

Black Powder Safety Regulations

1. **RESPONSIBILITY:** All participants are responsible for event safety. Each participant should be familiar with these safety regulations and follow them. Any participant observing an unsafe practice or condition should take it upon themselves to have it corrected and/or report it to one of the designated safety officers.
2. **SAFETY OFFICERS:** The Event Organizers will appoint an EVENT SAFETY OFFICER who will have overall responsibility and authority for monitoring and enforcing these Safety Regulations. The Event Safety Officer and/or the Event Organizers may appoint subsidiary Safety Officers who will have responsibility and authority for monitoring and enforcing these Safety Regulations in their respective areas. Safety Officers may have other duties and/or roles in addition to their duties as Safety Officers.
 - 2.1 **Force Safety Officer:** The CROWN FORCES SAFETY OFFICER and the CONTINENTAL FORCES SAFETY OFFICER shall have responsibility and authority for monitoring and enforcing these Safety Regulations for their respective sides. They, and/or the Event Organizers may appoint subsidiary Safety Officers who will have responsibility and authority for monitoring and enforcing these Safety Regulations in their assigned areas.
 - 2.2 **Camp Safety Officer:** The CAMP SAFETY OFFICER for each force shall have responsibility and authority for monitoring and enforcing these Safety Regulations in their respective camps, both military camps and associated civilian demonstration areas. If the Civilian Demonstration Areas are sufficiently large, a separate Provost may be appointed with responsibility and authority for monitoring and enforcing these Safety Regulations in those areas.
 - 2.3 **Infantry Safety Officer:** The INFANTRY SAFETY OFFICER for each force shall have the responsibility and authority for monitoring and enforcing these Safety Regulations among the infantry forces of their respective sides. They shall oversee the safety inspections of all infantry participants. During military demonstrations they shall have the authority to override the orders of field force commanders and to change or suspend action as they see fit if, in their opinion, an unsafe condition arises.
 - 2.4 **Artillery Safety Officer:** The ARTILLERY SAFETY OFFICER for each force shall have the responsibility and authority for monitoring and enforcing these Safety Regulations among the artillery forces of their respective sides. They shall oversee the safety inspections of all artillery pieces and participants. During military demonstrations they shall have the authority to override the orders of field force commanders and to change or suspend action as they see fit if, in their opinion, an unsafe condition arises.
 - 2.5 **Horse Safety Officer:** The HORSE SAFETY OFFICER for each force shall have the responsibility and authority for monitoring and enforcing these Safety Regulations among the mounted forces of their respective sides. They shall oversee the safety inspections of all mounted participants. During military demonstrations they shall have the authority to override the orders of field force commanders and to change or suspend action as they see fit if, in their opinion, an unsafe condition arises.
3. **RESPONSE TO UNSAFE ACTS OR CONDITIONS:** Any participant who violates these Safety Regulations or who otherwise poses a danger to participants or the public may be expelled at the discretion of the Event Safety Officer. Any unsafe action or condition during a Tactical Demonstration will result in suspension of the demonstration until the problem has been resolved. Any Unit Commander may call for suspension of activities.
4. **CAMP SAFETY:** The following regulations apply to all camps, military and civilian alike.
 - 4.1. **Fire Safety:**

Black Powder Safety Regulations

- A. FIRES, LOCATION: Fires are to be kept at least 30 feet (10 yards) from any tent, marquee or similar shelter with sides and at least 10 feet from any fly, awning or similar shelter without sides.
- B. FIRE PITS: Fires are to be built only in areas at least two (2) feet square from which the sod has been removed (fire pits). The sod from the fire pit is to be placed face down and kept moist so that it can be returned to its original position. Before departing all fires are to be thoroughly extinguished. Major residue (partially burned pieces of wood, etc.) is to be removed from the fire pit and the sod carefully replaced.
- C. SURROUNDING AREA: The area surrounding each fire pit shall kept clear of combustible materials for a distance of five (5) feet.
- D. FIRE SIZE: Fires are to be no larger than necessary for cooking. Although fires may be used as gathering and social centers after hours, large “bonfires” are not permitted.
- E. PUBLIC PRESENCE: No member of the public is to be allowed within 30 feet (10 yards) yards of an active fire pit. If a rope barrier is not available, create a physical, or at least a psychological barrier. Use tables, benches, firewood, cooking equipment or whatever is at hand.
- F. BLACK POWDER: No participant shall carry any black powder in any form within 30 feet (10 yards) of an active fire pit. All cartridge pouches, powder horns, etc. are to be removed and left in camp before approaching fires.
- G. FIRE SAFETY EQUIPMENT: A woolen blanket and a full container of water (bucket, kettle, etc.) containing at least two (2) gallons of water are to be kept within five feet of each fire pit. The water is not to be used for any purpose other than extinguishing fires.
- H. ADULT ATTENDANCE: Every fire is to have at least one adult in attendance at all times when it is burning. If the principal adult in attendance must leave, a substitute should be obtained to watch the fire in his/her absence, or the fire should be extinguished. Any fires found burning without an adult in attendance will be extinguished. Persons working or interpreting near a fire should always have another adult nearby to provide assistance in the event of an emergency.
- I. CHILDREN: Children may not start or tend fires (fetching wood is permitted). Children should not be permitted to run or play in the vicinity of fires (remember, a major cause of child mortality in the 18th Century was death from burns).
- J. CLOTHING: Persons working or interpreting around fires should only wear garments made of tightly woven wool or linen as these fabrics are least likely to flair up or burn vigorously if ignited.
- K. PERSONAL FIRE EMERGENCIES: If your clothing catches fire, use the “Stop, Drop and Roll” technique as advocated by fire safety authorities. If the clothing of someone near you catches fire, help them to “Stop, Drop and Roll,” and smother their clothing with a woolen blanket. In the event of a clothing fire, send a third party to summon medical aid. If a person with burn injuries appears to be going into shock, have them lie down, elevate their feet, keep them warm, shade them from the sun, and *do not handle the burned areas or attempt further treatment* unless you are an EMT, nurse or physician who is both qualified and aware of the potential liability.

4.2. Tent Safety:

Black Powder Safety Regulations

- A. SOLDIERS TENTS: No lit candle(s) are permitted in soldier's tents unless the tent is free of straw or similar combustibles *and* the candle is securely mounted in an enclosed *metal* lantern that has a door with a secure fastening mechanism.
- B. OFFICERS MARQUEES: No chandeliers suspended from the ceiling are permitted in Marquees. Sturdy candelabra, chafing dishes and the like may be placed on tables for dinners and other functions so long as there are several persons in attendance and only if there is no straw or similar combustible material on the floor. Otherwise, only candles securely mounted in an enclosed *metal* lantern that has a door with a secure fastening mechanism shall be employed in marquees.
- C. UNATTENDED FLAMES: No flame of any kind, no matter how securely enclosed, is to be left unattended in a tent or marquee, even momentarily. If you must leave your tent or marquee, take your candle with you or extinguish it.
- D. TENT FIRE EMERGENCIES: In the event of a tent fire, immediately determine if anyone is in the burning tent. At the same time, raise the cry of "Fire! Fire!" to summon aid. If there is no one in the tent, *and if it can be done safely*, use a long pole or similar tool to pull out the upright poles at the bottom so as to collapse the burning tent and retard the progress of the fire. If there are other tents nearby, collapse them in the same manner to slow the fire's progress, *if this can be done safely*. Upright tents contribute to the rapid spread of tent fires. Tents lying on the ground do not. It is better to collapse tents unnecessarily than it is to allow a tent fire to spread.

4.3. Animals:

- A. ANIMALS IN CAMP: Animals in the camps are strongly discouraged as anachronistic, a possible safety concern and an annoyance to others. If you must bring your pet with you, it is your responsibility to keep it on a leash and fully under control at all times.
- B. HORSES AND DRAFT ANIMALS: Horses and draft animals shall not be ridden or led within 30 feet (10 yards) of any tentage. When not being ridden or led, horses and draft animals shall be kept in the Horse Park or other designated area, securely tethered or corralled.
- C. ACCESS TO HORSE PARK: No persons, either participants or members of the public, who are not involved with horses and/or draft animals as part of the event may enter the Horse Park or other such designated area.

4.4. Weapons in Camp:

- A. FIREARMS: No loaded firearms may be carried within the camp.
- B. DISCHARGE: There shall be no discharge of firearms within the camp. This includes test firing, training firing, flashing the pan and other similar activities involving the use of powder, which must be done only in designated, secure locations. Snapping of unprimed locks to test flint function is permitted within the camps but should be done only at a safe distance (10 feet) from tents or other flammable materials.
- C. EXCEPTION TO LOADED FIREARMS IN CAMP: The sole exception to the above rules may be when the camp itself is intentionally included as part of a tactical demonstration. In such cases the action must be prearranged with the commanders of the forces involved, with the residents of the camp and with the site coordinator/sponsor.

Black Powder Safety Regulations

- D. LIVE CARTRIDGES AND THE PUBLIC: Cartridges containing black powder shall not be exposed to any member of the public. If you wish to display a cartridge for interpretive purposes, it must be a “dummy,” filed with sand or other inert powder substitute.
 - E. EDGED WEAPONS: There shall be no unsheathed bayonets, swords, polearms or similar weapons carried within the camp. Polearms are to be carried in the vertical position within the camp.
 - F. SENTRIES: Sentries posted within the camp may have bayonets fixed but their weapons are not to be loaded. Sentries posted 30 feet (10 yards) or more outside the camp may carry loaded weapons if authorized to do so by the Chief Safety Officer and with the concurrence of the Provost and the site coordinator/sponsor.
 - G. GAMES AND COMPETITIONS: Throwing of knives, tomahawks, axes or other weapons for sport or competition may not be done within the camp. If permitted at all, such activities shall be conducted only in a safe location with a clear background to be designated by the Quartermaster General with the concurrence of the the Chief Safety Officer and the site coordinator/sponsor. In no case are members of the public to be allowed within 30 feet (10 yards) of such activities.
- 4.5 **Tools**: Edged tools such as axes, knives, etc., used to cut firewood, prepare food, etc., shall be properly sheathed or otherwise situated so that the edge is not exposed when they are not actually in use.
- A. AXES: Only single bitted axes are permitted; double bitted axes are prohibited. When not in use an axe shall be sheathed or have its edge imbedded in a substantial piece of firewood.
 - B. KNIVES: When not in use knives should be sheathed, imbedded in something (such as a loaf of bread) or placed out of sight (in a box, covered with a cloth, etc.).
 - C. CHILDREN: Children are not to use edged tools in camp except under the direct supervision of a parent or guardian.
- 4.6 **Children**: Children are a part of any encampment. Although children are expected to act as children and to have fun, they may not be permitted to “run wild” through the camps. Please remember that adult participants have the right NOT to be bothered by other people’s children.
- A. MINOR CHILDREN: Minor children (anyone under 18 years of age) including soldiers under the age of 18 must have a parent, legal guardian or other adult in attendance who is authorized to act *in loco parentis* both factually and legally.
 - B. IN LOCO PARENTIS DOCUMENTATION: Persons authorized to act *in loco parentis* should have in their possession properly executed documentation of such designation. This provision is important because if medical assistance is required for a minor, many hospitals, emergency units and such will not, because of liability concerns, administer medical treatment (except that required to prevent death) to a minor person without permission from a parent, guardian or an other adult who is properly authorized to act *in loco parentis* for that minor person.
 - C. ATTIRE/BEHAVIOR: Children in camp are expected to dress in proper 18th Century attire and to behave as 18th Century children would. Children are as much a part of the overall public impression as any other group and as such have an important role to play in our activities.

Black Powder Safety Regulations

5. AMMUNITION

5.1. **Small Arms Ammunition:** Only blank ammunition conforming to the specifications set forth below shall be carried. No ball loaded ammunition, loose ball or other projectiles may be carried on one's person for any reason.

A. **AMMUNITION STORAGE:** Small arms ammunition carried by participants shall be kept in sturdy cartridge pouches, boxes or tins of proper 18th Century pattern. Reserve amounts of small arms ammunition in excess of the amount carried by the soldiers shall be kept in secure storage containers that will not admit the entry of a random spark. Modern ammunition boxes, tin containers with friction fit lids, casks fitted with trunk lids, hasps and locks (see Cuthbertson) and strong wooden boxes with hasps and locks are suitable storage containers. Such containers, if kept in camp, shall be kept in a tent, marquee or other place that is secure from the public.

B. **CARTRIDGES:** All small arms ammunition for muskets, rifles and pistols must be in the form of pre-prepared blank cartridges. Loading with loose powder or by any means other than with pre-prepared cartridges is strictly prohibited.

B.1. **Manufacture:** It is urged in the strongest possible terms that all small arms cartridges be manufactured and filled off-site before the event. The manufacture or filling of small arms cartridges on-site during an event is strongly discouraged. If for some reason small arms cartridges *must* be manufactured or filled during an event, such activity must be done in a place and in a manner approved by the Event Safety Officer or his designated deputy.

B.2. **Materials:** Blank cartridges must be made of stiff paper, rolled in an 18th Century manner, glued or tied, without staples or any other material that might become a projectile. Only black powder of FFg or FFFg granulation shall be used as the charge. No substitutions (e.g., smokeless powder) or replica powders (e.g., *Pyrodex*) are permitted. FFFFg black powder is not permitted as the charge in small arms ammunition but may be used in priming horns (see below.)

B.3. **Powder Charges:** Excessively large powder charges not only endanger the hearing of those in the vicinity, they can cause spectators and sponsors to think that an accident has happened. At best they are anachronistic and make us look silly. Participants are urged to use the smallest powder charge which will produce a satisfactory report. *Maximum* allowable powder charges for small arms cartridges are shown in the following table.

TABLE OF MAXIMUM ALLOWABLE SMALL ARMS POWDER CHARGES			
<u>WEAPON</u>	<u>CALIBER</u>	<u>POWDER GRANULATION</u>	
		<u>FFg</u>	<u>FFFg</u>
Brown Bess Musket	0.75	110 grains	100 grains
Charelvilleville Musket	0.69	110 grains	100 grains
Fowlers	Various	110 grains	100 grains
Rifles	Various	80 grains	70 grains
Pistols	Various	60 grains	50 grains

B.4. **Priming Horns:** Sound, securely stoppered priming horns containing no more than two (2) ounces of priming powder may be carried for re-priming purposes.

5.2. **Artillery Ammunition:**

Black Powder Safety Regulations

- A. **STORAGE:** All artillery ammunition shall be kept in the artillery park in fire proof containers and under constant guard when not required for use in a public demonstration. No person who is not an authorized member of a participating artillery unit shall come within 30 feet (10 yards) of the artillery ammunition storage or loading areas. There shall be no fires within 120 feet (40 yards) of an Artillery Park.

- B. **CARTRIDGES:** All ammunition for the artillery is to be in the form of pre-prepared blank cartridges. Loading with loose powder or by any means other than with pre-prepared cartridges is strictly prohibited.
 - B.1. **Manufacture:** It is urged in the strongest possible terms that all artillery cartridges be manufactured and filled off-site before the event. The manufacture or filling of artillery cartridges on-site during an event is strongly discouraged. If for some reason artillery cartridges *must* be manufactured or filled during an event, the following provisions must be strictly complied with: 1) manufacture and/or filling must take place in a location that is at least 150 feet (50 yards) from any camp, parking area, building or area that might be frequented by other participants or by members of the public; 2) The site must be inspected and approved *in writing* by the Event Safety Officer and the Artillery Safety Officer before any manufacture and/or filling of cartridges takes place.

 - B.2. **Materials of Construction:** Artillery cartridges are to be made from at least three (3) layers of heavy gauge aluminum foil and either FFA or Fg black powder *only*. Other materials, including wadding of any kind or anything else that might become a projectile are prohibited. Black powder of finer granulation than FFA or Fg is prohibited.

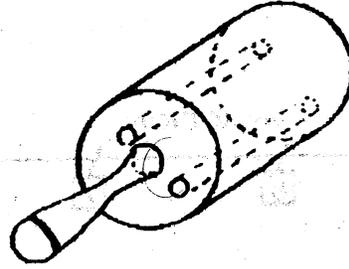
 - B.3. **Powder Charges:** Artillery units are urged to use the smallest powder charge which will produce a satisfactory report. *Maximum* allowable powder charges for artillery cartridges are shown in the following table.

TABLE OF MAXIMUM ALLOWABLE ARTILLERY CHARGES			
<u>GUN SIZE</u>	<u>BORE</u>	<u>POWDER GRANULATION</u>	
		<u>FFA</u>	<u>Fg</u>
1 Pounder (Wall Gun)	2.00"	4 oz.	2 oz.
2 Pounder (Swivel)	2.50"	6 oz.	4 oz.
3 Pounder	2.90"	8 oz.	6 oz.
4 Pounder	3.20"	10 oz.	8 oz.
5 Pounder	3.40"	12 oz.	10 oz.
6 Pounder	3.66"	16 oz.	12 oz.
Howitzers	All	To just fill the chamber of the piece	
Mortars	All	To just fill the chamber of the piece	

- B.4. **Construction:** Use a wooden former like that shown in Fig. 1 below. Cut a piece of aluminum foil three time as long as the circumference (9.5 times the diameter) of the former and of a width approximately equal to the height of the finished cartridge plus two time the diameter of the former. To form the cartridge roll the strip of aluminum foil three times around the former, fold one end closed and hit that end on a hard surface to lock the fold. Remove the former, fill with the proper powder charge and fold closed (see Fig. 2 below).

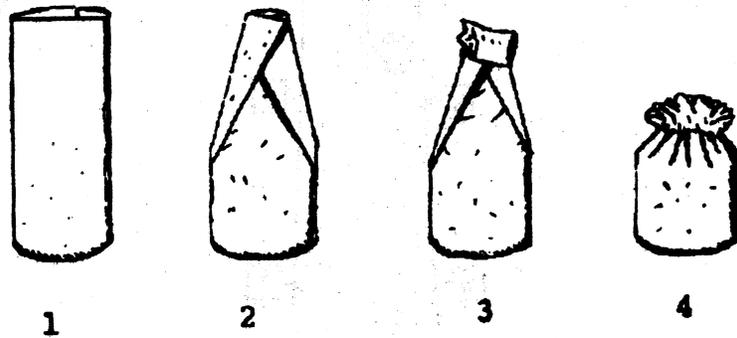
Fig. 1

Black Powder Safety Regulations



Former to be 0.2" smaller in diameter than the bore of the gun for which it is intended. Make the former with air passages in the center or on the circumference to facilitate its removal.

Fig. 2



B.5. **Primers:** Priming with loose powder is permitted. Priming powder must be in either pre-prepared paper cartridges similar to musket/rifle ammunition, each containing sufficient powder for one prime, or in sound, securely stoppered powder horns or similar containers containing no more than two (2) ounces of powder. Priming with analogs of the tin priming tubes used during the 18th Century is also permitted, provided that the analog priming tubes are made from soda straws or similar soft materials that will not pose a safety hazard (e.g.: being struck by a flying tube or falling on and being impaled by one) to participants or members of the public.

6. **INDIVIDUAL FIREARMS AND AMMUNITION:** The following rules apply to all participants at all times during an event including but not limited to opposed force tactical demonstrations, unit drill, ceremonies, and individual demonstrations of all kinds.

6.1. **Inspections:** Troops will be assembled for a pre-activity safety inspection immediately prior to any activity in which firing is to take place, and assembled again after the activity for clearing of any unfired weapons and a final safety inspection to insure that no loaded weapon is inadvertently taken away. Any individual who absents himself from or refuses to submit to such inspections, or whose weapons and/or ammunition are judged to be unsafe shall not be permitted to participate in activities in which firing is to take place.

A. **INSPECTING OFFICERS:** Inspections are to be conducted by unit commanders and/or NCO's in the presence of one of the event Safety Officers or his designee. The Safety Officer shall observe the inspections to insure that proper procedures are followed and may, at his discretion, personally conduct inspections of individuals and/or units.

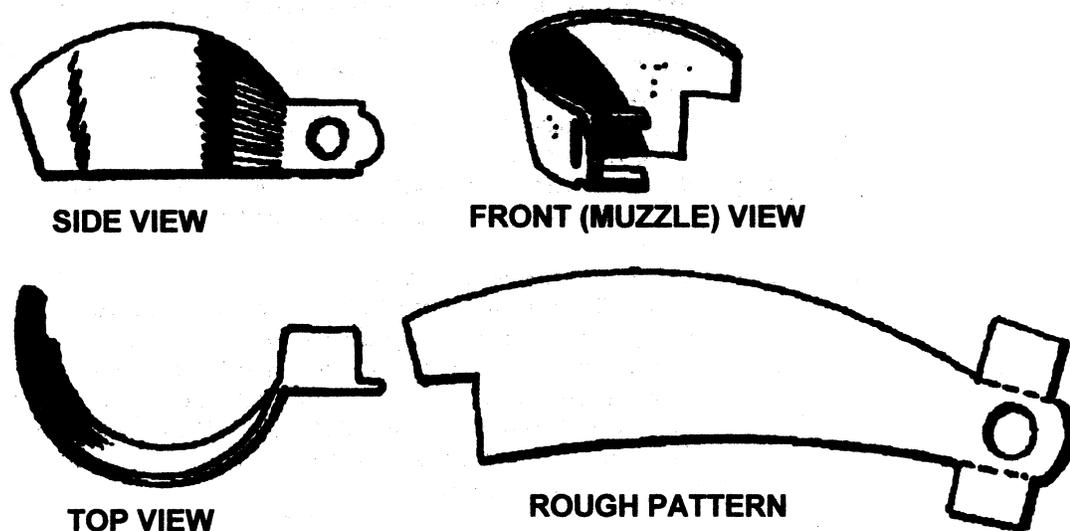
Black Powder Safety Regulations

- B. PRE-ACTIVITY INSPECTIONS: The following procedure is to be employed for inspections prior to activities in which firing is to take place.
- B.1. Formation: The troops are to be assembled in proper formation with all appropriate weapons and accoutrements. If the formation consists of more than one rank the ranks are to be separated sufficiently to permit the inspection party to move freely between them.
 - B.2. Physical Inspection of Firelocks: The troops shall be brought to the position of "Poise Firelocks." The inspection party shall pass down the lines, inspecting each firelock for the following: 1) no visible cracks or other serious stock damage; 2) presence of a properly functioning hammer stall (frizzen cover); 3) presence of a properly designed and installed flashguard; 4) proper function of the half-cock position of the lock.
 - B.3. Unloaded Firelocks: The troops shall be ordered to "search their pieces" (spring rammers) by withdrawing their rammer and initially inserting only the end into the muzzle of their firelock. As the inspection party passes down the line, each is then to drop his rammer down the barrel so that the inspection party can hear the "ping" of each individual rammer striking the breech plug.
 - B.4. Fit of Bayonets: The troops shall be ordered to fix their bayonets. The inspection party will check the fit of each bayonet.
 - B.5. Ammunition, Edged Weapons and Accoutrements: The inspection party shall pass behind each rank and visually inspect the contents of each cartridge pouch and/or cartridge box. Inspecting officers may withdraw individual cartridges for closer inspection at their discretion. At this time the inspection party shall also check that the coverings of edged weapons are in good condition and that no edges or points of such weapons are exposed.
- C. POST ACTIVITY INSPECTIONS: Immediately after any activity in which firing has taken place the troops shall not be dismissed until they have undergone a Post Activity safety inspection.
- C.1. Formation: The troops are to be drawn up in formation as in the pre-activity inspection.
 - C.2. Secure Firelocks: The troops are to be ordered to "secure firelocks" so that any unfired charges will be dumped on the ground.
 - C.3. Spring Rammers: The troops are to be ordered to "search their pieces" (spring rammers) as in 6.1.B.3 above to insure that all firelocks are unloaded and safe to return to camp.
- 6.2. Firearms Safety Requirements: Only replica flintlock arms of a type used during the 18th Century may be carried and fired. All firearms must meet the following minimum safety requirements. Any firearm found to be not in compliance with these requirements shall be barred from use until the deficiency has been corrected and the firearm has been re inspected and passed by the inspector who first disapproved it.
- A. GENERAL CONDITION: Stocks are to be free from splits, cracks, or other defects that might lead to failure in use. There shall be no missing parts. All parts shall fit tightly with no rattling or gaps that might allow powder to get into the internals of the lock.

Black Powder Safety Regulations

- B. HALF COCK: The lock, when in the half cock position, shall withstand a strong pull on the trigger without releasing the cock. At a minimum the half cock position must keep the hammer from falling when the entire weight of the firelock is suspended from the trigger.
- C. FLASHGUARDS: All firelocks must be equipped with a metal flashguard strong enough to withstand the vent blast without bending and so made and installed as to keep all flash and powder particles from traveling more than one foot in a lateral direction when the firelock is discharged. Flashguards must be of a design and installed in such a manner that they cannot slip down and expose the vent should their primary attachment (generally the frizzen screw) become loosened.

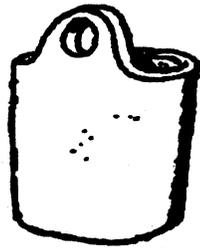
Fig. 3 – FLASHGUARD GUIDE (NOT TO SCALE)



- D. HAMMERSTALLS (FRIZZEN COVERS): All firelocks must be equipped with a leather hammerstall (frizzen cover) of sufficient thickness as to prevent the flint from cutting through it if the firelock is fired with the hammerstall in place. Hammerstalls are to be constructed so as to be a tight slip fit to the hammer (frizzen) and of such a length as to completely cover the striking surface of the hammer. Hammerstalls must be attached to the firelock with a tether in such a manner that they can be easily put in place and will not be lost.

Fig. 4 – HAMMERSTALL GUIDE (NOT TO SCALE)

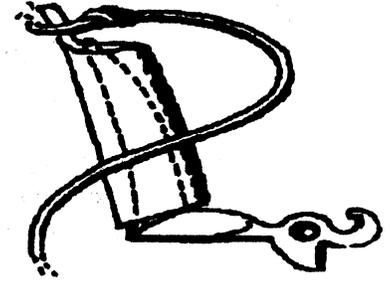
Black Powder Safety Regulations



FRONT VIEW



REAR VIEW



FINAL FIT

- E. **FOULING:** A heavily fouled firelock is a safety hazard. Participants are urged to thoroughly clean their firelocks on a regular basis. Any musket that is so fouled as to produce a “thud” rather than a “ping” when the rammer is dropped down the barrel and any rifle that is so fouled that the ramrod fails to “bounce” when dropped down the barrel shall be barred from use until it has been cleaned and re inspected.
- 6.2. **Handling:** Muskets and rifles pose dangers to participants and spectators beyond the obvious ones associated with their discharge. They are also heavy clubs which, when carelessly handled, have knocked out teeth, broken bones and caused severe bruises and cuts. Participants are enjoined to keep their firelock under control at all times, especially when enacting a casualty during a tactical demonstration.
- A. **RAMRODS:** Ramrods may be carried but are not to be drawn or used under any pretense during Opposed Force Tactical Demonstrations (see Section 8 of these Safety Regulations). No charges are ever to be rammed down when loading except as provided in Section 9.3. and 10.4.G. of these Safety Regulations.
- B. **CARTRIDGE PAPER:** Cartridge paper is never to be put into the muzzle even when not ramming. If a cartridge paper should be accidentally dropped into the muzzle, the firelock is not to be fired until the charge has been dumped and the paper removed.
- C. **LOADING:** All loading is to be done in the manner specified in the manuals of the period.
- D. **ACCIDENTAL DISCHARGES:** Under certain conditions there is a slight possibility that a spark may remain in the bore which will cause the powder to ignite during the loading process. For this reason, participants are urged to take great care to keep the muzzle away from their face and the faces of others, and to avoid placing their hands over the muzzle during the loading process or at any other time.
- E. **ORDER FIRELOCKS:** In general, troops should not be permitted to go to the position of “order firelocks” with loaded arms. If an unusual situation such a long delay or pause in the action makes such a move necessary, the troops may be brought to the “order firelocks” position with their right hand at the muzzle so that they can positively control its direction. Under no circumstances are they to be permitted to go to the “rest” position while loaded.
- F. **MISSFIRES:** After each fire, participants should glance at their pan to see if a wisp of smoke is issuing from the touch hole, indicating that the weapon has discharged. If there is any doubt as to whether a discharge has taken place, the weapon shall be presumed to have misfired.

Black Powder Safety Regulations

- F.1. Waiting Time: If a misfire is suspected, the firelock shall be kept pointed down range for a minimum of ten (10) seconds before any other action is taken.
- F.2. Re-Priming: A firelock that has misfired may be re primed while in formation. No additional powder shall be introduced to the barrel. If re priming is done from a new cartridge, the excess powder shall be scattered on the ground.
- F.3. Tightening Flints: Flints may be tightened while in formation. The firelock is to be in the half-cock position with the pan closed during such operation.
- F.3. Other Remedial Actions: All other remedial actions to correct misfires during a tactical demonstration such as knapping of flints or installing a new flint shall be done by 1) dumping any powder in the barrel and the pan; 2) stepping behind the formation to work on the firelock. *Under no circumstances should anyone be behind a formation with a loaded firelock.*

7. EDGED WEAPONS AND TOOLS:

- 7.1. Edges: Edged weapons (swords, pole arms, bayonets, etc.) used in demonstrations must have dulled edges and/or points. Tools (axes, tomahawks, knives, etc.) that are intended for use in camp duties, fatigue parties and the like should be well sharpened as a dull tool is more dangerous to the user than a sharp one.
- 7.2. Covers: All edged weapons and tools shall be provided with a sturdy sheath that completely covers all sharp edges and/or points, will not become displaced in handling and is thick enough to prevent the edge and/or point from cutting through if dropped from waist height. Covers shall be in place whenever the edged weapon or tool is not in use.
- 7.3. Weapons, Tools and the Public: Members of the public shall not be permitted to handle edged weapons or tools.

8. OPPOSED FORCE TACTICAL DEMONSTRATIONS: Opposed Force Tactical Demonstrations are demonstrations of tactics and maneuvers in the presence of an actual “enemy” force. Weapons are normally discharged in the direction of other participants during Opposed Force Tactical Demonstrations.

8.1 General Safety Rules:

- A. CEASE FIRE: At any time during an Opposed Force Tactical Demonstration that a “CEASE FIRE” is called by beat of drum, by a hat being held aloft on the tip of a sword or pole arm, or by verbal command, ALL FIRING AND OTHER ACTION SHALL CEASE IMMEDIATELY, TROOPS SHALL SHOULDER THEIR FIRELOCKS AND REMAIN STATIONARY AWAITING FURTHER ORDERS.
- B. TRAINED PARTICIPANTS: Only persons who are members of recognized units, who are at least sixteen (16) years old, who have been trained in the safe handling of weapons in tactical situations, and who have been inspected prior to the demonstration shall be allowed to participate.
- C. UNIT SAFETY OFFICERS: Every unit participating in an Opposed Force Tactical Demonstration shall have present during the demonstration at least one member who is a Safety Officer for that unit.
- D. SPECTATORS: A minimum distance of 90 feet (30 yards) shall be maintained between spectators and any action. No troops shall go among, alongside or behind spectators or

Black Powder Safety Regulations

approach within 90 feet (30 yards) of spectators during an Opposed Force Tactical Demonstration.

- E. DIRECTION OF FIRE: No firing is to take place in the direction of spectators: firing is to be limited to a direction parallel to or away from the line of spectators.
 - F. INDEPENDENT ACTION: There shall be no un-programmed aggressive actions undertaken by individuals or groups during tactical demonstrations or at other times during an event. This includes but is not limited to “heroic” assaults or flanking movements, “raids” on camps, “assaults” on sentries and the like.
- 8.2. **Infantry**: The term Infantry includes Riflemen, Rangers, Militia, dismounted Dragoons and all other troops except Mounted Troops and Artillery.
- A. NO PHYSICAL CONTACT: Physical contact during Opposed Force Tactical Demonstrations is strictly prohibited. Participants are not, at any time, with any object or with any part of the body, to touch any member of the opposing force. There shall be no simulated bayoneting, mock hand-to-hand combat or any other actions which would result in physical contact. The sole exception to the above rule is in the case of Mounted Troops, which may cross swords with other mounted troops when called for by the scenario (see Section 8.2.B.)
 - B. FIRELOCKS: Firelocks include muskets, rifles, fowlers, carbines, blunderbusses and any other firearm intended to be fired from the shoulder by an individual soldier. The following rules are intended only to cover firelock safety during Opposed Force Tactical Demonstrations. Detailed safety requirements for firelocks are set forth in the Appendix to these rules.
 - B.1. Loading: Ramrods shall not be removed from their channel in the firelock during Opposed Force Tactical Demonstrations. Charges are to be a suitable amount of black powder only. All firelocks, including rifles, shall be loaded using only pre prepared paper wrapped blank cartridges. Loading “from the horn” is not permitted in Tactical Demonstrations. There shall be no wadding or ramming at any time.
 - B.2. Elevation: Firelocks are to be aimed over the heads of opposing forces. There shall be no “leveling” of firelocks during Opposed Force Tactical Demonstrations.
 - B.3. Safe Discharge Distance: Firelocks may not be discharged when the opposing force is less than 120 feet (40 yards) from the firing formation.
 - B.4. Minimum Closing Distance: Under no circumstances may opposing Infantry forces close to less than 30 feet (10 yards) from one another. If opposing forces approach to that distance the situation is to be treated as a mistake. Both forces are to halt. The men are to bring their arms to the vertical (recover) position and remain in that position until the situation is sorted out and appropriate orders issued to separate the forces.
 - C. PISTOLS: Pistols may be carried but may not be fired in Tactical Demonstrations. The sole exception is in the case of mounted troops, who may discharge pistols when called for by the scenario, only with the prior approval of the Chief Safety Officer, the Field Commanders and the Master of Horse (see Section 8.2.C.).
 - D. BAYONETS: Bayonets may be fixed during Opposed Force Tactical Demonstrations *only* when agreed upon by the Force Commanders concerned and *only* under the following conditions. Whenever bayonets are fixed every participant must be constantly aware of where the point is and what is near it.

Black Powder Safety Regulations

- D.1. Capability, Comfort: Bayonets are to be fixed only by units who are able to maneuver and fire safely, in double rank, with bayonets fixed. If in the opinion of a Force Commander or a Safety Officer a unit is not capable of doing this safely, or if a unit is not comfortable with doing this, it will not fix bayonets.
- D.2. Terrain, Ground Conditions: Whenever the condition of the ground, due to weather or terrain or other factors would, in the opinion of a Force Commander or the Chief Safety Officer, make the fixing of bayonets dangerous, bayonets shall not be fixed.
- D.3. Fortifications, Conveyances, Etc.: When storming a wall or fence that is too high to step over easily, when climbing ladders, riding in wagons or boats, and in similar circumstances, bayonets shall not be fixed.
- D.4. Scenario, Sponsor and Other Limiting Factors: Bayonets may not be fixed if the agreed upon scenario prohibits it, if the regulations of the event sponsoring organization prohibit it, if local ordinances prohibit it or in any other similar situation.
- D.5. Running With Fixed Bayonets: Unless it is specifically called for in the agreed upon scenario, no one shall presume to move at a pace faster than a quick march with bayonet fixed. If the agreed upon scenario calls for a “rush” by a force, it may be done with bayonets fixed only under the following conditions.
- a. INDIVIDUAL CONSENT: Only participants who individually agree to be part of such a force shall do so. Any individual who is for any reason uncomfortable with being part of such action with fixed bayonets shall be excused from it.
 - b. OPEN FORMATION: Any running with bayonets fixed shall be done in a formation that is sufficiently open that if an individual should stumble or fall he will not endanger those around him.
 - c. HIGH PORT: Any running with bayonets fixed shall be done only with the firelock held at the “high port” position across the chest at an angle of approximately 45 degrees, with the bayonet above head height, as this is the position judged most effective for exerting control.
- E. CASUALTIES: Casualties shall be simulated by falling down and lying still. Writhing on the ground, screaming and similar actions that may lead participants and/or spectators to believe that an actual injury has occurred are prohibited. In formations with bayonets fixed, casualties shall be simulated by troops in the front rank only, who shall do so by falling forward with their firelock in front of them in such a manner that the firelock is under their control at all times and ends up flat on the ground, still in their control.
- F. EDGED WEAPONS: Edged weapons include swords, spontoons, halberds, knives, axes, tomahawks and other similar items.
- F.1. Unsheathed Edged Weapons: Only swords and pole arms whose edges are dulled in conformance with Section 7.1 of these rules may be carried unsheathed during Opposed Force Tactical Demonstrations. Axes, tomahawks, knives, etc. may not be removed from their protective covering. Any sword or pole arm with sharp edges shall not be carried unsheathed.
 - F.2. Control: Participants who carry edged weapons in Opposed Force Tactical Demonstrations shall be governed by the safety rules set forth for bayonets in Section 8.2.D. above.

Black Powder Safety Regulations

- G. WORKING WITH ARTILLERY: Artillery poses special safety issues. When artillery is present in an Opposed Force Tactical Demonstration, other participants must be especially vigilant to avoid dangerous situations.
- G.1. Artillery in Support: As a general rule, Infantry shall not advance beyond the axle of supporting artillery pieces and shall maintain a minimum lateral distance of 20 feet from artillery pieces in the line.
- a. ADVANCING: Infantry shall not advance ahead of a loaded artillery piece under any circumstances. Infantry may only advance ahead of an artillery piece when the Gun Captain has certified that the piece is unloaded and has caused the muzzle to be depressed.
 - b. RETIRING: Infantry may retire behind artillery pieces as appropriate. Artillery may retire behind infantry only when the Gun Captain has certified that the gun is unloaded and caused the muzzle to be depressed.
- G.2. Artillery in Opposition: Infantry shall not approach an opposing artillery piece nearer than 120 feet (40 yards) whether loaded or unloaded except when the scenario calls for an artillery piece to be overrun.
- G.3. Overrunning Artillery: No artillery piece is to be overrun unless such action is specifically called for in the scenario and the artillery crew, its supporting infantry (if any) and the overrunning force have jointly scripted the action.
- a. LOADED PIECE: No attempt is to be made to overrun a loaded artillery piece under any circumstances. All artillery pieces are to be presumed to be loaded unless the gunners clearly signal that the piece is unloaded as set forth in b. below. In the event that an opposing force should find itself within less than 120 feet (40 yards) of a loaded artillery piece, the gunners are to indicate that the piece is loaded by depressing the muzzle toward the ground and crossing the sponge and worm over the barrel. ***Forces who find themselves in front of an artillery piece whose crew has crossed the sponge and worm over the barrel and which has its muzzle depressed toward the ground are to immediately halt and retire to a safe distance until the piece has been unloaded and the gun crew has signaled that it is unloaded.***
 - b. UNLOADED PIECE: Artillery may be overrun *only* when the piece has been certified by the Gun Captain to be unloaded and he has caused the unloaded condition to be signaled to the overrunning force by having the gunner with the rammer insert the rammer into the muzzle, leave it there and then fall down immediately under and in front of the piece.
 - c. NO PHYSICAL CONTACT: There shall be no physical contact of any kind between overrunning troops and gun crew members. Gun crew members who have not “run away” are not to be touched in any way under any pretense.
 - d. NO RE-MANNING: Artillery is to be served only by trained artillery personnel. Any attempt to “take over” a captured artillery piece and turn it against the opposition is strictly prohibited.
- 8.2 Mounted Troops: Mounted troops include all participants on horseback.

Black Powder Safety Regulations

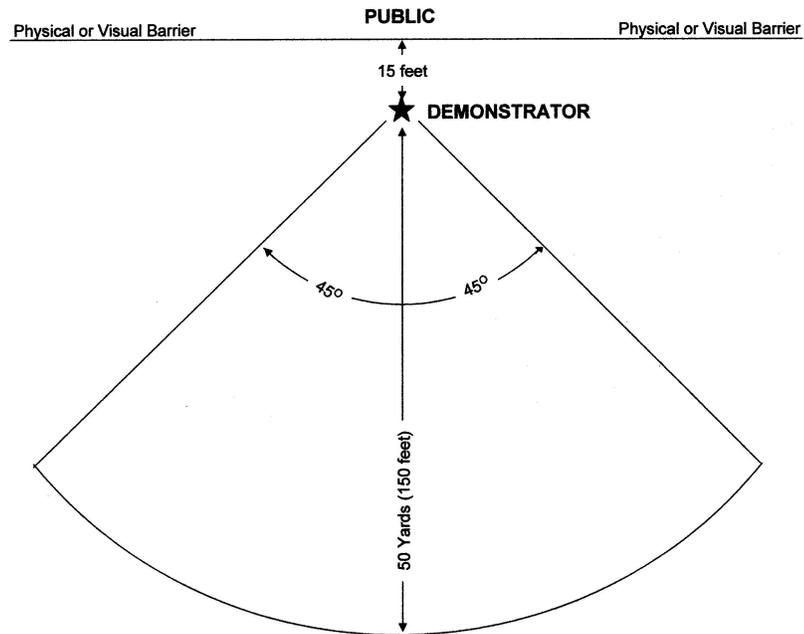
- A. ANIMALS: Only horses in good health and physical condition as determined by the Master of Horse shall be allowed to participate in Opposed Force Tactical Demonstrations.
 - A.1. Training: All participating horses must be thoroughly trained in the actions required of them and must be well trained to endure pistol firing, artillery firing and musket volleys at close range without flinching or bolting.
 - A.2. Removal: Any horse which at any time shows signs of nervousness or other symptoms that might indicate a dangerous situation in the making shall immediately be taken from the field to a calm location away from spectators and participants.
 - B. PHYSICAL CONTACT: Mounted Troops may cross swords only with other mounted troops and only when called for by the scenario. All such contact shall be with light blows and with swords held above the head
 - C. PISTOLS: Pistols may be fired during Tactical Demonstrations by Mounted Troops only with the prior approval of the Chief Safety Officer, the Field Commanders and the Master of Horse.
 - C.1. Pistol Loading: If pistols are to be fired by Mounted Troops, they must be loaded with black powder only. *Light* wadding sufficient only to keep the pistol loaded in the pistol bucket is permitted.
 - C.2. Pistol Firing: Mounted troops may fire pistols only from horseback. No pistol is to be fired at or near another participant or in the direction of the public. Pistols must be elevated at an angle of 45 degrees from the horizontal. No pistol firing is to take place at ranges closer than 60 feet (20 yards).
 - D. CLOSING DISTANCE: Mounted troops are not to approach infantry formations, artillery or spectators closer than 120 feet (40 yards). Simulations of close actions against troops such as “riding down” a broken formation are strictly prohibited.
- 8.3. Artillery: Artillery encompasses all crew served weapons including but not limited to field guns, mortars, wall guns, swivel guns and similar weapons.
- A. FIELD POSITION: Artillery acting as Field Artillery in support of Infantry shall not be loaded or fired from any position other than in line with or ahead of the line of the infantry which they support. Artillery serving as stationary “battery” artillery shall be positioned *at least* 150 feet (50 yards) from the primary field of battle.
 - B. CLOSING DISTANCE: Artillery shall not fire when opposing forces or anyone else is within 120 feet (40 yards) of the muzzle and within its “cone of danger,” which is an arc extending at a 45 degree angle to each side of the muzzle.
 - C. UNSAFE SITUATIONS: It is the responsibility of the gun crew to be constantly aware of what is going on around them and to take action should an unsafe situation involving their gun develop.
 - C.1. Unsafe Distances: If a loaded artillery piece is approached by an opposing force to a distance of less than 120 feet (40 yards) the crew is to immediately depress the barrel toward the ground, cross the sponge and worm over the barrel in the form of an “X” and remain in that position until the encroaching troops have retired to a safe distance.

Black Powder Safety Regulations

- C.2 Missfires: In the event of a misfire the artillery crew shall immediately notify infantry commanders on either side of its position of the situation and advise them to hold their position until the piece has been cleared.
 - D. MOVING ARTILLERY: Artillery pieces shall be moved only when unloaded. Artillery pieces shall only be loaded in a firing position and shall not be moved until unloaded.
 - E. CAPTURED PIECES: When an artillery piece is captured, the gun captain and at least one member of the crew shall stay with the piece to ensure that is not misused.
9. **UNOPPOSED TACTICAL DEMONSTRATIONS**: Unopposed Tactical Demonstrations are demonstrations of tactics and maneuvers in the absence on an “enemy” force. They include individual unit drill, unopposed “sham battles” such as required at facilities of the National Parks Service, and other activities in which there are no other participants or public down range.
- 9.1. **General Safety Rules**: All Rules set forth above for Opposed Force Tactical Demonstrations shall apply to Unopposed Tactical Demonstrations with the following exceptions:
 - 9.2. **Bayonets**: Bayonets may be fixed at the discretion of the unit or force commander unless the Chief Safety Officer or other competent authority determines that ground, terrain or other conditions make such action unsafe.
 - 9.3. **Wadding and Ramming**: Firelocks may be wadded and rammed during Unopposed Tactical Demonstrations at the discretion of the unit or force commander unless the Chief Safety Officer or other competent authority determines that such action is unsafe or the regulations governing the site prohibit such action.
 - 9.4. **Leveling**: Firelocks may be leveled during Unopposed Tactical Demonstrations if there are no persons or property that might be injured by a flying ramrod within 300 feet (100 yards) down range.
 - 9.5. **Casualties**: Simulated casualties shall not be taken during Unopposed Tactical Demonstrations.
10. **INDIVIDUAL WEAPONS DEMONSTRATIONS**: Individual Weapons Demonstrations are demonstrations by one or a small group of individuals intended to demonstrate to the Public the functioning and use of the various weapons employed in the period.
- 10.1. **Prior Approval**: All Individual Weapons Demonstrations must have the prior approval of a Safety Officer.
 - 10.2. **Safety Zone**: Individual Weapons Demonstrations are to be held only in a Safety Zone designated by the Chief Safety Officer or his Deputy for such demonstrations
 - 10.3. **Weapons and the Public**: At NO time is a demonstrator to surrender control of his weapon to a member of the public. A member of the public may be permitted to feel the heft of a firelock while the demonstrator holds the sling. All weapons must remain under the control of the demonstrator at all times.
 - 10.4. **Firelock Demonstrations**: Firelock Demonstrations are demonstrations of firearms other than crew served weapons.
 - A. **SAFETY ZONE**: Firelock Demonstrations shall be held in an area that conforms to the following diagram.

Black Powder Safety Regulations

SAFETY ZONE DIAGRAM FOR FIRELOCK DEMONSTRATIONS



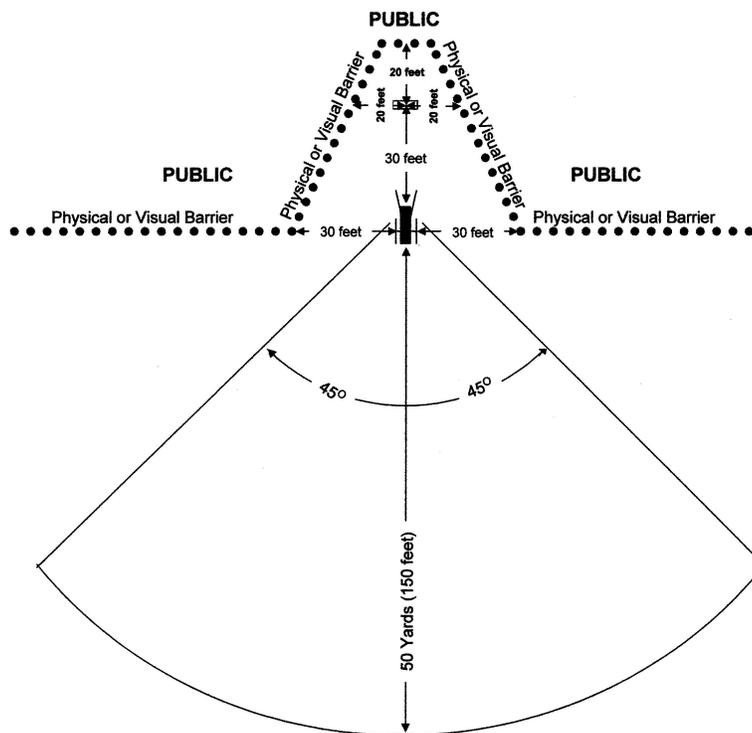
- B. DEMONSTRATORS A minimum of two (2) persons qualified to participate in Opposed Force Tactical Demonstrations must be present for an Individual Weapons Demonstration – one to operate the weapon and another to provide crowd control and watch for safety. Either may address the public. “Teaming” in which, for example, a rifleman may act as safety and crowd control person while a musket man demonstrates, then demonstrate while the musket man serves as safety and crowd control person. It is the responsibility of the non-shooting demonstrator to insure that the shooting demonstrator follows safe loading and firing procedures.
- C. WEAPONS: Only weapons that are authorized and approved for use in Opposed Force Tactical Demonstrations, and which have passed safety inspection that day shall be used in Individual Weapons Demonstrations.
- D. ACCOUTERMENTS: Flaps of cartridge pouches and cartridge boxes shall be kept in place at all times except when a cartridge is being withdrawn.
- E. AMMUNITION: Only blank ammunition approved for use in Opposed Force Tactical Demonstrations may be used in Individual Weapons Demonstrations.
- E.1 Rifles: Rifles may be loaded “From the Horn” only in Individual Weapons Demonstrations. The following procedures must be followed when loading a rifle “From the Horn.”
- Horns: Horns must be sound, equipped with a secure stopper and kept stoppered at all times except when actually pouring powder from them. Horns should not contain more than two (2) ounces of black powder.
 - Powder Measures: The main charge must never be poured directly from the horn into the barrel. The main charge must first be poured into a powder measure

Black Powder Safety Regulations

conforming to the Table of Maximum Loads (see 5.1.B.3.), then poured into the muzzle.

- F. **MANUAL:** Demonstrators shall follow the correct manual for the weapon being demonstrated. Riflemen or others who do not have a prescribed manual shall follow safe loading procedures. Care shall be taken that at no time during the loading or firing process is the weapon pointed in the direction of the public.
 - G. **WADDING AND RAMMING:** Wadding with paper and ramming is permitted for Individual Weapons Demonstrations only. Ramrods are not to be introduced into the barrel unless there is paper wadding between the ramrod and the powder charge.
 - H. **DIRECTION OF FIRE:** All fire is to be directed within in an arc extending no more than 45 degrees to either side of a line perpendicular to the line of public.
- 10.5. **Tomahawk/Knife Throwing:** Tomahawk/knife throwing demonstrations or contests are to be held only under supervision of a Safety Office who shall be present throughout. All throwing shall be in a direction directly away from the public in a Safety Zone designated by the Chief Safety Officer or his Deputy (see Section 10.2).
- 10.6. **Artillery Demonstrations:** Artillery Demonstrations are demonstrations of any firearm other than those normally carried and used by a single individual, including but not limited to cannons, mortars, howitzers, swivel guns, wall guns and grenade launchers.
- A. **SAFETY ZONE:** Artillery Demonstrations shall be held in an area that conforms to the following diagram.

SAFETY ZONE DIAGRAM FOR ARTILLERY DEMONSTRATIONS



Black Powder Safety Regulations

- B. DEMONSTRATORS: Artillery shall only be demonstrated by trained artillery crews who are qualified to participate in Opposed Force Tactical Demonstrations.
- B.1. Cannons, Mortars, Howitzers, etc.: Cannon crews should have at least six (6) members in addition to the Gun Commander. No cannon shall be operated with a crew of less than four (4) members. The Gun Commander and Gunners #1 through #4 shall all be experienced, qualified artillerists. Other positions on a Gun Crew may be filled with Infantry replacements with the approval of the Artillery Safety Officer.
- a. Gun Commander: The Gun Commander has overall command and safety responsibility for the gun and the crew. He is responsible for insuring safety, for giving commands and for assuring that crew members execute their duties correctly. He normally does not serve the gun. If he does serve the gun, he shall only serve as Gunner #1.
 - b. Gunner #1 (Firer): Maintains the linstock and touches off the charge when ordered by the Gun Commander.
 - c. Gunner #2 (Vent Tender): Stops (tends) the vent, covering it with a leather thumb stall so that no air passes during worming, sponging and loading. After the charge is rammed home, he picks the charge open with a priming wire and primes the piece.
 - d. Gunner #3 (Ram & Sponge): Sponges the piece with a wet sponger between shots and rams each new charge home.
 - e. Gunner #4 (Worm and Load): Extracts pieces of spent cartridge after each shot. Receives each new charge and places it at the muzzle in position for Gunner #3 to ram home. In a 4 man crew, Gunner #4 also performs the duties of Gunner #5
 - f. Gunner #5 (Powder Handler): Removes the ammunition box to a safe position before firing commences. Brings each charge forward to Gunner #4 for loading. Guards the Ammunition Box in the absence of a Gunner #6.
 - g. Gunner #6 (Powder Handler): Responsible for the security of the Ammunition box.
- B.2. Swivel Guns, Wall Guns, Grenade Launchers, etc.: Swivel guns, wall guns, grenade launchers and similar weapons shall be demonstrated only by crews whose composition and manning have been approved by the Artillery Safety Officer for the event.
- C. GUNS, CARRIAGES AND RELATED EQUIPMENT: Guns used in artillery demonstrations must be full-scale reproductions. Guns, carriages and related equipment shall be inspected before and after Artillery Demonstrations and must conform to the specifications in the Artillery Inspection Check List (See Appendix). Original guns may be used provided they also conform to the specifications in the Artillery Inspection Check List.
- D. AMMUNITION: Artillery ammunition must be in the form of pre-made blank cartridges prepared in accordance with section 5.2. of these regulations. Loading with loose powder or by any means other than with pre-prepared cartridges is strictly prohibited.
- E. LOADING AND FIRING PROCEDURES: The drill, loading and firing procedures employed by Artillery Crews shall conform to accepted period practice and must be approved by the Artillery Safety Officer. During demonstrations the Gun Captain or other

Black Powder Safety Regulations

designated Safety Officer shall observe procedures to ensure that they conform to accepted period practice.

E.1. Linstock: All firing shall be done with a linstock and slow match. Port fires shall not be used.

E.2. Priming: Priming with priming tubes (quills) is preferred. Priming with loose black powder is acceptable. If priming is done with loose black powder, the powder shall be contained in individual paper wrapped charges containing enough powder for one prime and which are constructed in a manner similar to that specified for Small Arms Ammunition in Section 5.1. If priming is from a horn, the horn shall contain no more than two (2) ounces of powder.

F. DIRECTION OF FIRE: All fire shall be directed within the 45 degree fan on either side of a line perpendicular to the public as shown in the Safety Zone Diagram for Artillery Demonstrations shown in Section 10.6.A. of these safety regulations.

11. CEREMONIES: Ceremonies (e.g.: a Feu de Joie) shall conform to the safety regulations set forth for Opposed Force Tactical Demonstrations with the following modifications.

11.1. Direction of Fire: Fire may be directed toward the public during ceremonies with the permission of the site management and the Chief Safety Officer under the following conditions:

A. DISTANCE: The Firing Line of troops shall be at least 120 feet (40 yards) from the nearest members of the public.

B. ONLY INDIVIDUAL SMALL ARMS: Only individual small arms (muskets, rifles, etc.) shall fire in the direction of the public during ceremonies. Artillery, if employed in a ceremony, shall fire in a direction at least 45 degrees *away* from the public.

11.2 Elevation: Individual small arms shall be fired at an elevation of at least 45 degrees in ceremonies.

APPENDIX

APPENDIX A – DETAILED FIRELOCK INSPECTION CHECKLIST

Before Disassembly

General Condition

1. Confirm that the firelock is unloaded by springing the rammer.
2. Overall first impression is favorable, no obvious flaws.
3. The firelock is reasonably clean with no crusty accumulations of fouling around the lock or in the barrel.

The Stock

1. No visible cracks or splits. If there is evidence of previous cracks or splits, confirm that they have been properly and soundly repaired.
2. Butt plate, trigger guard and all furniture fits tightly .
3. No burrs on the screws securing the butt plate, trigger guard or other furniture that might snag clothing or hands. Pins securing the barrel do not project beyond the wood of the stock.
4. If a banded firelock, barrel bands and band springs work smoothly and are not bound by the wood of the stock.
5. If a pin fastened barrel, all pins are present and tight; the wood around the pins is not splintered.

Black Powder Safety Regulations

6. There is no charring or burns around the lock.
7. If a two piece stock, the sections are securely joined.
8. Generally, no splinters, rough areas or sharp edges.

The Lock

1. The lock mechanism works smoothly.
2. The hammer or cock fits tightly on the tumbler.
3. All positions of the cock are firm and solid.
4. The half-cock (safety) position works properly and will withstand a strong pull of the trigger without allowing the cock to fall.
5. The trigger pull at full cock is moderate; not a "hair trigger," nor so heavy that the sear will not release when the full weight of the firelock is suspended from the trigger while in the full-cock position.
6. When the trigger is pulled while at full-cock the lock operates smoothly without catching in the half-cock position.
7. If a set trigger, it is adjusted properly and works smoothly.
8. The lock fits snugly into the lock mortise with no noticeable gaps or separations, and fits snugly against the barrel so that dust from priming powder cannot sift into the lock mortise.
9. The cock screw works smoothly and the jaws grip the flint securely.
10. The flint has a proper leather or lead flint cap.
11. The flint is in good condition, properly aligned and well tightened.
12. The feather (frizzen) spring is of proper tension, stiff enough to keep the hammer (frizzen) securely in the closed position, but not so stiff that the hammer (frizzen) cannot be opened easily when moderate force is applied to its face.
13. The hammer (frizzen) fits the lock and barrel with no gaps that might allow loss of prime, and is in good condition with no cracks, gouges on the face or other defects.
14. The hammerstall (frizzen cover) is present, securely fastened to the firelock with an appropriate tether, and fits the hammer (frizzen) securely.
15. The pan is clean and in proper alignment with the touch-hole of the barrel
16. A flashguard conforming to the specifications in Section 6.2.C of these Safety Regulations is in place and securely fastened.

The Barrel

1. The barrel fits the stock properly with no obvious gaps or separations between wood and metal.
2. There are no visible cracks or dents.
3. The flint does not strike the barrel.
4. The muzzle is not dented or worn.
5. The vent (touch hole) is clear and of proper size.
6. There are no signs of corrosion around the vent.
7. The barrel bands or pins hold the barrel securely to the stock.
8. The rammer (ram rod) is straight, fits the pipes properly, and can be withdrawn easily without sticking or binding.
9. The bayonet lug (on muskets) is present, is securely welded in place and is of the proper dimensions so that the bayonet fits easily and latches with a positive lock twist.

After Disassembly:

The Stock

1. There are no shiny spots in the lock recess from rubbing metal.
2. The lock recess is clean and free from splinters. There is no sign of splitting or cracking.
3. There is no sign of cracking around the tang screw.
4. The bed of the barrel is clean.
5. Any nose cap is securely fastened.
6. If a two piece stock, there is no sign of separation at the joint.

The Lock

Black Powder Safety Regulations

1. All internal screws are tight.
2. No internal parts are chipped, cracked, broken or worn.
3. The nose of the sear and the tumbler notches are sharp and in good condition.
4. There are no signs of metal rubbing on the inside of the lockplate.
5. There are no signs of improper repair or replacement parts.
6. The hammer (frizzen) fits down snugly on the pan.
7. With the cock fully forward, the mainspring does not disconnect from the tumbler nor does any part of it extend below the edge of the lockplate.
8. All parts are clean and lightly oiled.

The Barrel

1. The breech plug is fully seated and properly aligned. If a modern "patent breech," the fit is tight with no sign of separation.
2. The bore is clean and in good condition. Inspection with a bore light and reflectors reveals no pits or cracks. A patch goes in smoothly and comes out clean.
3. On pin fastened firelocks, all under barrel lugs are present, in good condition and securely welded, brazed or silver soldered to the barrel.

APPENDIX B – DETAILED CANNON INSPECTION CHECKLIST

General Condition

1. Confirm that the cannon is unloaded by inserting the rammer and then inserting the pricking wire, which should encounter the head of the rammer.
2. Overall first impression is favorable, no obvious flaws.
3. The cannon is reasonably clean with no crusty accumulations of fouling around the touch hole or in the barrel.

The Tube

1. The exterior of the tube is clean and free of rust or corrosion.
2. There is no sign of external damage or strain.
3. The interior of the tube is clean and free of pits, cracks and/or bulges.
4. There is no sign of rust or corrosion at the breech.
5. The vent is clear and of proper size (0.20 to 0.25 inch).
6. There are no signs of cracks or bending around the trunions.
7. There are no signs of weakness or cracks around the chaplets of Bronze tubes.

The Carriage

1. The body of the carriage is free of cracks, rot, infestations or other defects.
2. The wheels are tight, free of cracks, rot or infestations, are securely keyed to the axel and rotate freely.
3. The wheel hubs do not gouge the axletree.
4. The linch pins do not dig into the wheel hubs.
5. No pieces or parts are missing, loose, cracked, bent or broken.
6. The tube rotates freely on its trunions.
7. Trunion caps fit snugly and are securely keyed in place.
8. Ammunition boxes and limber chests are clean, free of loose powder, have lids that fit snugly and are equipped with a strong hasp and lock which enables them to be securely locked.

Equipment

1. All necessary equipment is present and in good condition. Each cannon is to have the following minimum equipment:
 - A serviceable water bucket
 - A secure haversack or ammunition pouch
 - A Thumbstall
 - A worm and rammer
 - A sponge and rammer

Black Powder Safety Regulations

- A linstock
 - Slow match
 - A priming wire
 - A powder horn containing not more than two (2) ounces of priming powder or paper wrapped priming charges, each containing enough powder for one prime or priming tubes (quills) made from paper, not metal.
 - A tube box if using priming tubes
 - A lockable ammunition box
 - A trail handspike
 - A muzzle tompon
 - An apron of leather or lead for the touch hole
2. The sponge is in good condition and is properly fitted to the bore.
 3. The rammer head(s) are secure on their shafts and free from cracks.
 4. The prongs of the worm are sharp and not bent or distorted.
 5. Small items (thumbstall, linstock, buckets, etc.) are in good condition.

-- END --