
  6. The Gunner shall give all executable commands to the gun; he may direct that the gun be fired on another officer's command.
  7. The command for firing shall be "ready, fire". At "ready" all cannoneers shall go to the ready position, and observe for encroachment in the "safe zone". All ammunition boxes within 50 feet shall be closed on a "ready" command.
  8. The gunner must ascertain that the safe zone is clear prior to giving the "Fire" command.
  9. After firing the vent will be brushed, stopped and the bore wormed and sponged. Breach loading guns not using metal cartridges may sponge the bore and the breach from the breach.
  10. The damp sponge shall have excess water removed either by a cloth or "spinning". Excessively wet sponges shall not be used.
  11. The gun shall be "dry" sponged.

Additionally the following shall be observed:

1. Guns may be loaded after three minutes have elapsed after firing. Two minutes are allowed if the gun is "double swabbed".
2. While loading the gun, cannoneers will stay as far behind the muzzle as is possible at all times.
3. No one shall cross in front of the muzzle at any time during loading of the piece.
4. Ammunition will be served from the ammunition box placed no closer than 25 feet from the piece, with the hinge toward the piece. The ammunition chest shall be manned or locked at all times. During battles a cannoneer shall stay with the limber or ammunition box, for the purpose of warning reenactors of its presence.
5. No smoking at anytime at the piece or ammunition box.
6. Firearms shall not be discharged within 25 feet of any ammunition box.

#### **IV. Missfire;**

1. "Do not advance, the primer has failed" or "misfire" shall be the commands for a piece that failed to fire.
2. The #1 and #2 man shall cross their rammers/sponges over the wheels making an "X" to indicate the gun has misfired.
3. If the primer has not fired the gun may be re-primed and re-fired.
4. If the primer has fired, the crew and gun shall stand idle for three minutes. Then the charge will be re-picked and re-primed. The gunner using a welders glove and taking care not to place his hand over the vent and holding the vent wire by the shaft will do this.
5. If after two attempts to re-fire the gun, the bore and vent shall be flooded and the charge shall be carefully wormed out and dropped into the sponge bucket.
6. The senior artillery officer shall inspect the charge to attempt to determine why the piece misfired and report the findings to the Artillery Coordinator.

#### **V. Construction of Rounds;**

1. Rounds shall be constructed of 6 layers of tin foil, made into a cup and sealed by folding the flaps.
2. No staples, tape or any other means to close the round shall be permitted.
3. Only black powder shall be used, no wadding or additive of any type is permitted.
4. The use of plastic baggies is optional but must be of lightweight, non zip lock sandwich baggies.
5. No round shall leak powder.
6. Cannons using cartridges may seal the cartridge with silicon. All cartridges shall be inspected by the Artillery coordinator.

## **VI. Placement of guns:**

1. The brigade commander or his representative will place the guns. Guns will not be placed less than 40 feet from the public. Guns closer than 60 feet shall have their muzzles deflected 30 degrees from the public. The public shall not be allowed closer than 25 feet from the limber.

2. The safety zone in front of the guns for reenactors shall be a minimum of 50 feet and shall be marked and indicated to the infantry and cavalry commanders.

3. The safety zone in front of the guns for the public shall be 150 feet.

## **VII. Gun Restrictions.**

1. Only full scale guns will be permitted.
2. Field guns shall have a four crew minimum. Mountain Howitzers three and mortars at least two.
3. Mortars may be used only if they are able to be placed waist high and must have primer deflectors.
4. Mortars using quills as the ignition source do not need a primer deflector but must be fired using a four-foot linstock taking care to stay at right angles to the breach. These mortars may be fired from ground level providing the cannoneer kneels well behind the muzzle.
5. Direct igniting of fuses with matches or lighters will not be tolerated.
6. Touch holes or vents shall not be filled from containers containing more powder than is needed for firing the charge.