

DIRECTOR'S ORDERS, DO-6
CHAPTER XX (TBA)

STANDARDS FOR HISTORIC WEAPONS FIRING
IN AREAS ADMINISTERED BY THE NATIONAL PARK SERVICE

XX.1 GENERAL REQUIREMENTS

XX.1.1 Program Planning: All historic weapons demonstrations must be described in the park's approved Comprehensive Interpretive Plan before implementation.

XX.1.2 Compliance with Director's Orders Relating to Living History Interpretation: All historic weapons demonstrations will be in compliance with the Director's Orders regarding Living History Interpretive Programs and any other related Management Policies.

XX.1.3 Definition of Terms: The use of "black powder" in NPS programs is restricted to potassium nitrate-based, sporting grade black powder.

XX.1.4 Impact on Resources: Demonstrations that would adversely impact the natural or cultural features of an area are prohibited.

XX.1.5 Use of Reproduction Weapons Only: (a) Weapons firing demonstrations conducted in areas administered by the NPS are restricted to reproduction "black powder" weapons only. (b) Requests by outside groups or individuals to use non-NPS original weapons will follow the exemption request procedure prescribed in Reference Manual 6, and will be granted or denied in writing by the superintendent. The Superintendent must be satisfied that such use is consistent with the resource preservation and interpretive values of the park. (c) Original weapons brought onto NPS lands must pass inspection using the appropriate checklist. (d) Original NPS museum weapons will not be used; no exemptions will be granted.

XX.1.6 Use of Reproduction Artillery: Reproduction artillery used in areas administered by the National Park Service shall conform to specifications found in the Historic Weapons Resource Manual.

XX.1.7 Use of Blank Ammunition Only: Firing demonstrations will use blank ammunition only. With the exception of the Lyle Line-Throwing Gun, projectiles shall not be fired from any type of historic black powder weapon in areas administered by the National Park Service.

XX.1.8 Exemptions: (a) Requests for exemption to any part of

these Director's Orders must be made in writing according to the Exemption Request Procedure described in the Historic Weapons Program Manual. (b) Exemptions will be evaluated on a case-by-case basis according to the established procedure, and recommendations submitted to the Associate Director for Interpretation and Education for review, and to the Director for approval. (c) Exemptions are valid only in the park initiating the request and must be reviewed and renewed each year.

XX.2 BLACK POWDER STORAGE AND HANDLING

XX.2.1 Regulatory Requirements: (a) In recognition of its public safety responsibility the National Park Service's policy is to comply with all applicable provisions of federal, state, and local safety codes and standards. (b) Where regulations differ, the National Park Service will be governed by the most restrictive regulations.

XX.2.2 Magazine Supervision: (a) Magazine storage and black powder use within the park must at all times be under the supervision of an officially trained and certified career, career-conditional or term employee, 21 years of age or older, whom the superintendent has designated in writing to be responsible for the enforcement of all safety regulations and precautions relating to black powder. (b) In the temporary absence of the responsible employee a career, career-conditional or term employee shall be designated in writing to act during this period.

XX.2.3 Notification of Local Fire Authorities: Written notification will be provided to local fire authorities as to the type, magazine capacity and location of each site where explosive materials are stored.

XX.2.4 Outdoor Storage: Outdoor storage of black powder, detonation devices or ammunition will be in an National Park Service Class 1 magazine, or Class 2 magazine(s) stored within another structure. Refer to the Historic Weapons Program Manual for standards for National Park Service magazines.

XX.2.5 Indoor Storage: Indoor storage of 50 pounds or less of black powder will be in a National Park Service Class 2 Magazine.

XX.2.6 Use of Inhabited Buildings: Visitor centers and /or administrative offices shall be considered as "inhabited buildings" under OSHA regulations. No portion of these buildings shall be used for magazines containing black powder, ammunition, or other explosive devices, nor for loading operations using these materials.

XX.2.7 Use of Historic Structures: Historic structures, including historic fort magazines may be considered individually as locations for NPS Class 2 magazines. Proof that the facility

and location exceeds safety regulations must be recorded in writing, approved by the Regional Director, and be on file in the park.

XX.2.8 Use of Pass Boxes: (a) Removal of black powder from a magazine shall be in an approved pass box if the powder is not in its approved shipping package. Explosives shall be attended by an employee at all times until they are used in a demonstration or returned to the magazine. (b) The pass box is suitable for all non-sparking, exclusively black powder materials including loaded paper cartridges, powder-horns or flasks, quill primers, and assembled cannon charges, but excluding percussion caps and friction primers. Ammunition may be transferred from the pass box to suitable historical containers such as cartridge boxes or limber chests for demonstration purposes. (c) At the completion of the day's demonstration, unused ammunition will be returned to the pass box, and then to the magazine, unless locked and under the control of a park employee at all times between demonstrations.

XX.2.9 Magazine Inspections and Inventory: (a) Regular openings and inspections of magazines must be performed by the responsible employee at least every seven (7) days to insure that there have been no unauthorized attempts at entry or removal of materials. (b) No smoking or open flames are permitted in or around magazines. (c) The black powder inventory will be kept as small as program demand allows. An excess of six months' supply should be avoided and in no case shall black powder be stored more than two years. (d) Containers should be dated and oldest powder used first. (e) An inventory log will be maintained to document use of powder and magazine inspections. See Historic Weapons Program Manual for recommended inventory sheet.

XX.2.10 Ammunition Loading Areas: (a) Ammunition loading areas shall be in an uninhabited building located at least 50 feet from the magazine. (b) In addition, the loading area will be provided with a non-sparking work-table or bench, adequate spark-free lighting, non-sparking floor surface and entrance control by the person handling the black powder. The loading area will be cleaned frequently with water to prevent the accumulation of black powder dust.

XX.2.11 Exposed Powder: Exposed powder should be kept to a minimum and must not exceed one pound or enough for one artillery round, if that is in excess of one pound. A pass box should be used to protect any additional powder in the loading area. Loaded ammunition should be placed in a pass box as units are completed. Preparation of ammunition components (i.e. "cylinders") will be completed before powder is brought to the loading area.

XX.3 WEAPON STORAGE AND SECURITY

XX.3.1 Storage: (a) Historic Weapons will be treated as sensitive property as defined in Director's Orders for Property Management and the storage standards described in the Historic Weapons Program Manual. (b) In general, weapons will be stored in a locked cabinet when not in use. (c) Access to weapons cabinets will be limited to those employees requiring access to the storage area.

XX.3.2 Security: Structures used to store historic weapons will be guarded with a monitored intrusion detection system.

XX.3.3 Identification: (a) All reproduction weapons used in demonstrations will have permanent identification markings placed in an inconspicuous location. (b) A complete inventory of firearms will be maintained by serial number, manufacture, model, NPS property number, barrel length, caliber, and location of identification marking on the firearm.

XX.4 BLACK POWDER TRANSPORTATION

XX.4.1 Regulatory Requirements: Because federal requirements are complex, NPS transportation should be avoided whenever possible. Explore all avenues to get direct delivery to the park by the distributor before undertaking National Park Service transportation.

XX.4.2 Local Regulation: State, county and municipal authorities shall be contacted before transporting black powder through their jurisdictions to insure compliance with all existing regulations.

XX.5 RANGE SAFETY

XX.5.1 Local Zoning Requirements: (a) Local zoning codes and authorities shall be consulted before designing demonstration ranges on park lands. Regulations and local sentiment regarding noise or potential hazards of blank firing must be considered before the program is implemented. (b) Refer to range standards in the Historic Weapons Program Manual.

XX.5.2 Park Requirements: Suitability of park lands must be assured. Maintaining the minimum cleared area shown on the range drawings in the Historic Weapons Program Manual is essential to keeping undetected visitors out of the danger zone. Whenever possible the site should also provide natural barriers to noise and encroachment.

XX.6 AMMUNITION PREPARATION

XX.6.1 Small Arms: (a) In addition to strictly following the procedures described in the approved small arms manuals, the park

historic weapons supervisor will insure that paper cartridges are made neatly, using the proper caliber former, and also that powder loads do not exceed maximum loads. (b) Small arms cartridges should be strictly accounted for, and unused cartridges returned to the magazine. (c) Small arms cartridges may be made in quantity in advance, however they should be used within 90 to 120 days of manufacture.

XX.6.2 Artillery: (a) In addition to strictly following the procedures required in the approved artillery manuals the park demonstration supervisor will insure that aluminum foil cartridges are made neatly using a former of the proper size, that the "projectile end" of the cartridge is obvious (especially if non-explosive filler in a separate container has been added to extend the length of the cartridge), and that the powder loads do not exceed the maximum of Fg or coarser powder listed in the table of maximum loads in the Historic Weapons Program Manual. (b) Artillery cartridges can be made in advance of the demonstration, however they should be used within 30 days of manufacture.

XX.6.3 Loose Powder: Loose powder must never be allowed in a demonstration area. Friction primers must be kept separately in Cannoneer No.4's pouch or stored in a tin box in the limber tray. Under no circumstances will they be stored loose in the limber chest with cartridges.

or

The stoppered powder horn used for priming artillery pieces will contain only enough powder for the demonstration and a possible misfire. (Quill primers are preferred).

XX.6.4 Damaged Cartridges: All torn or damaged cartridges will be destroyed by soaking in water until the powder is dissolved and the remains will be disposed in a safe place. Under no circumstances will torn or damaged cartridges be returned to the magazine.

XX.6.5. Artillery Ignition Devices: Only slow match, quill primers, and approved commercially available friction primers and kits will be used. The use of port-fires is prohibited.

XX.7 VISITOR SAFETY

XX.7.1 Physical Barriers: (a) Physical barriers are required to keep visitors at the safe distances indicated on the range drawings in the Historic Weapons Program Manual. If natural features are inadequate to restrain visitors, ropes, fences or other artificial barriers will be used. (b) NO VISITOR WILL BE ALLOWED IN FRONT OF A LINE PERPENDICULAR TO THE MUZZLE OF A DEMONSTRATION WEAPON DURING THE DEMONSTRATION.

XX.7.2 Demonstration Interpreter: (a) One person separate from the demonstration will control each demonstration in which multiple demonstrators are involved. This individual may be the park's historic weapons supervisor, or a volunteer or employee trained by the historic weapons supervisor. (b) This person is in addition to the demonstrators or artillery detachment and assures the range is clear, all range safety procedures are being followed, and the demonstration is explained adequately to the visitor. (c) The demonstration interpreter will be assisted by additional range lookouts as necessary.

XX.7.3 Misfires: (a) In case of weapon misfires, the demonstration interpreter will explain the situation and procedures to visitors, keeping them safely in place until the weapon is discharged or rendered safe. (b) If attempts fail to correct a misfire, small arms will be removed from the area. In the case of artillery, visitors will be removed from the demonstration area. Once visitors have been removed, prescribed unloading procedures will be followed. (c) All parks must have a written misfire plan approved by the regional inspector prior to initiating any weapons demonstrations.

XX.7.4 Visitor Warnings: Before actually firing, the demonstration interpreter will warn visitors of the loud noise, recommending caution to people with hearing aids and requesting control of children and pets.

XX.7.5 Handling of Weapons by Visitors: (a) Visitors will not be allowed to touch or handle any weapon or equipment containing black powder. Visitors may be permitted to touch unloaded firearms provided they are kept under physical control by the demonstrator. (b) Visitors are prohibited from touching or handling any edged weapon.

XX.8 EMPLOYEE SAFETY

XX.8.1 Use of Manuals: All demonstrations shall follow the approved National Park Service manual for the particular weapon involved. Demonstration of types of weapons lacking formal manuals will adhere to the basic safety precautions of the manual of arms for the most similar military weapons as specified in manuals of that historic period.

XX.8.2 Protective Clothing: For protection from flash burns, all demonstrators firing black powder firearms will wear natural fiber or skin long-sleeved outer garments or full uniforms as appropriate to the historical period. Special care should be exercised with worn, thin, or fringed clothing.

XX.8.3 Hearing Protection: All demonstrators will wear approved hearing protection during a firing demonstration.

XX.8.4 Eye Protection: Prescription eyeglasses provided to employees and volunteers by the National Park Service shall have safety lenses of sufficient size to provide reasonable protection to the wearer's eye.

XX.8.5 Other Protective Garments: For artillery demonstrations, all-leather gauntlets similar to welder's gloves shall be worn by the cannoneer who sponges and rams the piece. Flexible leather gauntlets shall be worn by the cannoneer who inserts the cartridge. A thumbstall will be used by the cannoneer tending the vent.

XX.8.6. Artillery Firing Frequency: Artillery shall not be reloaded more frequently than once every 10 minutes. Individual parks may establish longer periods between firing, if they wish.

XX.9 PROGRAM MANAGEMENT

XX.9.1 Multiple Supervisors: In parks having more than one certified historic weapons supervisor, the superintendent shall designate in writing a program coordinator.

XX.9.2 Types of Weapons Supervised: (a) The types of weapons used in demonstrations are restricted to only those black powder weapons that the area's certified historic weapons firing supervisor has been officially trained and authorized for, as listed on his or her certificate. (b) Weapon types not listed on the certificate may not be fired in the park. This applies to outside individuals, groups and VIPs, as well as National Park Service personnel. There will be no exceptions.

XX.9.3 Loss of Certified Supervisor: (a) If a park permanently loses its certified historic weapons supervisor, it must terminate all historic weapons firing demonstrations until a new supervisor has been trained and certified.

XX.9.4 Assistance to Other NPS Areas: (a) A park may request a certified historic weapons supervisor from another park to assist with special events, or to manage historic weapons firing demonstrations on a temporary basis due to the loss of certified personnel. The request should include a description of the demonstration program and types and uses of the historic weapons involved. (b) The request will be in writing and signed by the superintendent. A request for assistance by a superintendent authorizes the historic weapons supervisor to enforce all applicable National Park Service safety standards.

XX.9.5 Assistance to Non-NPS organizations: (a) Certified historic weapons supervisors may provide information about National Park Service historic weapons training standards, manuals, policies and related information to other agencies, organizations, groups and individuals. (b) Historic weapons

supervisors shall not supervise firing demonstrations, battle re-enactments, firing demonstrations, ceremonial salutes or similar activities taking place on non-NPS property sponsored by other agencies or organizations. (c) Only National Park Service historic weapons instructors may instruct in courses sponsored by other federal, state or local agencies. National Park Service sponsored training does not confer certification on non-National Park Service personnel.

XX.9.6 Off-Site Firing Demonstrations: (a) Off-site firing demonstrations conducted by qualified NPS staff or volunteers are permitted. (b) All requirements of the NPS Historic Weapons Safety Standards will be followed.

XX.9.7 Report of Accidents and Incidents: (a) Historic weapons supervisors will report all injury-related accidents to their regional historic weapons inspector within 24 hours of the incident using the format described in the Historic Weapons Program Manual. (b) Historic weapons supervisors will report all significant incidents to their regional inspector within 24 hours of the incident using the format described in the Historic Weapons Program Manual. A significant incident is defined as any occurrence in which the safety of a demonstrator may have been placed in jeopardy, an incident resulting in property damage or an incident which may have service-wide safety implications.

XX.9.8 Annual Historic Weapons Program Summary: The park historic weapons supervisor will submit an annual program summary by December 31 of each calendar year to the service-wide historic weapons advisory team.

XX.10 RESPONSIBILITIES, TRAINING AND CERTIFICATION OF HISTORIC WEAPONS PERSONNEL

XX.10.1 Historic Weapons Supervisor

XX.10.1.1 Historic Weapons Supervisor Program Responsibilities:

(a) All historic weapons firing demonstrations within the park must be under the supervision of an officially trained and certified career, career-conditional, or term National Park Service employee, 21 years of age or older, who shall be responsible for the enforcement of all safety standards and precautions relating to demonstrations in that area. (b) Any park with a regular, recurring historic weapons program shall have a current historic weapons supervisor on its staff. (c) Those parks without regular, recurring demonstrations or events must request a certified historic weapons supervisor from another park to supervise special events or programs (see XX.9.4)

XX.10.1.2 Historic Weapons Supervisor Training Responsibilities:

(a) The historic weapons supervisor is responsible for training

persons involved in demonstrating historic weapons in his or her park on a regular and recurring basis. (b) This training must include a thorough review of National Park Service standards for historic weapons firing and the approved manual for the particular weapon involved. The historic weapons supervisor is responsible for documenting any training provided. (c) Documentation must include name of trainee, description of competencies being taught, hours of training, and a record of which competencies were met or unmet by the trainee.

XX.10.1.3 Historic Weapons Supervisor Certification: (a) Certification for park historic weapons supervisors is obtained only by demonstrating mastery of the required competencies described in the historic weapons supervisor training curriculum to the satisfaction of a certified historic weapons instructor. See the Historic Weapons Program Manual for required competencies. (b) Certification is valid to the end of the calendar year four (4) years from the certification date and is limited to only those historic weapon types listed on the certificate. (c) The Superintendent must authorize certified historic weapons supervisors to carry out their function by signing the certificate.

XX.10.2 Historic Weapons Demonstrator

XX.10.2.1 Minimum Age Requirement: The minimum age of a historic weapons demonstrator is 16 years.

XX.10.2.2 Historic Weapons Demonstrator Responsibilities: Historic weapons demonstrators will adhere to all National Park Service rules and regulations and only present programs in accordance with the themes and approaches approved by the park's historic weapons supervisor.

XX.10.2.3 Historic Weapons Demonstrator Competency: All persons involved in demonstrations of historic weapons in NPS areas will be required to demonstrate their competency in the use of the weapon to the satisfaction of the park historic weapons supervisor. Competency is met after successfully meeting the criteria of the demonstration checklist in the Historic Weapons Program Manual.

XX.10.3 Historic Weapons Demonstration Interpreter

XX.10.3.1 Historic Weapons Demonstration Interpreter Responsibilities: (a) The park's historic weapons supervisor, or persons (employee or volunteer) trained by the historic weapons supervisor will control each firing demonstration involving multiple demonstrators. (b) This person is in addition to the demonstrators or artillery detachment and assures the range is clear, all safety procedures are being followed, and the demonstration is explained adequately to the visitor. (c) The

demonstration interpreter will be assisted by additional range lookouts as necessary.

<REFER to 16.7.2 under Visitor Safety Section>

XX.10.3.2 Historic Weapons Demonstration Interpreter Competency:

The historic weapons demonstration interpreter will be required to demonstrate his/her competency regarding knowledge of National Park Service range safety requirements, misfire procedures, appropriate demonstration techniques and any park specific requirements to the satisfaction of the park's historic weapons supervisor.

XX.10.4 Historic Weapons Instructor

XX.10.4.1 Historic Weapons Instructor Responsibilities: Certified historic weapons instructors are responsible for providing training and reviewing competency requirements for the certification of National Park Service historic weapons supervisors.

XX.10.4.2 Historic Weapons Instructor Certification: To be certified as an historic weapons instructor, one must hold a current historic weapons supervisor certification for the weapons or topic being taught, and must have demonstrated mastery of the required competencies described in the historic weapons instructor training curriculum to the satisfaction of the Interpretation and/or Risk Management Training Managers. See the Historic Weapons Program Manual for the required competencies.

XX.10.5 Historic Weapons Regional Inspector/Point of Contact

XX.10.5.1 Historic Weapons Regional Inspector Responsibilities:

(a) Each Regional Director will designate a regional historic weapons inspector and/or a Lead Point of Contact, who is responsible for providing program support and conducting regular on-site reviews of park programs within the region. (b) Where a region might have a high number of parks or complex historic weapons operations, additional inspectors, or specialist inspectors may be designated by the Regional Director c) Where a region does not have many active parks, a region may share an inspector with another region. (d) Refer to role and function statement in Historic Weapons Program Manual.

XX.10.5.2 Historic Weapons Regional Inspector Qualifications:

Regional historic weapons inspectors must hold a current historic weapons supervisor certification and be currently supervising an active historic weapons demonstration program.

XX.10.6 Historic Weapons Advisory Team

XX.10.6.1 Historic Weapons Advisory Team Responsibilities: An

advisory team consisting of subject matter specialists will provide advice to the WASO Program Manager, Division of Interpretation and Education and the Chief, Division of Risk Management regarding historic weapons program oversight and recommending appropriate action to be taken or changes in policy or procedures to the Associate Director for Interpretation and Education. Refer to the Historic Weapons Program Manual for the team's charter.

XX.10.6.2 Historic Weapons Advisory Team Qualifications: Refer to the Historic Weapons Program Manual for a description of the qualifications and selection procedures required for the various members of the team.

XX.11 INSPECTIONS

XX.11.1 Weapons Inspection: Each weapon used in the park firing demonstration will be given a thorough visual inspection by the park historic weapons supervisor at the beginning of each day the weapon is to be fired. Visual inspection will follow the appropriate checklist included in the Historic Weapons Program Manual.

XX.11.2 "Tagged-Out" Weapons: (a) Any weapon failing to pass according to the approved checklist in the Historic Weapons Program Manual will be tagged with a description of the problem and removed for repairs. (b) Following repairs, the inspection checklist will be applied again to insure compliance before removing the tag and returning the weapon to service.

XX.11.3 In-Park Demonstration Inspections: (a) All park historic weapons firing demonstrations will be inspected by the park's historic weapons supervisor using appropriate checklists from the Historic Weapons Program Manual at regular intervals to maintain compliance with the standards and appropriate manuals. (b) The regional historic weapons inspector will review programs according to the schedule and checklist outlined in the Historic Weapons Program Manual.

XX.12 NON-NATIONAL PARK SERVICE GROUPS

XX.12.1 Required Supervision: To provide proper safety supervision, a minimum ratio of one certified historic weapons supervisor per forty small arms demonstrators and/or two artillery pieces is required. Additional historic weapons supervisors may be required for complex events.

XX.12.2 Advance Notification: The park's historic weapons supervisor must notify the regional historic weapons inspector at least 30 days in advance of any planned weapons demonstration on National Park Service land that more than forty small arms

demonstrators and/or two artillery pieces.

XX.12.3 Competency Requirements: (a) All non-National Park Service individuals or groups who demonstrate using historic weapons will operate as VIPs or under a special use permit. (b) All persons involved in these demonstrations shall demonstrate competency to the historic weapons supervisor in the use of the weapon by successfully meeting the criteria of the demonstration checklist included in the Historic Weapons Program Manual.

XX.12.4 Written Agreements: (a) The park will provide all non-National Park Service individuals and groups with a copy of the Director's Orders on Historic Weapons Demonstrations Safety Standards and the appropriate approved NPS weapons manual at least 30 days prior to the program. (b) It is the responsibility of the individual or group to certify in writing that they have read and will adhere to the standards they have received from the park. This written agreement must be received by the park prior to the demonstration. (c) Any violation of the standards may result in immediate cancellation of the demonstration and removal of the individual or groups from further weapons firing demonstrations in the park.

XX.12.5 Ammunition provided by outside groups: (a) All black powder brought into a NPS area by non-National Park Service individuals and groups for use in firing demonstrations will be in the form of prepared cartridges and placed under National Park Service supervision. (b) Cartridges will be prepared in accordance with standards described in the Historic Weapons Program Manual. (c) Bulk or loose powder is prohibited.

XX.12.6 Inspections: (a) Each weapon used in the park firing demonstration will be given a thorough visual inspection by the park historic weapons supervisor at the beginning of each day the weapon is to be fired. Visual inspection will follow the appropriate checklist included in the Historic Weapons Program Manual. (b) Members of non-National Park Service groups shall submit to an on-site safety inspection by the historic weapons supervisor of their cartridge boxes and other equipment before being permitted to participate in National Park Service demonstrations. (c) This requirement applies to non-firing events as well.

XX.12.7 Demonstration Supervision: (a) The park's historic weapons supervisor must personally observe and supervise all firing demonstrations conducted by non-National Park Service individuals and groups within the park's boundaries. (b) The historic weapons supervisor must be prepared and authorized by the park superintendent to act immediately on any violation of the Director's Orders for Historic Weapons Demonstration Safety Standards including canceling the program and removing the individual or group from further firing demonstrations as

appropriate.

XX.12.8 Ceremonial Firings: (a) The discharge of weapons during ceremonial events will be regulated under a special use permit. (b) Active military units are exempt from these policies for ceremonial firings. (c) Refer to the Historic Weapons Program Manual for a sample listing of special park conditions to be included in a permit.

XX.12.9 Media Events/Commercial Filming: (a) Media events, theatrical presentations, commercial photography and filming will be regulated under a permit. (b) Historic weapons standards will be applied to any firing of black powder weapons in the park relative to these activities.

XX.12.10. Pyrotechnic Displays: (a) Pyrotechnic displays will be regulated under a special use permit. (b) Pyrotechnic displays on NPS lands must be supervised by a licensed technician. (c) Historic weapons supervisors are not certified to supervise pyrotechnic displays and will not be responsible for supervising such activities.