

Safety

Standard Operating Procedures for the

United States Volunteers

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ORGANIZATION

- A. Each member unit of the USV will have appointed, in writing, a unit safety NCO/OFFICER. At Company level, an experienced Sergeant who is slotted as Ordnance Sergeant for the company should fill this.
- B. Each Regiment of the USV will have appointed, in writing, a SAFETY OFFICER at the rank of Captain. This officer will be slotted as Ordnance Officer for the Regiment to include Infantry Artillery and Cavalry.
- C. The Brigade Headquarters will appoint, in writing, a BRIGADE SAFETY OFFICER, at the rank of Major to serve as Brigade Ordnance Officer.
- D. Each Company and Regiment will provide the name and mailing address of its respective SAFETY OFFICER/NCO to the Brigade Safety Officer. Any changes in appointment will be copied to the Brigade Safety Officer.

DUTIES

It is the duty of the appointed Ordnance Officers and NCO's of the USV to actively and vigorously supervise the Safety Programs and Regulations set forth by the USV and the sponsor's of the event being attended.

Specific duties of the USV Brigade Safety Officer/NCO during an event will include, but are not limited to the following:

- 1) Full-time duty of overall supervision of safety during the event. This includes safety
 1. supervision of USV units during maneuvers from behind the firing line.
 - 2) Ensuring that company commanders and/or first sergeants *conduct safety briefings IAW the USV checklist prior to marching each day.*
 - 3) Spot checking of cartridges and firearms during safety inspections. Canteens should also be checked and company commanders should be encouraged to see that their troops drink at least a full canteen of water *prior to marching* on particularly hot days.
 - 4) Ensuring that USV accident/incident reports are promptly submitted as required.
 - 5) Submitting a written after-action safety report to the USV commander including copies of all incident reports.
 - 6) Accidents and incidents will be reported to respective unit Ordnance (Safety) Officer/NCO who will prepare and submit an incident report (see enclosed format in TAB F) to their Regimental Safety Officer who, in turn, will confirm the reported accident/incident and forward a copy of the report with comments to USV Brigade Headquarters for the Brigade Safety File. Each Regimental Safety Officer will maintain one copy of each report for the Regimental Safety File.
 - 7) The Brigade Ordnance (Safety) Officer will maintain such reports along with follow-up reports from involved parties pertaining to the final results of such accidents/incidents.

- 8) Events attended by USV units, where no accidents or incidents are reported, will require preparation of a negative report for the unit file for liability insurance purposes. Headquarters should retain copy as well. See TAB F for format and procedure.

GROUND RULES

- A. All participants must be 16 years of age or older to carry any weapon, i.e., rifle, musket, carbine, pistol or edged weapon, on the battlefield at living histories or battle re-enactments.
- B. Participants between the ages of 16 up to 18 years of age must have parental consent in writing and/or a parent present on the field in order to take part in events. Parental consent must be filed with Unit Ordnance/Safety Officer with a copy forwarded to Regiment Ordnance/Safety Officer.
- C. Participants between the ages of 12 and 16 may serve as musicians. *THEY MAY NOT BE COMBATANTS!*
- D. All USV personnel participating in any event WILL have a *FULL CANTEEN* of water with them and carry said canteen on their persons during *ALL* drill period, marches and battles.
- E. It is recommended that all USV personnel drink at least a full canteen of water *prior to marching* during hot weather events. This practice has greatly reduced the incidence of heat-related injuries.
- F. No-one will carry *glass bottles* of water in lieu of a canteen. Plastic bottles inside the haversack will be acceptable.
- G. *THE WEARING OF EAR PROTECTION IS ENCOURAGED IN THE FORM OF A MODERN EAR PLUG WITH A SMALL BIT OF COTTON AFFIXED TO THE OUTER AREA IN ORDER TO SIMULATE SOMETHING A SOLDIER OF THE PERIOD MAY HAVE USED.*

MEDICAL CARDS

- A. ALL USV personnel will carry a medical card, **See PG 37** with them when participating in any Drill or battle. This card will be carried in the following locations.
 - a. Officers, Musicians, Non-Combatants the card will be in the Left Brest pocket.
 - b. Enlisted carried in the cartridge box within the utility pouch
- B. Company commanders will ensure this card is carried by inspecting each member for it at the Camp Inspection requirements for infantry, for artillery it will be checked at Morning Muster. For cavalry at the first morning muster

NOTE

No Man will be allowed on the field without a fully filled out medical card

CAMP SAFETY

- A. FIREPITS WILL ONLY BE DUG IN ASSIGNED/AUTHORIZED AREAS. Only *one (1)* fire pit will be dug per company street.
- B. Children must be under the supervision of a parent or guardian. Adults taking responsibility for someone else's children must have such permission in writing. Such permission should be retained by the Company Commanding Officer for the duration of the event.
- C. Anyone found under the influence of alcohol will not be allowed to take arms or enter battles.
- D. The use of illegal drugs is prohibited. Any such incidents will be reported to local authority.

E. HORSES

- a. All horses brought onto site are required to have a current Coggins certificate, which will be checked by the Cavalry Commander.
- b. Horses should be trained for gunfire and battle **BEFORE THE EVENT. DO NOT BRING UNTRAINED HORSES TO ANY EVENT!**
- c. **HORSES WILL NOT** be ridden through infantry company streets.
- d. Horses will only be picketed in areas designated by event sponsors. When allowed, command and staff mounts will be as close to USV Headquarters as terrain and safety permits.

F. **NO LITTERING!** USV units should leave areas in a better condition than found.

G. **NO** gunfire in camps unless on order of authorized officers.

H. It is required that a full water bucket or bucket of sand be kept adjacent to campfires at all times.

I. No one will place any material into fire pits **OTHER THAN FIREWOOD**. This includes trash, soda cans, etc. All trash and litter should be kept in trash bags out of sight until the end of the event.

J. All non-period containers or packages will be kept out of sight in tents and specifically away from campfires

K. HORSES

- a. All horses brought onto site are required to have a current Coggins certificate, which will be checked by the Cavalry Commander or his designee.
- b. Horses should be trained for gunfire and battle **BEFORE THE EVENT. DO NOT BRING UNTRAINED HORSES TO ANY EVENT! Individual unit Commanders are responsible to enforce this rule within their respective units.**
- c. **HORSES WILL NOT** is ridden through infantry company streets.

L. Horses will only be picketed in areas designated by event sponsors. When allowed, command and staff mounts will be as close to USV Headquarters as terrain and safety permits. **Changes for safety and health reasons shall be at the sole discretion of the Senior Officer in command.**

INFANTRY REGIMENT SAFETY REGULATIONS

WEAPONS SAFETY

- A. Weapons will be inspected for safety by EACH COMPANY COMMANDER AND/OR COMPANY ORDNANCE/SAFETY OFFICER/NCO prior to each event.
- B. NO modern firearms OF ANY KIND, rifle, pistol or shotgun are allowed.
- C. NO Hawken, Zouave, Kentucky, Plains or Flintlock firearms are allowed.
- D. Infantry rifles will be 3 banded percussion Springfield or Enfield ONLY.
- E. Cavalry will be equipped with carbine, pistol and saber.
- F. Exceptions to these rules would be units that carried breechloaders historically.
- G. Sidearm are to be carried by officers only. Units that document the issue of pistols to enlisted personnel may carry such. HOWEVER, THEY WILL NOT BE LOADED.
- H. NO LIVE AMMUNITION IS PERMITTED ON SITE! Cartridges must be of lightweight paper, in period style. NO penny wrappers, staples, wonder wads, etc. as these become projectiles if loaded!!
- I. Cartridge papers will not be loaded. Powder will be poured and paper discarded.
- J. Recommended loading charges are:
 - a) 54-58 cal - load 60 grains maximum.
 - b) 69 cal - load 80-90 grains
 - c) carbines - load 60 grains
 - d) pistols - load 30 grains
- K. *FIREARMS WILL NEVER BE AIMED DIRECTLY AT ANY PERSON OR ANIMAL!*
- L. Firearms will not be discharged at a range inside 25 yards. Inside 40 yards, ALL FIRINGS WILL BE ELEVATED so as not to endanger any combatant or animal. Use "Rule of Thumb" to establish range.
- M. NO gunfire in camps unless on orders of authorized officers.
- N. Fingers should be kept OFF the trigger and outside the trigger guard when moving. DON'T PLACE YOUR FINGER ON THE TRIGGER UNTIL YOU ARE READY TO FIRE!
- O. Fouled muskets will be taken to the rear of the line of file closers with the unit sergeant/safety NCO to clear.
- P. Ramrods *WILL NOT* be drawn on the battlefield as they become projectiles if left in the barrel. ONLY the file closer/safety NCO may draw a ramrod to check a firearm on the field.
- Q. Tompions will be left in camp. Any tompion found during safety inspections will be taken and given to your overall commander.
- R. No participant under the age of 16 years will be allowed to carry or fire a firearm or serve on a cannon crew.
- S. NO sheath knives will be worn or carried into battle.
- T. Bayonets will not be fixed except for drill demonstrations or stacking of arms.

- U. FIREWORKS, of any type are prohibited.
- V. When at "Rest", DO NOT place your hand(s) at any time over the muzzle of a rifle, loaded or unloaded. An accidental discharge could cause severe injury.
- W. If it is necessary to recover from the "Aim" position, lower the hammer from the full cock position by placing the "crook" of the thumb over the hammer spur and gently bringing the hammer to "half-cock". Be especially observant of the position of the muzzle.
- X. At the conclusion of "live" firing in the field prior to return to camp at the end of the day, ALL firearms (including officers' revolvers) will be primed and discharged on command to insure that no unburned powder remains in firing chambers.
- Y. During loading of the rifle-musket, the hammer WILL BE LEFT IN "FIRED" POSITION with a musket cap in place while charging with powder. This precludes the possibility of air coming in through the nipple, mixing with a spark left in the barrel and causing a premature discharge as powder is being poured down the barrel.
- Z. HAND TO HAND AND CLOSE COMBAT.
 - a) While there is to be no unauthorized hand-to-hand combat, the following guidelines are for safe "close quarters combat" when opposing units meet on the field.
 - b) Musket butts should not be raised above waist level.
 - c) Muskets should be held at "present arms" position for the defensive and "port arms" for the offensive.
 - d) Lunging with musket muzzles is prohibited.
 - e) Pistols must not be discharged at close quarters.
 - f) Sabers should be used with sheaths at close quarters.
 - g) Rear rank soldiers must keep the first and second bands of their muskets aligned with the first rank soldiers' shoulders and **most importantly** must not step back when firing as this will move their musket muzzles too close to the first rank troops.
 - h) Firearms should be discharged before taking a "Hit"

NOTE

SAFETY IS EVERY PARTICIPANT'S RESPONSIBILITY! While unit's officers and NCO's are held responsible for the actions of their unit members, it still remains that EVERY UNIT MEMBER IS A RESPONSIBLE ADULT!

CAMP INSPECTION ALL WEAPONS

THIS INSPECTION WILL BE COMPLETED BY THE UNIT COMMANDING OFFICER OR UNIT FIRST SARGEANT WITHIN THE COMPANY AREA AND COMPLETED PRIOR TO THE FIRST DRESS PARADE OF THE EVENT.

- A. At inspection arms, ramrod should be inserted in barrel with button end down. It should strike the bottom of the breech plug with a clear, metallic "ring". If the ramrod sticks or makes a dull thud, it is an indication of dirt, corrosion or lead rings in the bore. Run the ramrod slowly up the bore angling it to touch the inside of the barrel to check for residue build-up in the bore. The Springfield ramrod should protrude no more than 1/4" from the muzzle due to its longer barrel. Enfield ramrod threads should protrude no more than 1/4" or to the extent of the threads due to its shorter barrel. If the ramrod extends excessively from the muzzle, then there may be an obstruction in the breech. Muskets that are dirty will be excluded from the event until cleaned under the supervision of a qualified NCO.

WARNING

Any musket suspected to have an obstruction in the bore will not be used at all during the event and will be removed from camp.

NOTE

Any musket used for live fire REQUIRES A detailed inspection by careful probing with the ramrod to ensure no lead rings forming in the breech area during live fire and then becoming a projectile during blank fire.

- B. The nipple area should then be inspected. The nipple should be fully seated into the bolster. If a nipple appears to be not fully seated, it should be checked with a nipple wrench. The nipple must screw fully into the bolster with no undue resistance. A nipple that does not screw in fully is indicative of cross threading. One that is loose may indicate an improper or loose thread.

NOTE

Any musket with a nipple or bolster that is questionable will not be allowed on the field and will be removed from camp.

- C. The nipple area should be bright and clean, free from all dirt and powder residue. The cleanout screw on the 1861 Springfield must be fully seated into the bolster.
- D. The musket lock should then be checked to insure that the half-cock notch is operable. Any musket that fires from the half-cock position will be excluded from the event and removed from camp. Under no circumstances should the hammer be struck forward with the heel of the hand by the inspecting officer or in any manner tampered with. Even pressure only

should be applied to test the half cock position, at the same time checking for side to side play.

- E. The musket hammer must solidly engage in the full cock position with no play in the lockwork. Any musket that does not properly function in the full cock position will not be used in the event and will be removed from camp. The face of the hammer should be inspected to insure an even strike on the nipple. A solid circle indicates a solid strike where a crescent or figure-eight mark indicates an off-center strike, possibly resulting in cap fragments breaking off on impact *creating a severe hazard to the eyes!*
- F. Musket stocks should be inspected for substantial structural cracks. Any musket with stock cracks that could pose a safety hazard may not be used in the event and will be removed from camp.
- G. The musket should be returned to the soldier in the half cock position.

NOTE

Any repairs made to a musket must be cleared with the unit First Sergeant who will then determine if the subject arm will be allowed on the field. Any musket which fails any of the above standards or is any manner questionable from a safety standpoint will not be used in the event and will be removed from camp to avoid any possibility of its ending up on the field.

BREECHLOADING CARBINE SAFETY INSPECTION

These procedures also apply to all single-shot breech loading rifles.

- A. At inspection arms, the bore will be visually inspected for obstructions. After inspecting the bore, the inspecting officer should then close the breech and check the nipple area. The nipple should be fully seated into the breach block. If a nipple does not appear to be fully seated, it should be checked with a nipple wrench. The nipple must screw fully into the breach block with no undue resistance. A nipple that does not screw in fully is indicative of cross threading.

NOTE

A nipple that is loose may indicate an improper or loose threads. Any carbine with a nipple or breech block that is questionable will not be allowed on the field.

- B. The carbine should then be checked to insure that the half-cock notch is operable.

NOTE

Any carbine that fires from the half-cock position will be excluded from the event and removed from camp.

- C. Under no circumstances should the hammer be struck forward with the heel of the hand by the inspecting officer or in any manner tampered with. Even pressure only should be applied to test the half-cock position, at the same time checking for side to side play.
- D. The carbine hammer must solidly engage in the full cock position with no play in the lockwork.

NOTE

Any breech loading carbine that does not properly function in the full cock position will not be used in the event and will be removed from camp.

- E. The face of the hammer should be inspected to insure an even strike on the nipple. A solid circle indicates a solid strike on the nipple where a crescent or figure-eight mark indicates an off-center strike, possible resulting in cap fragments breaking off on impact *creating a severe hazard to the eyes!*
- F. Carbine stocks should be inspected for substantial structural cracks. Any arm with stock cracks that could pose a safety hazard may not be used in the event and will be removed from camp.
- G. The carbine should be returned to the soldier in the half cock position.
- H. F. Any repairs made to a breech loading carbine must be cleared with the unit First Sergeant who will then determine if the subject arm will be allowed on the field. Any arm which fails any of the above standards or is any manner questionable from a safety standpoint will not be used in the event and will be removed from camp to avoid any possibility of its ending up on the field.

Once unit safety inspection has been completed, carbines will be capped off by file under supervision of the company commander and/or first sergeant. Carbines will be held at a 45 degree angle to the ground with the muzzle aimed at a leaf or blade of grass. Order will be given to prime and fire by fire, with unit officers and NCO's observing each carbine muzzle as the piece is fired to insure that the percussion

cap blast moves the leaf, thereby insuring that the flash channel is clear.

- A. Only after this procedure has been followed will a unit equipped with breech loading carbines be permitted to march for battle.
- B. This carbine safety inspection procedure will be accomplished prior to or during dress parade each day of an event.

REVOLVER SAFETY INSPECTION

This inspection will be completed by the Regimental Safety officers prior to loading the weapon.

- A. At inspection arms, the revolver will be presented unloaded to the inspecting officer in the halfcock position with the muzzle in the vertical position.
- B. The inspecting officer will first check the barrel with a cleaning rod or dowel of the appropriate length to insure that the bore is clear.
- C. The revolver cylinder should then be checked to insure that none of the chambers are loaded. Any revolver presented for inspection in a loaded condition will be returned to the owner who will be instructed to discharge the piece in a safe manner and at a safe distance before returning for further inspection.
- D. After insuring that the cylinder chambers are clear, the revolver will then be checked to insure that no live percussion caps are on the nipples.
- E. The revolver will be returned to the soldier in the half-cock position with the muzzle up.
- F. Only after this procedure has been followed will a unit be allowed to march for battle.
- G. This revolver safety inspection procedure will be accomplished prior to or during dress parade each day of an event or by the regimental Safety officer prior to loading for battle

DRESS PARADE

This musket safety inspection procedure will be accomplished *during dress parade each day of an event.*

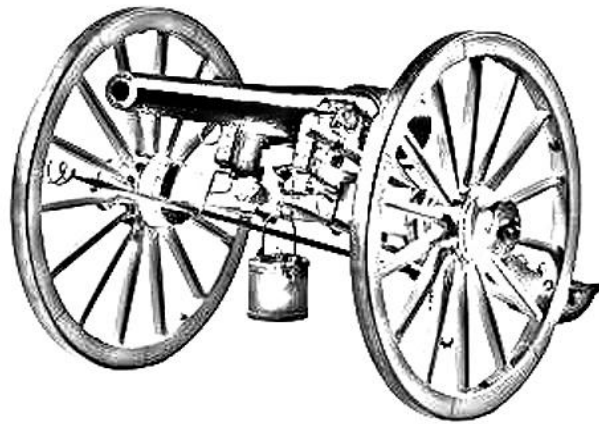
- A. company to inspection arms Commanding officer should inspect weapons for cleanliness and proper hammer position at half and Full cock.
- B. After safety inspection of each individual musket has been completed by unit personnel, muskets will then be capped off and fired under supervision of the company commander and/or first sergeant as follows
 - i. Have company cap and fire an elevated volley to insure that nothing that can become a projectile remains in the bore of any musket prior to marching for battle.
 - ii. The second rank will be faced about, muskets held at a 45 degree angle to the ground with the muzzle aimed at a leaf or blade of grass. Order will be given to prime and to fire by file with unit officers and NCO's observing each musket muzzle as the piece is fired to ensure that the percussion cap blast moves the leaf, thereby indicating that the flash channel is clear.
 - iii. After capping off, the second rank will again face about to its original position. Company will then close ranks.
 - iv. Order will then be given to load and fire by file, with unit officers and NCO's again observing each musket to ensure that each piece has functioned properly. The point of this exercise is to ensure that *there is no potential projectile in the bore of any musket carried onto the field.*

NOTE

Only after this procedure has been followed will a unit be permitted to march for battle.

Safety Standard Operating Procedures of the United States Volunteers Artillery Regiment

Revised March 27, 2011



WARNING!! DANGER!!

The passing directly in front of artillery, between cannons, or between cannons and their limbers, whether afoot or mounted is strictly prohibited when artillery is on the field.

In the event that necessity deems such actions, permission shall only be granted by the battery commander or an artillery officer of higher rank.

This rule applies prior to an action, during an action and after an action.

Artillerist's are instructed to take reasonable measures to ensure the safety of personnel, spectators and the possibility of damage to ordnance.

SOP - SAFETY REGULATIONS – ARTILLERY

Any and all personnel caught on the field under the influence of alcohol or drugs shall be dealt with immediately and could lead to expulsion from the event.

1. FEDERAL ARTILLERY ORGANIZATION

- A. All attending units will be assigned to the Artillery organization formed for a particular event. Units wanting to be assigned to a particular Infantry Brigade must obtain permission from the Chief of Artillery and the Commanding General.
- B. All attending units will be assigned to Batteries. Batteries will be assigned to Artillery Brigades.
- C. The Chief of Artillery will choose Battery and Brigade commanders on individual experience and past performance of leadership at previous events.
- D. All attending units will participate in all safety inspections, drills, demonstrations, battle formations and camp duties that they may be assigned.
- E. The Chief of Artillery will assign staff positions.
- F. All attending units with less than six guns will be organized into Batteries. Existing officers of the attending unit will be utilized in these batteries. Excess officers will be asked to perform positions and duties where needed.
- G. Officers are expected to have knowledge of their duties and be prepared to perform duties commensurate with their rank. This may mean temporary assignments with duties of their rank in other Batteries than their own.
- H. The Chief of Artillery will be chosen by the Federal Commanding Officer.
- I. The Chief of Artillery must approve all officers above the rank of Captain. No walk on Regimental Grade Officers, i.e. Maj, Lt. Col. or Col.
- J. NCO's of Regimental rank will be assigned duties commensurate of their rank, i.e. Ordnance Sgt., Quartermaster Sgt. or Sgt. Major.
- K. Company grade NCO's will be expected to perform duties according to their rank. Surplus NCO's may be advised and asked to perform as cannoneers.
- L. All officers will be required to attend their appropriate meetings. Meeting will be held at three different levels. Meetings will have designated meeting places and times posted. Remember that information has to flow down the chain of command as well as up the chain of command.

Meeting levels:

Staff – Staff and Brigade members only

Brigade – Brigade and Battery officers

Battery – Battery, Unit, and Section officers

- M. All horse drawn guns will be organized into a Brigade or Battery to serve together. The Chief of Artillery will choose the commander of this unit. This unit at many times will be under the direct authority of the Commanding General and the Chief of Artillery due to their needs of deployment on the field.
- N. Morning Reports and other paper work will be issued daily and turned in at Battery headquarters, consolidated, then sent to Brigade headquarters and then sent to Artillery headquarters. Times will be posted when paper work is to be turned in.

2. ACCEPTABLE ARTILLERY PIECES

Full scale No. 1 or No. 2 carriage with 57-inch wheels. Full scale original or reproduction, 6 pounder smoothbore or rifled, 12 pounder smoothbore or rifled, 12 pounder Napoleon, 12 pounder howitzer, 2.9 inch Parrot rifle, 3 inch Parrot rifle, 3 inch Ordnance rifle. Other types will be accepted if tube and carriage are of proper period type. A photograph accompanying registration form would help guarantee acceptance. On all carriages, cheeks and trunnion straps must be thoroughly bolted; all cheeks must be bolted through the trail. **NO LAG BOLTS.**

Breech plug should be expertly installed by a competent manufacturer. Sand colored bored are not acceptable. The vent should be lined with a threaded vent liner similar to an original gun vent liner in order to provide an unbroken passage through the casting and the liner into the bore. All tubes and carriages must be free of rot, rust and in good working order to be acceptable. **NO MOUNTAIN HOWITZERS, SUB-SCALE GUNS OR MORTARS** unless approved for certain uses by Federal forces in the Eastern Theater of Operations or event sponsors.

3. ACCEPTABLE ARTILLERY LIMBER AND CHEST

Full scale limber carriage and chest with 57-inch wheels. Limber chest should be constructed and resemble an original in looks and size. The chest is used to contain prepared rounds and small equipment. The chest should have a center divider and a removable tray for small equipment. Friction primers are to be stored in the limber chest (see ignition devices) in a separate container. The chest should have a self-closing lid restricted to opening at no greater than 80-degree angle. The lid chest should be arched as the original to repel water. The chest lid should be covered with heavily painted canvas or copper (copper preferred). The chest lid should seal the chest with a lip all the way around as the original. This will prevent sparks from entering the chest and exploding the rounds inside. NO flat top lids without lip to seal the chest will be allowed. The chest must be provided with a hasp and lock. The chest is to be kept locked when not in service. The interior of the chest must be constructed with non-ferrous materials (copper nails). If ferrous nails or screws are used, they must be countersunk and heads puttied over. The chest must be kept clean and free from loose powder.

No bulk powder or unauthorized equipment should be stored in the chest (Cordless electric drill, hammer, screwdriver, pliers or other things that could cause sparks). The Chief of the Piece or Number 6 shall be responsible for locking the ammunition chest. No one will be allowed in the chest except during inspections. The manufacturing of rounds, or storage of bulk powder in camp is prohibited. All rounds must be made prior to the event.

4. ARTILLERY EQUIPMENT NEEDED

2 – Priming wires or vent picks

Brass or non-ferrous metal. Should be shortened or leather wrapped around the shaft so point of wire is restricted from hitting bottom of bore. A priming wire that is too long could cause a pit in bottom of bore over time.

1 – Gimlet

Used to extract spent primers or clear vent.

1 – Vent punch

Used to drive stuck primers from vent when gimlet will not remove a spent primer

2 – Vent brushes

Used to clean debris and sparks from the vent. Bristles should be firm and shaft unbent

2 – Thumb stalls

Used by Number 3 to seal the vent during loading and sponging

2 – Tube pouches

One used by Number 3 to hold spare lanyard, priming wire, gimlet, vent brush and any other tools needed to clear the vent in the event of a failed primer. One used by Number 4 to hold primers and lanyard. Optional: A third tube pouch used by Gunner to hold fuse punch, sight and other equipment used by Gunner.

2 – Lanyards

Used by Number 4 to fire the gun. Must be made with wooden handle and cotton or hemp rope with a secure “S” hook on the end.

2 - Pair of welders gloves

Used by Numbers 1 and 2 for protection during loading

1 – 60cc or larger medical syringe, ear syringe or a device capable of injecting water into the vent in the event of a misfired round must be pulled through the muzzle. CO2 fire extinguisher can be used to blow misfired round out of bore through the vent, BUT the round must be flooded prior.

1 – Gunners haversack

Used by Number 5 to transport rounds from the limber chest to the gun.

Optional item

A towel may be used to wipe off sponge and stave.

5. ARTILLERY IMPLEMENTS NEEDED

1 – Worm

Used to clean foil from breech. Must be close fitting in the bore, points fairly sharp and turned to just outside the twist of the worm. Stave should be ash or hardwood.

2 – Sponge-Rammers

Used to extinguish sparks in the breech. Sponge must fit bore tightly, show no signs of wear and be clean of foreign matter. Sponge cover material should be wool carpet or sheepskin. Nails used to attach

the sponge to the sponge-head should be copper, bronze or non-ferrous metals. Rammer-head should be securely attached to the stave with a hardwood dowel. Nails used to attach the copper band on the rammer-head should be copper, bronze or non-ferrous metals. Stave should be ash or hardwood. The second sponge is used as a spare or dry sponge.

2 – Trail handspikes

Used to move the trail of the piece during sighting. Other uses: Remove barrel from carriage, lift carriage to remove wheels.

1 – Sponge bucket

Used to hold water to wet the sponge after the gun has been fired.

1 – Tar bucket (*optional*)

Attaches to the limber. Used to hold grease for the wheels.

6. ACCEPTABLE ARTILLERY ROUNDS

All rounds must be triple wrapped in heavy-duty aluminum foil. No staples or tape of any kind. Rounds must not leak powder. No long twist of foil on the round as this could become a projectile. Use black powder only, NO modern smokeless powder. Black powder used to make rounds should be cannon grade; 1F, 2Fa or 3Fa only. All rounds will not exceed 4 ounces of specified black powder per inch of bore diameter. Plastic bags are not recommended for use in making rounds because melted plastic could plug the vent and coat the breech, totally disabling the gun. It is recommended that rounds be made in a safe environment before coming to an event. Bulk powder has many possible hazards in the field; with campfires and smokers everywhere, the safe environment is hard to control. It is recommended that rounds be kept in individual cardboard tubes or non-ferrous similar substitute. This will protect them from damage and powder leaking into the limber chest. Remember: when transporting bulk powder, follow Local, State and Federal regulations.

7. ACCEPTABLE IGNITION DEVICES

Reproduction friction primers, Hidden locks, Parrot locks or locks using .22 caliber blanks. Friction primers or blanks should be stored in a safe, non-ferrous container within the limber chest. Never store loose friction primers or blanks inside the limber chest tray. A faulty primer or blank could explode the limber chest. Friction primers or blanks needed for firing should be placed in the tube pouch only and carried by Number 4. When firing is finished, return unused primers or blanks to the safe, non-ferrous container outside the limber chest. No locks using musket caps and a nipple will be allowed. The vent cannot be properly cleaned with this firing device.

The lanyard used to ignite friction primers or activate a lock must be 6 feet long to allow the Number 4 cannoneer to stand outside the wheel and out of the way of recoil.

8. ACCEPTABLE ARTILLERY DRILL

While artillery drills may vary somewhat, all must be submitted in writing and approved by the Chief of Artillery and his appointed Safety/Ordnance Officers prior to each event.

The following are the minimum steps that all drills must include:

Brush vent; Stop vent; Worm – until all debris is removed; Sponge – Damp, not soaking; Sponge – again, without wetting the sponge this time, or a dry sponge; Advance the round; Ram – Do not crush the powder or break the round in the bore. You can only get a round so tight, after that you are asking for trouble; Sight the piece – Take your time with this step; Ready; Prime; Prepare to fire; Fire.

9. FAILED PRIMER DRILL

It is important that Number 1 and Number 2 have their eyes fixed on the muzzle of the gun along with

Number 3's eyes on the vent. That will help them determine whether the gun has fired or not. When the gun fails to fire, Number 1 or Number 2 whose eyes should be fixed on the muzzle or anyone who realizes that the gun has not fired should immediately call out:

Call Out: DO NOT ADVANCE, THE PRIMER HAS FAILED

No's 1 and 2 stand at the hubs holding crossed implements above the barrel crossing each other as an X. No-one should move for a minimum of 3 minutes before an attempt is made to reprime the gun. Once 3 minutes have elapsed, or longer if the Gunner or Number 2 feels more time is needed, the Gunner commands:

Call Out: TIME HAS ELAPSED. NUMBER 2, ADVANCE AND REPRIME THE PIECE

If troops are in the Safety Zone, Number 1 places the rammer on the hub of the wheel, his body in line with the front of the wheel. Number 1 should be responsible for watching the Safety Zone while the gun is reprimed. Number 1 may have to catch the attention of Infantry troops by placing the sponge horizontal over the head and moving it up and down for a more visible signal. Number 2 slides around the front of the wheel, hugging the wheel. He places himself between the wheel and the barrel, near the axle housing. Number 3 advances his body outside the hub, in line with the axle housing. Number 3 must not push Number 1 forward. Number 4 also advances his body to outside the hub in line with the axle housing.

Handling misfires: The 3 minute misfire drill will be strongly enforced. After the third misfire the vent and barrel must be properly flushed and unloaded through the muzzle (no fourth attempts). If any misfired primer tube (first or second attempts) cannot be accounted for, the barrel must be flushed and unloaded through the muzzle. No re-ramming misfired rounds. The only time a round can be re-rammed is when #3 discovers the round is not properly seated before it is fired the first time. If it becomes necessary that you must unload through the muzzle for any reason, a safety officer must be present during the procedure. Misfired primers are to be removed from the field in a safe receptacle.

Number 2 must now determine why the gun did not fire. He receives from Number 3 the gimlet or tool he needs to clear the vent. Number 3 makes sure he hands the gimlet or tool to Number 2 over the top of the wheel, so that Number 2 does not expose himself to the vent or the muzzle. After the vent is clear, Number 2 receives the priming wire from Number 3 over the top of the wheel as before. Number 2 should always hold priming wire or gimlet between thumb and forefinger, never placing thumb or finger through the ring. Number 2 should drop priming wire into the vent to see if the round is against the breech, then push priming wire into round. Number 2 returns priming wire to Number 3 over top of the wheel. Number 2 then receives from Number 4 a prepared primer. Number 2 inserts primer into vent and holds lanyard until Number 4 is in position. Number 3 moves back into position when Number 4 moves. Number 2 slides around the front of the wheel, hugging the wheel until outside the wheel. The Gunner should be closely watching every step of this whole procedure. He is responsible that no mistakes are made.

Number 2 then commands:

Call Out: READY

Numbers 1 & 2 drop into the Ready position and the Gunner commands:

Call Out: PREPARE TO FIRE – FIRE

If Number 2 determines that the round is not against the breech, or after 3 primers have failed to fire the gun, the round can be wormed from the bore or blown out by CO2 fire extinguisher. The vent and bore must be thoroughly flooded with water first. Be sure to have a clear front before pulling the round. This whole procedure is dangerous. Take your time and be careful.

10. ACCEPTABLE ARTILLERY UNIFORMS

Federal Artillery uniforms and accoutrements were nearly identical to Federal Cavalry with the exception of trim color on the Artillery shell jacket, which was red. Some uniforms were of special design according to the state, but all Federal uniforms generally consisted of the following:

Officers: Coat – sack coat, frock coat or non-regulation officer’s coat. NO enlisted man’s shell jacket with shoulder straps. Trousers – Sky blue or dark blue. Hat – Forage cap, kepi or slouch hat. Shoes – Jefferson brogans or period boots. Accouterments – Sash, saber, saber belt, haversack, canteen, revolver and revolver holster. Federal officers usually wore a saber and sash as a badge of rank.

Enlisted: Coat – 4 button sack coat or shell jacket. Trousers – sky blue. Hat – Forage cap or slouch hat. Shoes – Jefferson brogans or period boots. Accouterments – Haversack, canteen, saber belt.

Optional saber, revolver and revolver holster.

Canteens will be mandatory for all Artillerymen regardless of rank. Non-issue clothing or gear such as neckerchiefs, animal parts, knives, etc. will not be allowed unless pictorial or written documentation is presented to the Chief of Artillery for his approval.

11. ARTILLERY WEAPONS

Revolvers and sabers are not recommended for enlisted personnel. They can get in the way of the operation of the gun. If they are carried, they must standard Federal issue for Light Artillery. The use of proper saber belt and holster is required to carry a revolver or saber. NO revolvers sticking in the belt with no holster. Permission for firing revolvers must be obtained from the Chief of Artillery. Revolvers can only be fired under the supervision and by command of the Battery commander. Cannoneers firing revolvers must be at least 25 yards in front of the limbers. There will not be any individuals firing revolvers at will. Revolver safety is addressed in TAB C Weapons Safety of this Safety SOP and must be followed. All revolvers brought to an event must be inspected in an UNLOADED CONDITION by an Artillery Ordnance Officer or a USV Safety Inspector before they will be allowed on the field.

12. PARKS / GUARD

Parks will be formed when transportation of guns from camp to battery positions warrants its necessity. Guns will be parked with Battery camps if possible, but at large events a Division park will be necessary.

Guard mounts will be posted for security and safety of the guns and ammunition while in park.

Requests for Guards will be made so as not to put a burden on any one unit. Remember, when on duty as a Park guard, you will be watching all the guns, not just yours. A tent may be set up to be used as an office area for the guard. Guards posted during the night time hours should have reliefs sleep in this area.

13. ENCAMPMENT

Camps will be laid out according to the 1861 to 1864 Artillery regulations, either Type or Type 2 layout. The chief of artillery or his adjutant will decide the layout of the artillery camp. All units assigned to the artillery camp must comply with the chosen layout. All units must notify the chief adjutant of their tentage and ordnance numbers at least 3 weeks prior to an event.

TENTAGE:

Battery commanders –

One wall tent and fly. To be used as sleeping quarters and office area for the Battery.

Section commanders –

One A tent or shelter tent. Optional Wall tent & fly.

Enlisted –

One A tent, shelter tent or bivouac under the gun tarp. No wall tents will be allowed for use by enlisted personnel.

Mess and supply tents –

They have their places in both layouts and may be used.

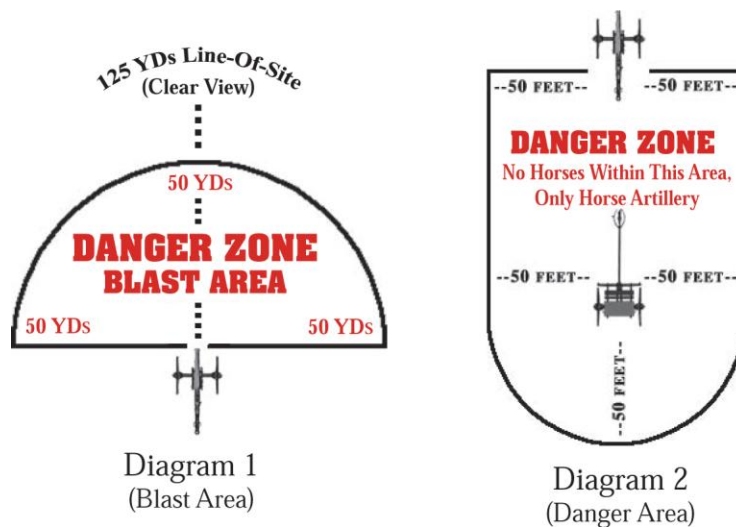
Dependent camping –

Will be determined by the Commanding General, Chief of Artillery or the Battery Commander.

Provisions will be slightly different at each event, but we will try to accommodate your families. Many times you will be camping with people you have never met or served with before. Please treat them and their families the way you would like to be treated.

14. RULES OF ENGAGEMENT

A. Guns will be fired in designated Battle areas and Demonstration areas only. If a gun is fired for colors, a Safety area will be marked off and Safety guards will be posted. Firings not scheduled must be approved by the Chief of Artillery. No one will let one rip because they are bored or they want to wake everyone up.



B. **Diagram 1** - a 50 yard diameter danger zone will be maintained in front of the gun in all directions along with (if available) an unobstructed view (line of site) of 125 yards from the muzzle. No one including Artillery personnel will breach the 50 yard “Blast Area” danger zone. This zone may be marked by red flags or other identification markers at their outer limits on stationary guns.

Guns positioned within a battery are usually 14 to 20 feet apart from hubs, or 20 yards from hubs if Infantry is to advance and support the gun line with an additional defense.

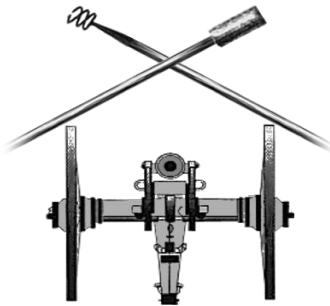
Diagram 2 - a 50 foot diameter danger zone will be maintained around the limber. Only artillery personnel may occupy this area; all others must request permission from the battery commander. Discharging of firearms or the smoking of tobacco within the danger area is strictly prohibited. The minimum safe distance to the gun (gun hubs) from the sides is 50 feet.

The blank cartridge (powder charge), when ignited in the field piece tube, throws a cone of flame

down range from the muzzle of the gun almost 50 yds. . An accidental discharge with an object such as the rammer, the worm or a small solid piece of debris in the tube will throw fragments down range an unpredictable distance. The spent primer is launched upward in a column of flame as the gun is fired and sometimes comes down outside the danger zone. All personnel shall be aware of the dangers associated with being near the gun line or a cannon and remain outside the danger zones if not a member of the Artillery or attached to that service.

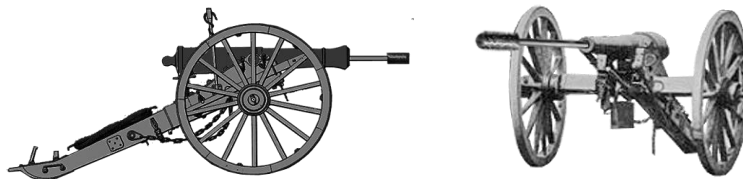
All non-artillery personnel, re-enactors and spectators, will maintain a safe distance from the artillery during demonstrations or battle reenactments.

Crossed sponge rammer and worm (Crossed Implements) signal indicates "the primer has failed", and the gun is still "Hot or Loaded" and could fire prematurely. When this signal is given, this piece of ordnance must be avoided until the piece is rendered safe by artillery personnel.



C. Failed Primer Signal

When a gun has a failed primer, Number 1 and Number 2 Cannoneer's shall place the implements (sponge rammer and worm) over the wheels, crossing over the barrel at an apex to indicate the signal that the primer has failed and the piece is still hot and loaded. To avoid confusion of Infantry troops, this signal is only to be used when the primer has failed, and the 50 yard safety "Blast Area" zone is once again active for this piece of ordnance and must be avoided until the piece is rendered safe.



D. "Spiked" or Safe Gun

Artillery pieces are not to be charged/assaulted except as previously arranged in a "scripted" scenario, and then only at a pre-arranged signal. The 2 diagrams above both show the signal to opposing infantry or cavalry, the sponge rammer protruding from the muzzle of the gun, with the front of the gun unoccupied indicating the gun is clear and safe for assault.

This signal indicates the gun is not loaded and is safe to either pass by or approach the piece. If this signal is not indicated, the piece must be considered dangerous (loaded) and avoided.

E. All detachments must be inspected by an Artillery Ordnance Officer for proper drill and safety. Equipment and Gun Drill Forms must be signed by each person manning the gun, with all inspections, both visual and written, to be completed and passed before each artillery piece is qualified to be allowed on the field.

F. The best Safety regulation in this Safety SOP is the use of Common Sense. Use it freely. The only

good reenactment is one in which no-one is hurt. Commanders and gunners are expected to give the gun crews ample opportunity for water and rest during the battle or drills.

Use common sense but do not endanger the health of the participants. If you have a physical condition that may require special attention or may affect the outcome of possible emergency treatment during the event, it is recommended you notify your commanding officer or someone who would be with you on the field of such condition in advance of taking the field.

SOP – SAFETY REGULATIONS - MOUNTED ARTILLERY

1. BATTLEFIELD CONDUCT

- A. Mounted Drivers and Teams may not be armed or engage in any form of mounted combat.
- B. All mounted gun teams, limbered and unlimbered, must obey the commands of the Chief of Artillery and his designated officers. Mounted artillery will be combined into sections and batteries wherever possible.
- C. New and inexperienced teams should not be hitched to equipment on their first exposure to massed troops and firing. They should be harnessed in pairs and led gradually on to the battlefield during their first battle with outriders and/or householders to steady and test each pair's reaction to the environment.
- D. Teams, which, in the opinion of the Chief of Artillery or his Mounted Officer, require assistance, will use outriders and/or out walkers (horse holders) on foot to assist in control of the team(s).
- E. No cannoneers will ride the limber chests at gaits above a Walk, on or off the battlefield.
- F. No more than three cannoneers may ride any single limber chest.
- G. Steep downhill movement will be done at a walk with either a prolong rigged as a brake (held back by the crew) or with the wheel lock chain fixed on the towed vehicle. Cannoneers must not ride limber chests during steep downhill movement.
- H. Uphill movement which required any gait faster than a walk will be preceded by outriders(s) or other personnel to arrange a clear path for the detachment. Cannoneers must not ride limber chests during steep uphill movements.
- I. No gear (such as canteens, haversacks or packs) will be placed on the limber chests in any fashion, which will allow the gear to swing into the wheels of the vehicle. Driver's canteens and haversacks must be placed on the off horses.
- J. No driver will take a hit off a team horse without it being a part of a pre-planned scenario approved by the Chief of Artillery which scenario must include a replacement driver being present. Wheel and lead drivers must never take a hit from their mounts.
- K. No list of rules or guidelines can completely address all situations. The Chief of Artillery or his designated Mounted Officer will make the final decision in any situation involving artillery horses,

riders or practices.

2. RULES OF CAMP ROUTINE

- A. No artillery horses or teams will ride into non-mounted camps. Drivers will mount/dismount in the area of the mounted Artillery Park or their picket area. No movement in or about camped areas will be allowed at a gait over a Controlled Walk.
- B. Inexperience riders and green teams will be identified to the Chief of Artillery by the senior officer on the unit proposing the team and/or rider prior to any mounted activity at the event, including training.
- C. No person under the age of 16 will mount a horse in any mounted capacity with the Mounted Artillery without specific authorization of the Chief of Artillery and the Commanding General.
- D. Horses will always be camped within the Mounted Artillery camp unless alternative arrangements have been made in advance with the Chief of Artillery and the Commanding General.
- E. Picket line watches will be detailed during the hours of darkness and at any other time the Chief of Artillery or his designated Mounted Officer deems it necessary for the physical safety of the horses or event spectators.
- F. Physical abuse of horses in violation of state laws prevailing at event sites will have zero tolerance and will be grounds for immediate expulsion from the event and possibly reported to the local authorities.
- G. Horses participating as or with Mounted Artillery must have a valid current copy of the Coggins test as a minimum and any additional health papers as required by state travel laws or event sponsors.
- H. Horses will be ridden on event grounds only by drivers and artillery personnel designated by the Chief of Artillery or his designated Mounted Officer. Civilians, spectators, children and visitors will absolutely not be allowed to mount any horse.
- I. Stallions, Mules, Work Horses will not be allowed to participate in any event in any manner with regards to Mounted Artillery.

3. FEDERAL MOUNTED ARTILLERY ORGANIZATION AND STRUCTURE

- A. All units registering as Federal must be prepared to field themselves under the Chief of Artillery as part of mounted sections, half or full batteries along with the dismounted artillery.
- B. Unit commanders may serve as mounted gun commanders as NCO's with the teams(s) and the crews which they field.
- C. The designated Mounted Officer or the Chief of Artillery will appoint Section, Battery commanders and/or NCO's based on individual experience and past performance of leadership at previous events.
- D. The designated Mounted Officer or the Chief of Artillery may assign or require outriders and/or out walkers for horse teams based upon individual experience and past performance of the teams at previous events.

- E. No Mounted Artillery unit may register as a sub-unit of an Infantry or Cavalry organization. Registration signifies willingness to cooperate with the overall direction of the Mounted Artillery at the event. The Chief of Artillery or his designated Mounted Officer may detach sections or pieces to act as supporting guns when appropriate.
- F. All registrants accepted as Mounted Artillery will participate in all drills, demonstrations, battles and camp routines. Reasonable cause for absence from any artillery activity will be determined by the Chief of Artillery, his designated Mounted Officer and the senior member of the detachment involved.
- G. The contact individual registering any Mounted Artillery detachment(s) will be responsible for informing the detachment(s) of the conditions stated within these Safety Regulations concerning Battlefield, Camp Routine, Organization, Uniforms, Harness and Equipment. Any individual or group in violation of these rules will be removed from the event.

4. ACCEPTABLE MOUNTED ARTILLERY UNIFORMS

- A. All Gun Detachments will follow the basic artillery inform guidelines as set forth in Section 10, Acceptable Artillery Uniforms TAB D Artillery.
- B. Artillery drivers are advised to wear reinforced sky blue kersey trousers. All drivers will wear leather civil war period artillery leg guards.
- C. Artillery drivers will wear Forage caps with functional chin straps on the battlefield. No loose slouch or Hardee hats will be worn on the battlefield. Loose hats may be worn for parades, reviews or demonstrations.
- D. Artillery drivers and mounted personnel are advised to wear black artillery boots or military riding boots or period design. Military spurs are prohibited.
- E. Canteens will be mandatory for all Mounted Artillerymen, on foot or on horse, regardless of rank. All Artillery driver's haversacks and canteen will be placed on the off-horses, not on the driver.
- F. In the interest of achieving the advancement of Mounted Artillery in general, uniforms and equipment do not have to be absolutely correct. Each unit or individual will be inspected for reasonable Federal standards prior to taking the field. Those units or individuals not meeting the minimum qualifying standards will be given the opportunity to correct the disqualifying item(s). The same will apply to horse tack.

5. MOUNTED ARTILLERY WEAPONS

- A. All Gun Detachments will follow basic artillery weapons guidelines as set forth in section 11 Artillery Weapons, TABD Artillery.
- B. Drivers will not carry weapons except for parades, reviews or demonstrations.
- C. Mounted cannoneers will not carry weapons except for parades, reviews or demonstrations.

6. HORSE HARNESS AND TACK

- A. All saddles will be of Federal issue patterns. Grimsley for harness/team mounts and Grimsley or 1859 McClellan for outriders, guidons, buglers and NCO's. Other plausible saddles may be used

with documentation for officers.

B. Saddle blankets will be blue or red wool with orange or dark blue trim respectively.

C. Required team equipment – harness and tack will consist of:

1. Sturdy military tugs
2. Breaching
3. Headstalls
4. Cruppers
5. Tug hangers
6. Brake straps
7. Military style open metal stirrups
8. Pole chains or pole straps
9. Pole yoke
10. Pole pad
11. Military reins
12. Military curb bit and curb chain

Surcingles will be used on all ridden horses. Artillery halters and leads or Cavalry halters and leads may be used. Leather is to be black.

D. Pairs will not be linked at the bit or halter to be driven. Pairs may be linked with “breakaway” links in other harness locations but not at the heads.

E. Horse breeds and sizes should be compatible with Civil War era horses. Appaloosa, spotted and other colors unavailable to Civil War usage will not be permitted.

F. Bed rolls, feed bags, horse collars, Artillery watering bags and other horse furniture will conform to the types in common use during the Civil War.

G. No field equipment of Indian War era or later (i.e. WWI or WWII) will be allowed for use on the field. Passable and safe visual substitutes will be tolerated for temporary use of detachments in their first year of service.

H. Absolutely no Western or English riding equipment will be allowed for use in a Civil War era event.

I. Questionable equipment will be inspected by the Chief of Artillery, his designated Mounted Officer or the Safety Officer for acceptance. The decision of the inspecting officer(s) will govern the use of the equipment in question.

Tips for Infantry while Deployed near Horse Drawn Artillery

A. Things you need to remember...

1. They had 'right of way' in 1863 and they still do. Why? Because they have no mechanical brakes and only 2 of the horses have the ability to slow or stop the 5,000 odd pounds advancing on you. If the Mounted commander or artilleryman yells for you to move, do it regardless, it is for your safety, and it may save your life.
2. Horses are trained and experienced but.... they still react to things which bother them and these are not what you might expect.

B. In general, horses really dislike:

1. High pitched noises..caps more than loaded muskets (cap off further away) Snare drums are worse than bass, but don't fire a volley right next to them WHERE THEY CAN'T SEE IT.
2. They don't like being surprised as they startle easily. This is why the army in 1863 did not give them blinders.
3. They have been on a battle field before, if they can see it they probably understand what you are doing, don't 'sneak around them'.
4. Claustrophobia.....
2 million years they evolved by running away from problems and not being trapped.
Don't close in right next to the rigs, especially not on both sides!! Give them some space to fight over who eats which dandelion without worrying about confinement.
5. Flags..
They don't really understand flags.. They don't like wind anyway, it brings smells from far away so they can't rely on smell for their safety, and worse blowing in their ears it makes it harder to hear what is a threat also.
So now this 'flag thing' flaps at them in the wind they already don't like and as each flag is a 'new threat' they can't be sure it isn't really trying to eat them. If the 'predator flag' 'makes a move' on a horse, the horse may try to escape the flag.

Silly... So silly in fact that you ought to just hold onto the flags passing by the teams till you are well clear.

C. Turning space...

A full six horse gun and limber is 14 yards long. Only the best exercised and trained units can turn about in less than their length.. They will be able to move up or back a little to find space, but give them some room to turn in your deployment.

The United States Volunteer's Artillery Regiment

Safety Standard Operating Procedures For Cavalry and Mounted Infantry When Maneuvering Around Artillery



Adapted by the USV Artillery Regiment, March 27th 2011 This SSOP will serve as the "official rules and regulations" regarding mounted units in the proximity of artillery batteries and /or individual artillery pieces positioned on the battlefield when commanded by the USV Artillery Regiment

The blank cartridge (powder charge), when ignited in the field piece tube, throws a cone of flame down range from the muzzle of the gun almost 50 yds. . An accidental discharge with an object such as the rammer, the worm or a small solid piece of debris in the tube will throw fragments down range an unpredictable distance. The spent primer is launched upward in a column of flame as the gun is fired and sometimes comes down outside the danger zone. All personnel shall be aware of the dangers associated with being near the gun line or a cannon and remain outside the danger zones if not a member of the Artillery or attached to that service.

All non-artillery personnel, re-enactors and spectators, will maintain a safe distance from the artillery during demonstrations or battle reenactments. The proper safe distances from any gun line or cannon and limber are outlined in the following diagrams.

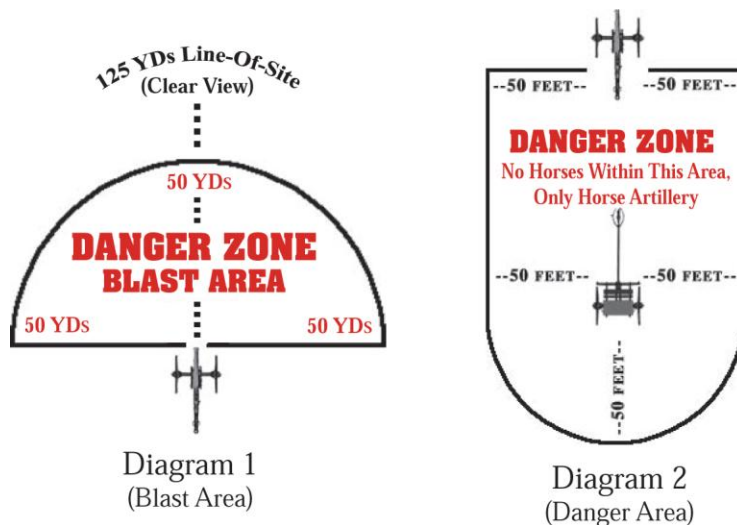


Diagram 1

A 50 yard diameter danger zone will be maintained in front of the gun muzzle in all directions. No one including Artillery personnel will breach this danger zone. The “Blast Area” Danger Zone may be marked by red flags or other identification markers at their outer limits on stationary guns.

Diagram 2

A 50 foot diameter danger zone will be maintained around the limber. Only artillery personnel may occupy this area; all others must request permission from the battery commander. Discharging of firearms or the smoking of tobacco within the danger area is strictly prohibited. The minimum safe distance to the gun from the sides (gun hubs) is 50 feet. **No Horses, or Non Artillery Personnel shall occupy, walk or ride between the gun and limber without the direct permission from the Battery Commander.** Unless scripted prior to battle this perimeter is off limits to all mounted and dismounted personnel.

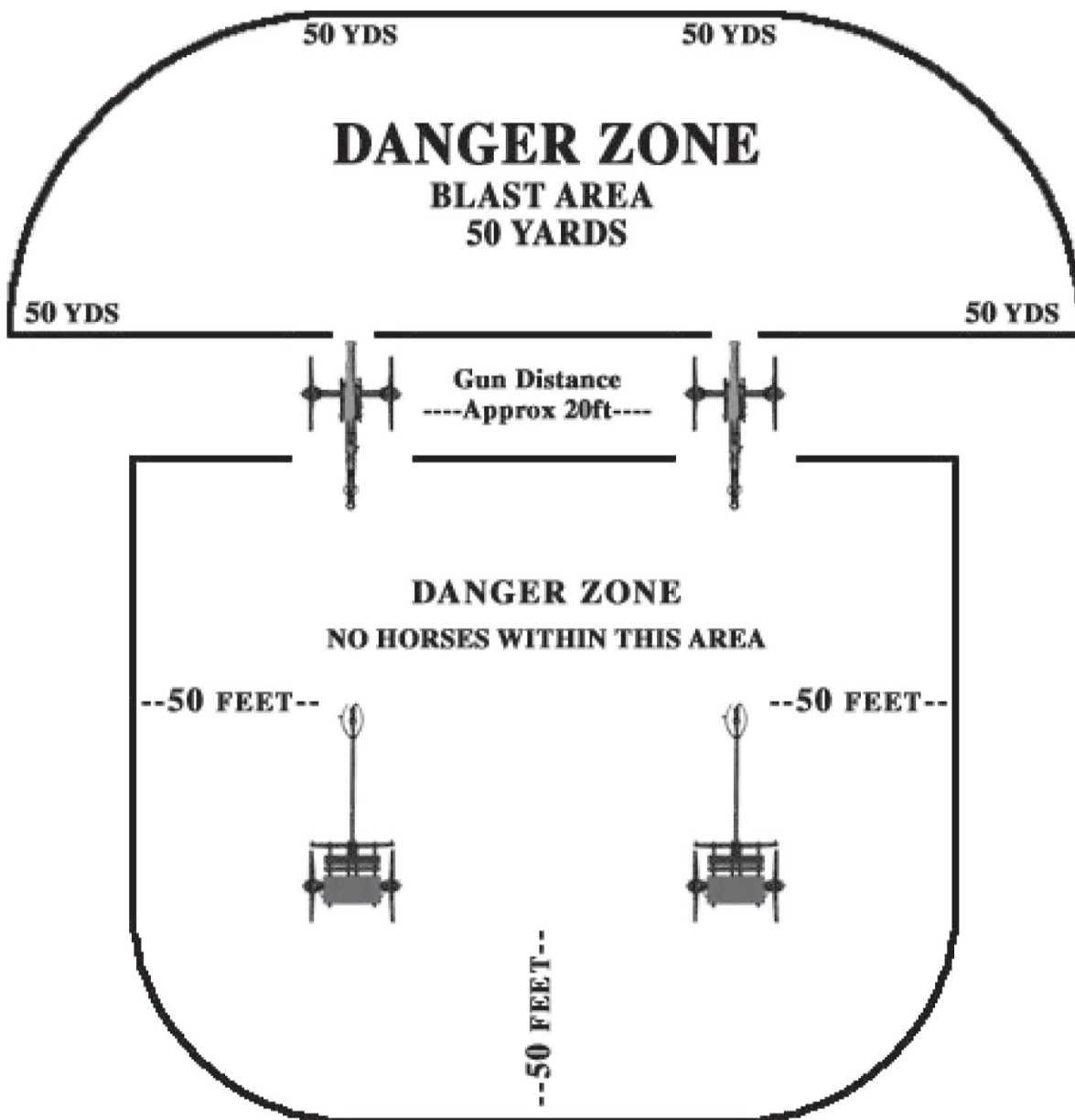


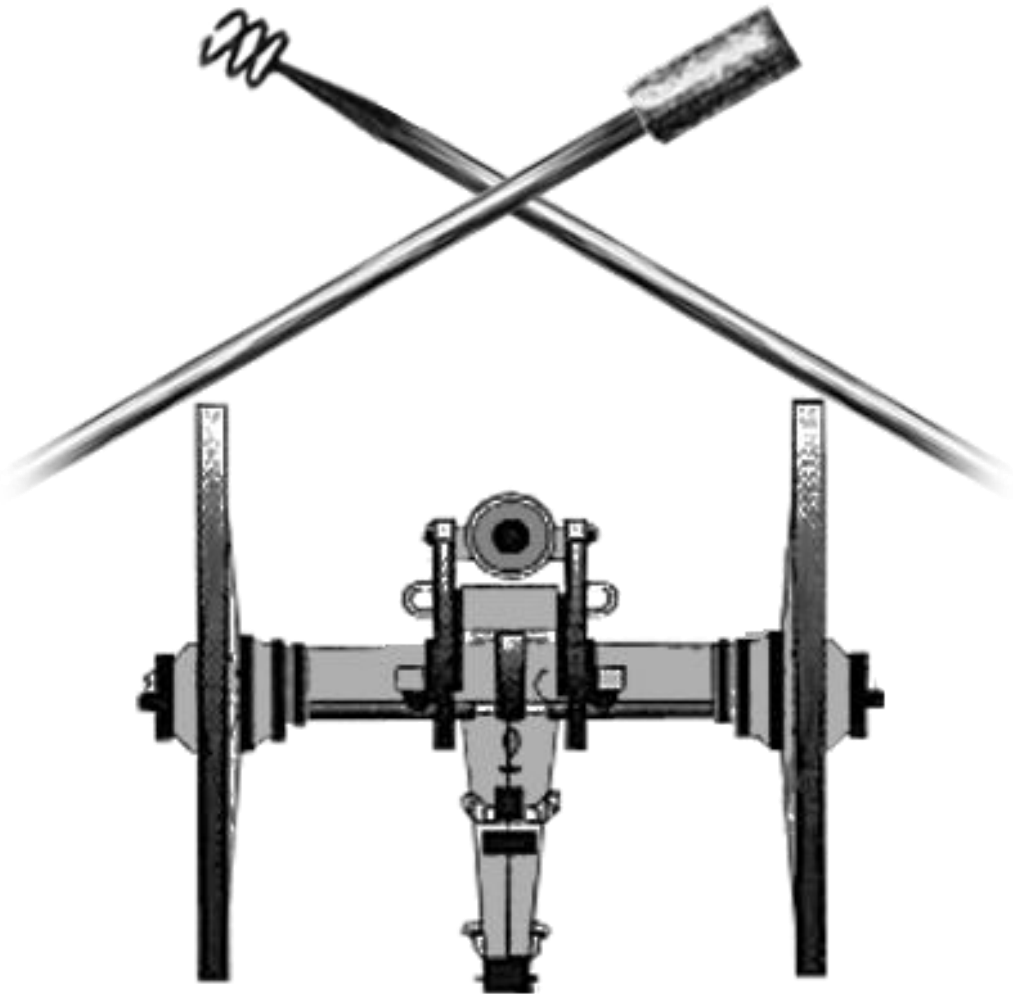
Diagram 3
(Battery Perimeters)

Diagram 3

Danger zones may be marked by red flags or other visual markers at their outer limits. In addition to the markers, the artillery commander may, at times, place personnel outside the danger zones to help ensure that no one crosses into the zones accidentally. All non-artillery personnel must heed any warnings or orders from artillerists regardless of rank, as they are mandated to enforce artillery safety procedures. These members of the artillery shall be regarded as safety officers and will be given the respect due the position. *Note: The distance between guns at an event are determined by scenario and terrain. Because of that, distances between the guns will vary.*

The din and smoke of the battlefield make verbal communication near impossible. The artillery battery relies upon the use of the cannon's implements and hand signs to signal when the cannon is loaded, when it is about to fire, when there is a misfire and when the cannon has been rendered inoperable.

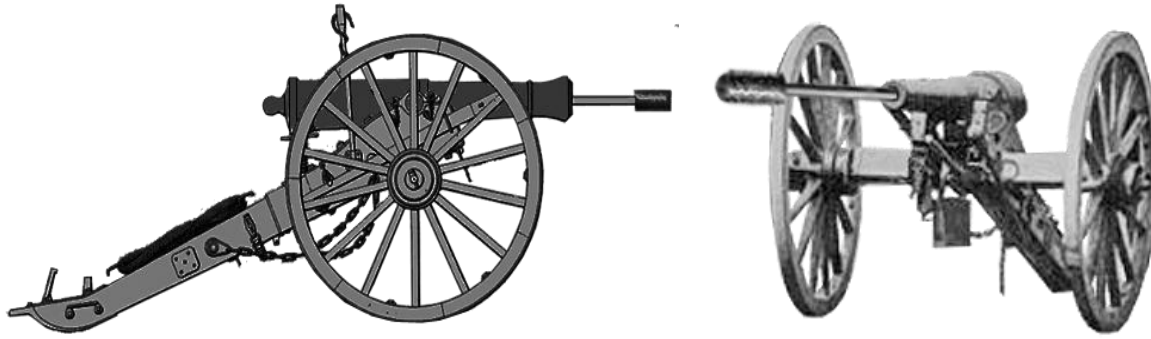
When a battle scenario dictates that mounted and or dismounted personnel shall approach the gun's perimeter, visual signals by artillery personnel should be understood by cavalry or infantry opposing artillery; when and when not to advance on the ordnance. Such signals are outlined in the following diagrams.



Misfire Signal

Diagram 4

Crossed rammers or crossed sponge and rammer (Crossed Implements) signal indicates "the primer has failed", and the gun is still "HOT or LOADED" and could fire prematurely. When this signal is given the 50 yard safety "Blast Area" zone is active for this piece of ordnance and must be avoided until the piece is rendered safe by artillery personnel.



Spiked “Safe” Gun

Diagram 5

The diagram above shows a sponge rammer protruding of the muzzle of the piece in the absence of artillery personnel. This signal indicates the gun is not loaded and is safe to either pass by or approach the piece. If this signal is not indicated, the piece is to be considered dangerous (loaded) and avoided.



Diagram 6

Upon rendering the gun safe to approach, (the sponge rammer in the muzzle) the cannoneers, if they do not deployed away from the piece, may position themselves within the wheels, forward and to the rear of the axle for personal safety. This visual movement it is also an indication for cavalry to occupy the front (Blast Area) but not ride pass or around the gun or through an artillery battery. The safety area (Diagram 2) of the limber, however, must be avoided to assure no harm to personnel or damage to property.

United States Volunteers

Cavalry

Safety procedures

1. RULES OF ENGAGEMENT

A. SABER.

- A. The use of excessive force in saber contact will not be tolerated.
- B. No-one will allow a drawn saber blade to drop beyond 45 degrees from the vertical when at 25 yards or less to the opposing force.
- C. Striking an opponent horse or rider with any weapon is prohibited.
- D. Grabbing or holding any portion of an opponent's person, uniform or horse equipment is prohibited.
- E. Bringing any weapon other than a saber (i.e. firearms) to bear upon a saber contestant in close quarters is prohibited.
- F. Continuation of the attack after any participant in the engagement has been unhorsed is prohibited.
- G. All carbines and revolvers will be elevated above the opponent's head when discharged at ranges of 25 yards or less.
- H. During dismounted engagements, troopers mounted or dismounted will not charge horse holders or otherwise engage in activities *that may spook horses linked together*.
- I. All cavalry combatants mounted and dismounted shall obey the commands of the cavalry commander and his designated subordinate leaders. **The USV Cavalry chain of command is in force at all times, no exceptions.**
- J. All cavalry combatants will follow the safety rules for actions around artillery as outlined in the USV Artillery Safety SOP. At a minimum:
 - 1. No cavalry combatant will deliver weapons fire within 25 feet of an artillery piece or limber.
 - 2. No mounted cavalryman will ride between a limber box and its associated artillery piece.
- K. The signal for a loaded artillery piece is implements crossed on the barrel. If this signal is observed or the artillery crew is waving combatants off - *stay away from the piece*. Always ride behind the artillery piece and limber box when crossing the field of fire of fixed or mobile artillery.

2. RULES OF CAMP ROUTINE

- A. Anyone having a horse on the picket line will be present in the horse camp during the hours of darkness or have a designated stand-by *identified to the cavalry commander of the camp*.
 - B. No one will ride or lead a horse into the camps of infantry, artillery, civilians or sutlers.
 - C. All horses will be dismounted prior to entering any authorized camp area and led into the designated picket area. With the exception of a designated combat area, *absolutely no mounted individual will allow a horse to enter a camp area above the gait of a controlled walk*.
 - D. Inexperienced riders and green horses will be identified to the cavalry commander by the unit senior member present prior to participating in any aspect of the event.
 - E. Picket line watches will be detailed during the hours of darkness and at any other time the cavalry commander deems it necessary for the physical safety of the cavalry units or event spectators.
 - F. No person under the age of 16 will mount a horse as a combatant or serve in a mounted capacity of any type unless specifically authorized by the cavalry commander
 - G. Physical abuse of horses will be grounds for **immediate dismissal from the event**.
 - H. Horses will be ridden on the event grounds only by troopers or staff designated by the Cavalry Commander. *Civilians, spectators and visitors will absolutely not be allowed to mount any horse unless authorized by the Cavalry Commander*.
- A. Any horse entering an event must have a valid current copy of the Coggins test. A health certificate may also be required by the event sponsors.
 - B. Stallions will not be permitted to participate in any event in any manner.
 - C. Any horse drawn conveyance must be approved by the event sponsors prior to the event.
 - D. No list of rules or guidelines can completely address all situations. The cavalry commander or senior officer in charge will have the final decision in any situation or dispute involving horse, rider or dismounted cavalry trooper.

3. HORSES FOR STAFF, MOUNTED ESCORTS AND MUSICIANS

- A. All mounted escorts will be assigned to headquarters picket area for duty. Duties include, but are not limited to:
 - a. Care and grooming of all horses utilized by the headquarters commanding officer and staff officers.
 - b. Properly tacking all staff horses prior to required use and the removal of equipment following field use.
 - c. Scheduled feeding and picket line manure/debris cleanup.
 - d. Picket line safety watches during the hours of darkness and when safety watches are required during open camp hours to spectators and visitors.
 - e. Courier duty to pass required information to various army service branches and other officers that are not in the headquarters camp.
 - f. Maintenance of a proper picket line for all staff horses and mounted escorts.
- B. Mounted escorts are subject to all of the cavalry guidelines and standing operating procedures that apply to mounted cavalry.
- C. The senior mounted escort will report to the cavalry commanding officer for morning reports, the need for additional assistance and any problems occurring within the escort detachment.
- D. All mounted escorts will respond to requests by staff officers for assistance in equine related matters. Help will be rendered in a positive and timely manner.
- E. No person under the age of 16 will act as a mounted escort or courier.
- F. Disciplinary actions involving mounted escorts, couriers, or musicians will be determined as a joint decision between the army commanding officer and the designated cavalry commander.
- G. All mounted escorts, couriers and musicians other than those assigned by the cavalry commander shall be only at the direct invitation of the army commanding officer.

4. CIVILIAN EQUESTRIAN ACTIVITIES

- A. The Event Sponsors/Organizers must be in agreement for civilian equestrian activities to take place on the event site.
 - a. The equestrian civilian unit will co-ordinate with the Cavalry Commander in advance of the event.
 - b. Civilian equestrian activities will be carried out only in the proper attire for the 1860's era, (i.e., civilian females may only ride sidesaddle and in the proper riding dress common to females of the era).
 - c. Authorized civilian equestrians will be subject to all of the same safety regulations within the Cavalry SOP's as are the combat troopers.
 - d. The appointed civilian equestrian supervisor for an event and the Chief of Cavalry will have the final decision on any disputes when not specifically covered by the SOP's.

Incident reporting

INCIDENT PROTOCOL PROCEDURE.

- A. Upon discovery of an injury, the call "*MEDIC*" will be sounded by the nearest re-enactors.
- B. The first Company Commanders to respond, or higher ranking officer who happens to precede them, will determine the seriousness of the injury and make a preliminary determination as to its cause.
- C. Company Officer will ensure EMT's or proper medical authority are on scene
- D. Company commander will ensure that a member of that company is assigned to help the injured party and to take charge of personal affects (musket, cartridge box etc.)
- E. IF ANY OFFICER PRESENT, INCLUDING NCO'S WHO ARE COMMANDING COMPANIES AT THE TIME, deem the cause to have been the result of gross misconduct, he will alert the nearest Regiment Commander.
 - a. Once the alert has been sent to the Regiment Commander, the commanders of those companies in the vicinity of the injured re-enactor will assemble their units in the immediate area. These officers will then question their soldiers to determine if any witnessed the injury or were the cause of the injury. Those who were witness to the injury or were the cause of the injury will then be questioned as to what they witnessed or experienced.
 - b. The officer who alerts (ALERTING OFFICER) the Regiment Commander will see to it that all present company commanders reform their companies. It is this officer's duty to use his best effort to ensure that all re-enactors present immediately reform on their companies. The purpose here is to maintain order among the companies and to prevent straggling by those who may be responsible parties and/or witnesses to the injury.
- F. As procedures B, C, D & E are in progress, every effort should be made to notify those medical professionals identified in the re-enactor ranks as well as the local medical support services and to insure that the location of the injured re-enactor is communicated to them. The alerting officer or the injured party's commander will see to it that this is accomplished quickly.
- G. The company commanders will report their initial findings to the Regiment Safety Officer or Regimental Commander who arrives first on the scene.
- H. The Regiment Commander will then immediately undertake whatever additional investigation he deems necessary and work together with fellow Regiment commanders, overall commanders and event organizers to determine the cause for the injury and the identity of the responsible re-enactor(s).
- I. Upon reasonable determination of the identity of the re-enactor(s), their names, addresses and units will be obtained from them directly or through their company commanders and provided to the Brigade Safety officer through the regimental Safety Officers.
- J. Regimental Safety officers will submit a copy of any injury or Safety incident to the Brigade Safety officer who will keep on file all incidents by Calendar year.

INCIDENT REPORTING

- A. Regimental Commanders and Safety officers should be notified by the Line company commander or anyone seeing an incident immediately to resolve all incidents in a timely manner.
- B. All incidents involving medical or Safety violations will be officially reported by the regimental Safety officers and forwarded to the Brigade commander via the Brigade Safety Officer.
- C. All Incidents will be reported in writing, the following information should be included in all reports.
 - a. Date of incident
 - b. where the incident took place (reenactment Living history as well as location ex Manassas Virginia)
 - c. Party or parties involved (injured or not)
 - d. Detailed description of the incident
 - e. resolution of the incident
 - f. Any recommendations of the Regimental commanders or Safety officer
- D. All incidents will be reported within 1 week of the date of the incident.

USV MEDICAL CARD
Front

Member	Company	Regt	USV	Date
			In Case of Emergency	
Name				
Address			Name	
City, State, ZIP			Relationship	Phone #
Ph#	DoB		Physician Name	Phone #
Allergies & Sensitivities			Medications (name, dosage and frequency)	
Health Problems & Surgeries				

BACK

Member	Company	Regt	USV	Date
			In Case of Emergency	
Name				
Address			Name	
City, State, ZIP			Relationship	Phone #
Ph#	DoB		Physician Name	Phone #
Allergies & Sensitivities			Medications (name, dosage and frequency)	
Health Problems & Surgeries				