

Fort Sill Regulation 385-64

Safety

Explosives Safety Management Program (ESMP)

**Department of the Army
Headquarters, USAFCoEFS
455 McNair Avenue, Suite 100
Fort Sill, OK 73503
1 February 2023**

UNCLASSIFIED

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Effective 01 February 2023

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Explosives Safety Management Program (ESMP)

History. This ESMP identifies the roles and responsibilities of all organizations with an A&E mission at Fort Sill including any service components, contractors, and/or tenant activities. The term USAFCoEFS incorporates all organizations assigned or attached on Fort Sill to include Logistics Readiness Command (LRC) and United States Army Garrison (USAG) Regulation.

Summary. This regulation provides all personnel with Ammunition management procedures on Fort Sill. This regulation is distributed and published solely through the Directorate of Human Resources, Administrative Services Division Homepage at:
<https://sill-www.army.mil/USAG/publications.html>

Supplementation. Local supplementation of this regulation requires coordination with USAFCoEFS Safety Office.

Suggested Improvements. The proponent office of this regulation is USAFCoEFS Safety Office. Send comments and suggested improvements on Department of Army (DA) Form 2028, Recommended Changes to Publications and Blank Forms, to Commander, USAG and Fort Sill, ATTN: Safety Office, Fort Sill, OK 73503.

Applicability. Procedures outlined in this regulation apply to all Active-Duty units, activities, organizations, dependents, contractors, National Guard, Reserve units and other agencies that use ammunition services at Fort Sill.



DANIEL T. BLACKMON
Colonel, GS
Chief of Staff



M. LORENZO HELLER
Director, Human Resources

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***This regulation supersedes FS regulation 385-64, 10 December 2021.**

SUMMARY of CHANGE

FS REG 385–64
Explosives Safety Management Program

This major revision, dated 28 December 2022--

- Aligns the risk acceptance authority for safety standard deviations with the current CG policy memorandum for risk acceptance authority.
- Updates the FCoE Safety Director duties to include:
- Participation in the Fort Sill master planning process and annual review of the Fort Sill master plan, ensure adequate communication between safety, firefighting, security, emergency response, ammunition surveillance, and storage personnel.
- Annually review and document the installations' explosive location map, ensure required explosive safety site plans, submissions, and licensing's are accomplished.
- Maintain LPS test result records, and review and issue ammunition storage licenses (paras 1-8b (7), (8), (11), (12), (13), (14)).
- Removes the requirement of the USAG Commander to implement the A&E amnesty program (para 1-8c (3)).
- Moves all tenant organizations explosive safety programs under the FCoE Safety Office for support (throughout).
- Changes the A&E working group to the Explosives Safety Working Group, and the Ammunition Explosives Safety Board to the Explosives Safety Council (para 1-8d (15)).
- Changes LPS visual inspections from every 12 months to every 10 months, and bi-annual testing from every 24 months to every 20 months, to prevent overdue inspections, or testing scheduling conflicts (para 1-8g (2)).
- Changes ESMPB to Explosives Safety Certification Board (para 1-8i (3)).
- Reduces amnesty collection point to 4 locations controlled by the QASAS (para 4-4c).
- Added the two designated areas for FARRP operations (para 4-7c).
- Changes requirement for all Deviation Approval Risk Acceptance Documents (DARAD) to

be routed through the FCoE Safety Office (para 4-10b).

- Changes wording from, The Fort Sill Senior Commander is responsible for the overall Explosives Safety Management Program of the installation. **To.** The USAFCoEFS Senior Commander is responsible for the overall Explosives Safety Management Program of the installation. (Para 1-6 a. (1)).
- Changes wording from maintains risk acceptance authority for safety standard deviations as outline in DA Pam 385-30, Risk Management, table 4-1 for high-risk exemptions and waivers. Risk acceptance authority for medium and below may delegate to the next lower-level O-6 Commander in writing. **To.** Maintains risk acceptance authority for safety standard deviations IAW current CG Policy on Risk Management and Risk Acceptance Authority. (Para 1-6. A. (2)).
- Removed para 1-6. C. (3) IAW IMCOM 385-10; Implement ammunition and explosives amnesty program and provide amnesty containers at each ammunition supply point.
- Changed requirements for USAG Safety Manager 1-6. D. (1).
- Garrison Safety Office is referred to as GSO
- Changed wording from 12 through 17 To 15 through 20 (Para 3-5 a).
- Added wording (by having the commander sign the FS 700 this serves as the commander's authorization to store small quantities of ammunition for operational purposes. DA Form 581 must accompany this FS 700 Form).
- Changed responsibilities from GSO to FCoE Safety Office (para 3-9 b).
- Changed responsibilities from GSO to FCoE safety Office (4-10. b.)
- Removed paragraph C. (para 4-10. C.)
- Updates the Fort Sill Arms room ammunition storage request packet (originally Appendix G, now Appendix D).
- Consolidated Appendices D, E, F and G into Appendix D. (Updated remaining appendices and figure numbering as necessary).
- Makes other minor administrative and grammatical changes (throughout).
- Updated Fort Sill 700 Ammunition Storage License dated January 2023 (Appendix E).
- Removed CG Risk Acceptance Authority Memorandum.

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Chapter 1 Overview

1-1. Purpose

This Explosives Safety Management Program (ESMP) establishes and implements the ESMP for USAFCoEFS Commands with Ammunition & Explosives (A&E) missions and in developing their specific explosives safety programs to protect personnel and resources. This policy complies with the requirements set forth in the Defense Explosive Safety Regulation (DESR) 6055.9E, and the Department of Defense Explosives Safety Board (DDESB); Department of Defense (DOD) Instruction 6055.16, Explosive Safety Management Program; Army Regulation (AR) 385-10, The Army Safety Program; Department of Army Pamphlet (DA Pam) 385-64, Ammunition and Explosives Safety Standards and DA Pam 385-65, Explosive and Chemical Site Plan Development and Submission.

- a. This ESMP identifies the roles and responsibilities of all organizations with an A&E mission at Fort Sill including any service components, contractors, and/or tenant activities.
- b. A&E safety standards and requirements are design to protect against serious injury, loss of life and damage to property, but not intended to be so rigid as to prevent USAFCoEFS from accomplishing its mission. When deviating from the regulation mentioned above, the appropriate managing authority must weigh the added risk to personnel and property against strategic and other compelling reasons that necessitate such deviations.
- c. Provides the policy and framework for addressing the 16 elements; organization and staffing, site planning, facility conformance, emergency response, tenants, master planning, ranges, contractors, accident prevention program, facility maintenance, demilitarization/destruction, risk management, explosives safety issuances, records management, inspections/evaluations/audits, and training required by AR 385-10, paragraph 5-3(a) and DA Pam 385-64 fig 1.1.

1-2. Policy

USAFCoEFS facilities and operations involving A&E must comply with the requirements of all applicable Federal, DOD and Army Regulations, and this plan. The following minimum requirements shall govern explosives facilities and A&E operations at Fort Sill:

- a. All new facilities, structures, or operations where an A&E operation will be conducted, will require submission of an Explosives Safety Site Plan (ESSP) IAW requirements of DA Pam 385-65 and DA Pam 385-64.
- b. Deviation Approval and Risk Acceptance Document (DARAD) and deviations to

explosive safety standards can only be granted after it has been determined that compliance with applicable essential missions must still be performed, or other necessary mission and related compelling reasons exist.

c. Standing Operating Procedures (SOP's) are an essential and integral part of any A&E operation. SOPs are mandatory for all explosives operations. All explosives' operations will be performed per the provisions of a current and approved SOP or Test Plan. Unless prohibited by law or regulation, delegate authority to others to conduct duties as deemed appropriate.

d. The cardinal principle in any operation, activity or test involving explosives is to limit the exposure to a minimum number of personnel, for a minimum time, to a minimum amount of A&E consistent with safe and efficient operations.

1-3. Applicability

The provisions of this ESMP are applicable to all units, activities, and tenants that have operations and activities involving the handling, storage, shipping, transporting, receiving and/or disposal of A&E on Fort Sill.

NOTE: Throughout this ESMP, A&E will mean not only conventional ammunition but also nonstandard A&E, commercial A&E, chemical agent A&E, and ordnance and explosives clean-up operations when and where appropriate.

1-4. References

Required and related publications and prescribed references and forms are listed in Appendix A.

1-5. Explanation of abbreviations and terms

Abbreviations and terms used in this regulation are explained in the glossary.

1-6. Roles and Responsibilities

a. Senior Commander:

(1) The USAFCoEFS Senior Commander is responsible for the overall Explosives Safety Management Program of the installation.

(2) Maintains risk acceptance authority for safety standard deviations IAW current CG Policy on Risk Management and Risk Acceptance Authority.

(3) Appoint a qualified Safety Manager or other certified Occupational Safety and Health professional as the FCoE/FS Explosive Safety Manager to manage all aspects of the USAFCoEFS ESMP related actions.

b. FCoE Safety Director will:

(1) Establish and manage the installation ESMP and is the Fort Sill point of contact for all explosives safety actions. Supporting agencies (e.g., USAG Safety, LRC, DPW, QASAS) will support the FCoE Safety Directors requests.

(2) Execute the ESMP IAW DA Pam 385-64. Identify requirements for explosives licenses, explosives safety site plans, safety submissions, explosives safety deviations, waivers, and exemptions (Secretarial Certifications), coordinate with staff, Garrison, installation, and/or unit support personnel as needed. Ensure all Potential Explosion Sites (PES's) and Exposed Sites (ES), both military and civilian, are indicated on approved explosives safety site plans and submissions.

(3) Monitor ammunition and explosives operations for compliance with explosives safety standards.

(4) Review explosives safety actions before forwarding to the MACOM of the requesting organization to ensure operational needs and safety implications are clearly defined and projected requirements are stated.

(5) Evaluate and make recommendations for approval of requests for explosives safety waivers and exemptions.

(6) Serve as a voting member of the Explosive Safety Council (ESC that meets at a minimum semi-annually.

(7) Actively participate in the garrison or installation master planning process and annually review the installation master plan to ensure construction projects are not planned inside Explosives Safety Quantity Distance (ESQD).

(8) Adequate communications between safety, firefighting, security, emergency response, ammunition surveillance, and storage personnel.

(9) Ensure responses to findings from DDESB surveys or Ammunition Review and Technical Assistance visits from the U.S. Army Defense Ammunition Center (DAC) are developed, reviewed, and submitted to meet time requirements. Director shall provide reports through the chain of command to ensure higher headquarters are aware of any adverse finding. The Safety Director is responsible to monitor the status of corrective actions in response to DDESB or DAC findings.

(10) Ensure safety inspections are conducted at least annually, for all TRADOC organization areas where A&E related activities are conducted. Maintain a list of all such areas and records of inspections. Maintain records for

five years.

(11) Annually review and document the installation's explosive's location map to monitor encroachment within ESQD.

(12) Ensure required explosives safety site plans, submissions, and explosives licenses are accomplished.

(13) Maintain the lightning protection system test results records for the last six inspections cycles, and review yearly for trend analysis. Provide copies to FCoE Safety Director.

(14) Review and issue ammunition storage licenses.

c. USAG Commander will:

(1) Ensure operating, training, and construction plans and budget provide adequate resources to comply with ESMP requirements and to mitigate to the extent possible any explosive safety hazards per AR 385-10.

(2) Serve as a voting member of the ESC that meets at a minimum semi-annually.

d. USAG Safety Manager will:

(1) Identify requirements for explosives licenses, explosives safety site plans, safety submissions, DARADs, waivers and exemptions (Secretarial Certification), for all USAG organizations and coordinate with Garrison, installation staff, and unit support personnel as necessary. Ensure all USAG Potential Explosive Sites (PES) and Exposed Sites (ES) are indicated on approved explosive safety site plans and submissions.

(2) Ensure that appropriately trained personnel review all plans and protective construction designs for explosive handling, manufacture, testing, storage, surveillance, maintenance, response actions, demilitarization, and disposal operations within USAG for compliance with explosive and occupational safety standards IAW DoD Directive 4715.11.

(3) Ensure safety inspections are conducted at least annually, for all USAG areas where A&E related activities are conducted. Maintain a list of all such areas and records of periodic inspections and provide copies of each to the FCoE Safety Director. Maintain records for five years.

(4) Monitor A&E uploads and other activities for USAG organizations that involve the transportation and storage of A&E to ensure that explosive safety requirements are met.

(5) Review USAG policies, SOPs, and directives for compliance with explosives safety requirements.

(6) Review USAG DARADs and Secretarial Certification's for completeness and accuracy prior to forwarding to the FCoE Safety Director for approval and submission.

(7) Maintain a copy of all USAG approved DARADs, waivers, exemptions, and/or deviations; and advise incoming Garrison Commanders of the respective corrective action plans for each situation.

(8) Ensure USAG procedures are developed and in place for:

(a) Maintaining fire symbols and chemical hazard symbols current with actual A&E stored at a particular location.

(b) Ensuring that USAG personnel responsible for managing A&E keep current information on the type and location of A&E storage and provide this information to safety as well as firefighting personnel.

(c) Notifying the FCoE Safety Director when fire or chemical hazards change.

(d) Ensuring USAG personnel who supervise, handle, or transport A&E have the appropriate training and local certification.

(e) Maintain current maps, showing all USAG explosives locations with fire and chemical hazard symbols, including current facility response cards and notebooks for A&E storage by fire station communication centers.

(9) Monitor USAG A&E operations conducted on the installation to ensure all DOD, Federal, state, local, and contractor participants understand and comply with applicable explosives safety standards.

(10) Monitor, on a periodic basis, USAG A&E-related activities to evaluate explosives safety and the integration of risk management. Activities that should be monitored include, but may not be limited to the following:

(a) A&E storage, handling, and operating sites.

(b) A&E transportation activities.

(c) Public demonstrations to include but not limited to "Organization Day" and "Independence Day" type activities.

(11) Assist USAG Commander, Directors and staffs with resolving explosives safety concerns associated with real property known or suspected to contain Munitions

and Explosives of Concern (MEC).

(12) Investigate and report A&E accidents, incidents, and mishaps, per DESR 6055.09, AR 385-10, AR 75-1, Malfunctions Involving Ammunition and Explosives and DA Pam 385-40, Army Accident Investigations and Reporting; document and disseminate explosives safety lessons learned.

(13) Brief the USAG command and staff, as necessary, to keep leadership informed of explosives safety requirements, issues, and the status of the USAFCoEFS ESMP.

(14) Provide FCoE Safety Director copies of all A&E inspections, testing, and results.

(15) Serve as a member of the Explosives Safety Working Group (ESWG) which meets every 2nd Thursday, as a voting member of the Explosives Safety Certification Board (ESCB) that meets quarterly, and a representative on the ESC that meets at a minimum semi-annually.

(16) Ensure USAG safety personnel involved in inspections of ammunition or explosive sites have received the appropriate training to perform duties in a competent manner. Provide training records for these individuals to the FCoE Safety Office for ammo handler certifications.

e. Quality Assurance Specialist-Ammunition Surveillance (QASAS) will:

(1) Conduct periodic (at least annual) inspections of the ASP, range complex ammunition issuing points, and unit arms rooms as requested. Inspections will be conducted to evaluate the safety of A&E storage, packaging, handling, surveillance, maintenance, demilitarization, and disposal activities.

(2) Provide technical assistance to commanders, armorers, and safety managers as requested.

(3) Prepare explosives safety DARADs and Secretarial Certifications for matters involving the ASP and staff through FCoE Safety and other applicable offices.

(4) Review protective construction designs for A&E operational facilities for compliance with explosives safety standards at least every five years.

(5) Conduct safety inspections of A&E handling, storage, use, maintenance, and disposal areas at least annually.

(6) Monitor A&E uploads and other activities that involve the transportation, storage or conduct of other A&E-related operations which a DARAD or Secretarial Certification has been approved and/or is awaiting approval to ensure explosive safety

requirements are met.

(7) Review QD compliance of existing and planned facilities both prior to and after construction. Review SOP's and directives for compliance with explosives safety requirements.

(8) Oversee and maintain the FCoE/FS A&E Amnesty Program. Inspect A&E recovered to determine whether it is safe to handle and can be returned to the logistics system for issue.

(9) Monitor A&E-related operations to assist Army units with understanding and complying with explosive safety program requirements.

(10) Conduct and record a visual inspection of the ASP and Ammunition Holding Area (AHA) lightning protection systems (LPS) annually and provide the FCoE safety office a copy of the results. Maintain a copy of the LPS test results and records for the last six inspection cycles.

(11) Monitor and evaluate A&E-related activities, including the following:

(a) Production, storage, handling, maintenance, operating, demilitarization, and disposal.

(b) Transportation of A&E.

(c) Weapon systems modifications, special exercises, and test programs.

(d) Contingency planning.

(e) Explosives safety training.

(12) Respond and investigate ammunition malfunction incidents.

(13) Ensure ESMP policies and procedures are followed for operational and tactical A&E-related activities, such as:

(a) Siting and operation of Ammunition Holding Area (AHA), and Ammunition Transfer Points (ATPs)

(b) Siting of uploaded tactical vehicles.

(c) Relief in place and transfer of authority A&E operations.

(d) A&E retrograde, reconstitution, and reset activities in a tactical area of operation.

(e) Contractor conducted A&E Operations.

(14) Review contractor Production Work Schedule (PWS) to ensure all A&E operations are IAW regulatory requirements. Non-compliant findings are submitted to the Logistics Readiness Center (LRC) Contracting Officer Representatives (COR) and LRC Safety Manager for action.

(15) Monitors all A&E and messages and take appropriate action directed by Joint Munitions Command (JMC) and other military services.

(16) Serve as a member of both the ESWG and the ESC, as well as a voting member of the ESCB.

f. Commanders, Directorates and Tenants: having responsibilities for A&E operations and facilities on USAFCoEFS will:

(1) Establish and maintain QD limits for explosive facilities and operational sites and provide any changes to the FCoE Safety Office.

(2) Develop and coordinate required ESSPs and final safety submissions with FCoE Safety. ESSPs and final safety submissions must have concurrence from the FCoE Safety office before they are submitted to the Director, U.S. Army Technical Center for Explosive Safety (USATCES).

(3) Develop and coordinate with the FCoE Safety Office design criteria for engineered control of explosive hazards.

(4) Develop and coordinate with the Brigade Safety Officer and FCoE Safety Office justification for explosives safety DARAD and deviations. FCoE Safety Office and Brigade will review DARAD and deviations on an annual basis to ensure accuracy and that the circumstances requiring the DARAD, or deviation have not changed.

(5) Develop A&E SOPs and test plans as required and coordinate concurrence with the FCoE Safety Office. Provide copies of new and updated SOPs and test plans as developed.

(6) Conduct regular surveys, walkthroughs, and inspections of A&E operations for compliance with explosives safety regulations and directives.

(7) Notify the FCoE Safety Office, Emergency response agencies and oversight authorities immediately of any accidents / incidents involving explosives or ammunition items.

(8) Ensure preparation of hazard analysis and risk assessments for all A&E operations, equipment, and facilities, as required.

(9) Participate in the DPW Real Property Planning Process to ensure operations do not affect operations of other Fort Sill activities, and vice versa.

(10) Allow safety representatives unlimited access to A&E areas, sometimes with short notice or no notice inspections.

(11) Ensure personnel are properly trained and licensed to handle and transport A&E.

g. Directorate of Public Works (DPW) will:

(1) Provide testing for LPS and/or grounding/bonding of ammunition and explosive storage, and operational facilities as required IAW DA Pam 385-64, chapter 17.

(2) Provide the facility managers with records of LPS, and grounding/bonding electrical tests for A&E storage facilities, airfields, and ranges. Physical testing inspections of all LPS (bonding checks) are required every 24 months (recommend scheduling for every 20 months to prevent any facility becoming non-compliant due to unforeseen situations that delay the inspection). Airfield grounding tests and visual inspections are required and recorded every 12 months (recommend scheduling every 10 months to prevent lapses). Results of these tests are kept on file for six cycles at the FCoE Safety Office.

(3) Provide engineering support necessary to ensure explosives safety standards are met.

(4) Ensure coordination with the FCoE Safety Office in the design, construction, and renovation of new or existing facilities. Ensure compliance with OSHA standards and prevent construction infringement per DESR 6055.09 and DA Pam 385-64 and DoD Directive 4715.11 on the Ammunition Supply Point, Army Airfield, Ammunition Holding Area, or other approved ammunition site plan locations.

(5) Provide review and documentation of existing and new facility physical security construction statement, DA Form 4604, every five years.

(6) Provide support of facility repairs in a timely manner and keep ESC updated on repairs and status.

h. Real Property Master Planning (DPW):

(1) Real Property Master Planning (RPMP) is a continual, collaborative, and integrated process, primarily performed at the installation level, reflective of mission requirements. To maintain this process, it is imperative that all tenants and component commands use the systems specified in AR 210-20, RPMP for Army Installations, when requesting changes or additions to the RPMP. The Senior Commander, or his/her

designated representative, participates in the Installation Real Property Planning Board (RPPB) to ensure that all new construction is properly sited according to explosives safety standards.

(2) Any real property known or suspected to contain MEC, recovered chemical warfare material IAW DESR 6055.09 and DA Pam 385-64, chapter 19, Unexploded Ordnance (UXO) IAW DA Pam 385-64, chapter 19, or Chemical Warfare Materiel IAW DA Pam 385-61 will be treated and handled accordingly. Master Planning maintains an A&E Master Plan map showing locations of A&E operations and quantity distance arcs for the Installation. The maps are developed by the FCoE and the Installation Master Planning department.

(3) The A&E Master Plan map includes the following:

(a) A&E hazard class, division, and the Net Explosives Weight (NEW) authorized at each site.

(b) A&E 'safety zones' required around each location based on ESQD criteria.

(c) Primary and alternate routes for the transport of A&E through the installation.

(d) Locations, outside of designated impact areas, authorized for the conduct of A&E operations to include loading/unloading of ground equipment, and arming and de-arming for aviation equipment (ATHPs and FARRPs)

(e) Vehicle upload and download areas (other than at authorized firing ranges – loading docks etc.).

(f) A&E support facilities. Locations of real property and facilities known or suspected to contain MEC, Material Presenting a Potential Explosives Hazard and areas where a munitions response (cleanup) have been completed, but residual hazards are known or suspected to be present.

(g) Date of the last map validation.

(h) Airfield locations designated for jettisoning or addressing hung A&E and gun-clearing operations as addressed in applicable regulatory policy.

(4) The FCoE Safety Office annually documents a review of the A&E Master Plan map to monitor encroachment within ESQD and ensure required explosives safety site plans, submissions and explosives licenses are accomplished.

i. Director, LRC 407TH AFSB will:

(1) Coordinate with DPW for testing LPS of ammunition and explosive storage

and operation facilities and airfield grounding points as outline in DA Pam 385- 64, chapter 17.

(2) Ensure ammunition is stored per the explosive's storage license and applicable explosives safety requirements. Inform all tenants, units, and satellite facility commanders of the license limits for facilities they occupy.

(3) Assist ASP and QASAS developing a training program to qualify personnel that handle A&E.

(4) Ensure personnel are trained to standard and records maintained.

(5) Serve as a member of the ESWG group which meets every 2nd Thursday and as a member of the ESCB that meets at a minimum semi-annually.

(6) Notify FCoE Safety of proposed new construction or conditions that require explosive site license modification, DDESB submissions, etc. Provide the following items for review upon request by the FCoE Safety Office:

(a) Maintain complete Explosive Safety Report, by storage facility, showing the Department of Defense Identification Code (DODIC), nomenclature, quantity, and total NEW to FCoE Safety upon request.

(b) Copies of the current LPS inspections report.

(c) Copy of work orders submitted for correction of safety deficiencies.

j. Mission Installation Contracting Command (MICC):

(1) All contracts involving A&E shall include Defense Federal Acquisition Regulation Supplement (DFARS), clause 223.370, Safety precautions for ammunition and explosives. DFARS, clause 223.370 requires use of DOD contract safety manual and safety oversight. This clause cannot not be removed without authorization from the appropriate command level. The lead contracting agency will review appropriate A&E contracts for other explosives safety requirements.

(2) In addition to the DFARS clause, all A&E contracts will require compliance with A&E safety requirements, mishap reporting provisions and the development of an A&E SOP as required by DESR 6055.09, AR 385-10, DA Pam 385-64 and DOD 4145.26-M, whichever is most stringent.

(3) For operations monitored by Defense Contract Management Agency (DCMA), the DCMA safety representative will coordinate any A&E safety issues with the FCoE Safety Office.

k. Contracting Officer Representative of companies with A&E operations will:

(1) Ensure that the proper chain of command is followed for A&E operations that involve contractors.

(2) Coordinate with appropriate contractor representatives and Government personnel in the chain of command during the conduct of hazardous operations as required.

(3) If contractors are involved in a A&E safety related incident, ensure prompt reporting to the appropriate authority or chain of command. All A&E related incidents must be reported immediately to the Supervisor, Commander, and Director. Immediately after management personnel notifications, notify the FCoE safety Office and the Contracting Officer.

(4) Coordinate with the Contracting Officer, applicable contractor personnel, FCoE safety Office and the Team Lead for any safety concerns occurring during A&E operations that involve contractors.

(5) Ensure all A&E handler and transportation training requirements are completed.

I. Managers and Supervisors of A&E operations and storage facilities will:

(1) Ensure personnel receive and document explosives safety training as required by DOD, Army, and/or service components command policy and standards.

(2) Ensure A&E contracts include appropriate explosives safety training requirements.

(3) Ensure every effort is taken to remove excess, unwanted, unneeded, or unknown A&E inventory from storage. Participate in Fort Sill Explosives Safety Council (ESC).

(4) Participate in Fort Sill ESWG.

(5) Coordinate with the FCoE Safety Office in the preparation of A&E safety site plans. Obtain higher HQ or component command concurrence of A&E safety site plans prior to submitting to FCoE Office for review and concurrence. Maintain the proper fire and chemical hazard symbols of A&E present within A&E facilities (unless specifically authorized not to do so, example: security concerns), and notify Fort Sill's installation Fire Department and FCoE Safety Office when those hazards change.

(6) Conduct periodic inspections and/or audits of A&E activities to ensure compliance with the activity SOP, DA Pam 385-64, and this regulation, including compliance with the Hazards of Electromagnetic Radiation on Ordnance (HERO) requirements.

(7) Ensure that A&E SOPs have been properly staffed and approved prior to starting operations, and that no deviations are allowed without proper review and approval.

(8) Prepare an Ammunition and Explosives Storage License for every separate A&E operating and storage location within the Fort Sill.

(9) In the event DoD and Army explosives safety requirements are not able to be met, a DARAD will be prepared by the owning organization, staffed, and approved at the appropriate level IAW DA Pam 385-30.

(10) Participate as required in A&E inspections and evaluations.

(11) Ensure that A&E mishaps are properly reported, investigated, and analyzed.

(12) Ensure all operations are performed in accordance with approved ESSPs, licenses, Deliberate Risk Assessment Worksheet (DRAW), and DARADs.

(13) Ensure facilities approved for A&E storage and operations are used for their intended purposes.

(14) Ensure that a DRAW (DD Form 2977) is completed prior to any A&E operations IAW ATP 5-19, Risk Management.

(15) Ensure that all operating personnel working with A&E are trained IAW DA Pam, 385-64, Table 1.1, have completed the Ammunition Handlers Class, and have a FS A&E Handlers Certification Card.

(16) Ensure all required tools and equipment are on hand and in serviceable condition for A&E operations, ensure personnel are properly trained and licensed to operate.

(17) Provide appropriate Personal Protective Equipment (PPE), ensure personnel are trained in its proper use, and enforce personnel are using PPE when required.

(18) Those that have an A&E Mission shall manage and staff their organization with an Explosives Safety Representative.

(19) Complete all required training IAW DA Pam 385-64 Figure 1.1.

(20) Ensure personnel are properly trained and licensed to handle and transport A&E.

m. Employees will:

(1) Follow their unit or organizations A&E safety requirements and this regulation.

(1) Use the PPE and protective devices provided.

(2) Develop safe working habits by following safe practice rules and regulations to protect themselves and fellow workers from injury.

(3) Read, sign, and adhere to all applicable A&E SOPs prior to beginning working.

(4) Properly secure all A&E loads when transporting munitions.

(5) Stop any operation that will cause or is likely to cause death or serious injury or property damage. Immediately notify a supervisor or safety specialist for further guidance. Do not proceed with any A&E operation that cannot be performed safely.

(6) Notify supervisor of all safety deficiencies.

(7) Not engage in any operations involving A&E unless certified.

a. G4 will: ensure that all personnel that transport A&E are properly licensed and endorsed with HAZMAT requirements.

b. BDE/BN Ammo Warrants (890), 89 Series SFC E-7, 761st ORD DET SFC, and an AMMO Rep for 100th BSB will participate in all scheduled ESWG via MS TEAMS meeting every 2nd Thursday. Units shall contact the FCoE Safety Office for scheduled dates and times and provide names of personnel that hold these positions.

1-7. Mishap Prevention Program

a. All activities with an A&E mission will have explosive safety is an integral part of their overall mishap prevention plan.

b. The plan will be tailored to the operation being conducted and will address the program elements required in AR 385-10 and DA Pam 385-10 as a minimum.

c. All activities will share lessons learned from mishaps and incorporate those lessons into their training program, policies, and procedures.

d. All activities will encourage personnel to stop unsafe acts.

e. All activities will establish frequent and reoccurring safety meetings to get all personnel involved in explosive safety matters.

1-8. Emergency Response

a. There are four designations for sites on Fort Sill where an explosive related emergency might occur:

- (1) Ammunition Supply Point
- (2) Ammunition Holding Area
- (3) Unit arms rooms
- (4) Various ranges

b. In the event of an A&E emergency, the Fort Sill Emergency Operations Center (EOC), among others as outlined below, will be notified. The EOC will determine whether the community should be warned. Warnings to the community would be made through the Fort Sill Security Warning System.

c. When making emergency notifications, be prepared to provide the following information:

- (1) Your name and location.
- (2) Phone number from where the call is being made.
- (3) Location of the emergency, including facility/range name, Bldg. #, and address.
- (4) Type of emergency: Fire, Chemical Agent, etc.

d. Other important information.

- (1) Number and condition of victims.
- (2) Location and extent of situation, hazard, fire, etc.
- (3) Involvement of Hazardous Materials. (What type. If available, give product name and/or describe any markings, labels, or placards).
- (4) What is needed?

e. DO NOT HANG UP FIRST. Let emergency personnel hang up first. After the call, station someone to direct Emergency Response vehicles to the scene of the emergency.

f. Emergency Notifications Contact Information.

Table 1-1 Helpful Phone Numbers	
Police and Fire Emergency.....	911 Fort Sill
Installation Operations Center	(580) 442-3240/3241/3329
Explosive Ordnance Disposal.....	(580) 442-2313
Range Operations	(580) 442-2008
FCoE Safety	(580) 442-4701/2266/2212
Garrison Safety	(580) 442-4466/5810
Fort Sill-ASP QASAS.....	(580) 442-4408

g. Ranges and Training Areas. Any incident, to include weapons and ammunition malfunctions, occurring at or on Fort Sill Ranges and/or Training Areas will be reported to Range Operations IAW Fort Sill Regulation 385-1, Post Range Regulation.

h. Site Specific Explosives Safety Emergency Action Plan. The following information is intended to be generic in nature and implemented at each of the four sites previously mentioned in para 1-8a. Each site will incorporate this information into their site-specific SOP, making it as specific to their site as possible. Each individual site will conduct and document an exercise of these emergency procedures at least once annually. Newly assigned/hired personnel will be briefed on these emergency procedures within 30 days of reporting. The Explosives Safety Emergency Action Plan portion of the site-specific SOP must be reviewed with each assigned person:

- (1) When the plan is developed, or personnel are initially assigned to a job.
- (2) When the personnel responsibilities under the plan change.
- (3) When the plan is changed.

(4) Evacuation Routes. Each individual site will develop a primary and secondary emergency evacuation route out of the A&E facility/operation leading away from the area during an A&E related emergency. All personnel should know at least two routes of escape to the assembly/rally point; rally points should be at least the Inhabited Building Distance (IBD) away from the incident area. Personnel should make maps depicting the emergency evacuation routes and rally points available for quick reference. The map should be located where personnel will be most likely to see and use it before and during an emergency. The following information should be marked on evacuation maps:

- (a) Emergency exits.
- (b) Primary and secondary evacuation routes.
- (c) Locations of fire extinguishers.
- (d) Fire alarm pull station locations.

(e) Assembly or Rally Points.

(5) When notified to evacuate, do so in a calm and orderly fashion:

(a) Walk do not run.

(b) Keep conversation level down.

(c) Take your valuables and outer garments.

(d) Close all doors behind you.

(e) Use the stairs, not the elevators.

(f) Help others in need of assistance.

(g) Rally for accountability at your assigned location.

i. Procedures for Reporting A&E Emergencies:

(1) Fire, Explosion or Smoke Emergencies. When fire, explosion, smoke, or other fire emergency situations are discovered:

(a) Activate the nearest fire alarm (if installed).

(b) Notify the Fort Sill Fire Department, Installation Operations Center (IOC), Range Safety Officer, FCoE Safety, and the QASAS.

(c) If a fire alarm is not available, notify the site personnel about the emergency by the voice communication and/or radio; whichever process will spread the word most rapidly.

(d) Do not attempt to fight the fire. Only personnel who have been properly trained, and receive documented annual retraining, may attempt to fight a fire that is small and is not spreading to other areas. Otherwise, available fire extinguishers are only in place for occupants to use to clear their exit route if needed.

(2) Upon being notified about a fire emergency, personnel must:

(a) Leave the building/site using the designated escape routes.

(b) Assemble at the designated Assembly or Rally Points.

(c) Remain outside until the Fire Department announces that it is safe to re-enter.

- (3) Designated Officials must:
 - (a) Coordinate an orderly evacuation of personnel.
 - (b) Perform an accurate head count of personnel reported to the designated area.
 - (c) Determine a rescue method to locate missing personnel.
 - (d) Provide the Fire Department personnel with the necessary information about the facility.
- (4) Emergencies Involving Munitions with Chemical Hazards:
 - (a) Sites that store munitions containing chemical hazards, or where munitions containing chemical hazards are used, will be identified by A&E storage license or site plan. The Fire Department and other activities with a need to know will be notified about the locations of these assets by the owning organization.
 - (b) Any required PPE to be worn in the event of an emergency involving munition with chemical hazards will be identified by the safety data sheet and/or the Job Hazard Analysis (JHA) and prepositioned at the site as required.
- (5) When a munitions containing chemical hazards, emergency occurs:
 - (a) Evacuate the site as necessary; it is best to go uphill/upwind.
 - (b) Notify the Fort Sill Fire Department, IOC, Range Safety Officer, FCoE Safety Office and the QASAS. Phone numbers are contained in Table 1-1 of this regulation.
 - (c) Assemble at the designated Assembly or Rally Points.
 - (e) Secure the area and alert other site personnel.
 - (f) Do not attempt to clean the spill unless trained to do so.
- (6) Attend to injured personnel and call the medical emergency number, if required.
 - (a) Designated Officials must:
 - (b) Coordinate an orderly evacuation of personnel.
 - (c) Perform an accurate head count of personnel reported to the designated area.

- (c) Determine a rescue method to locate missing personnel.
- (d) Provide the Fire Department personnel with the necessary information about the facility.
- (7) Criminal Acts and Workplace Violence. Upon witnessing a serious criminal act or workplace violence at an A&E related site:
 - (a) Alert other employees (if possible).
 - (b) Observe pertinent details (i.e., description of suspect, make and model of vehicle and/or license plate number).
 - (c) Call 911-Fort Sill; communicate pertinent details to emergency operator.
- j. Take prudent actions to protect yourself and others (i.e., evacuate to a safe location or lock doors).
- k. Any release of information will go through the Public Affairs Office (PAO).
- l. See Appendix J for the fire symbol hazard and actions (Figure J-1) and emergency withdraw distance for nonessential personnel (Figure J-2).
- m. Units shall provide Armed Guards/Escorts to accompany transport of category I & II A&E.

1-9. Inspections, Evaluations, and Audits

- a. All organizations with an A&E mission at Fort Sill will conduct and document periodic (at least annual) internal inspections and/or audits of A&E activities (e.g., A&E storage, packing, handling, surveillance, maintenance, demilitarization, and disposal activities) to ensure compliance with DoD and Army A&E policies. Inspection findings shall be documented and followed-up to ensure implementation and effectiveness of corrective measures. At a minimum, inspections shall address the elements required by DA Pam 385- 64, paragraph 1-9. The FCoE Safety Office will document final A&E facilities acceptance inspections following construction, renovation, or modification of facilities prior to commencing any explosives operation IAW DoD Directive 4715.11.
- b. The results of external inspections, evaluations, audits, and surveillance efforts (Headquarters, Department of the Army (HQDA), Inspector General (IG), Explosives Safety Assistance Visit (ESAV), and DDESB survey or program evaluation) will be incorporated into action plans, lessons learned and will be tracked to remediate inspection deficiencies. Copies of these documents will be furnished to FCoE Safety Director so corrective actions can be taken and responses provided.

c. Inspection records will be made available for review during all external program evaluations/audits.

d. Organizations with an A&E mission at Fort Sill shall conduct periodic surveys of A&E transportation activities to evaluate implementation of A&E transportation safety requirements. At a minimum, A&E transportation inspections shall address the elements required by DA Pam 385-64, paragraph 1-10, and DoD directive 4715.11.

1-10. Facilities Conformance

a. Tenants/Organizations/Activities using Fort Sill facilities are responsible for ensuring periodic inspections of their A&E facilities and/or operations to ensure continued compliance with approved ESSP, ESMP, and other safety requirements. They are responsible for reporting facility non-conformances to the FCoE Safety Office

b. The FCoE Safety Office is responsible to ensure facility construction meets requirements of approved ESSP IAW the DA Pam 385-64.

c. The FCoE Safety Office and DPW reviews and releases work orders pertaining to explosives safety.

d. The FCoE Safety Director, or designated representative, has the authority to inspect any A&E facility and/or operation at any time.

1-11. Facilities Maintenance

All organizations with an A&E mission will have a program to address facility maintenance. Each program will:

a. Ensure facility maintenance plans and schedules are in place for A&E related and supporting structures.

b. Ensure action plans are in place for identifying, funding, and correcting facility deficiencies (repair, replacement, modification). Ensure periodic inspection and trend analysis are conducted on lightning protection systems (LPS). See DA Pam 385-64 for guidance.

1-12. Ranges

USAG Fort Sill Directorate of Plans, Training, Mobilization, and Security (DPTMS) Range Officer serves as the central point for control and coordination for all activities conducted within the installation training complex to ensure safety and unified operations. All tenant activities will coordinate with Range Operations for current firing range status. Any military forces to include Army National Guard and Army Reserves coming onto Fort Sill for on post training will coordinate and schedule through Range

Operations (580) 442-2008.

a. Policies for safe use of the Fort Sill training complex for official government purposes is published in Fort Sill Regulation 385-1 (Post Range Regulation).

b. Organizations that require the use of any Fort Sill range will present appropriate signed/approved risk acceptance documentation for concurrence. When an experiment trial is to be conducted involves the firing of a projectile (including rockets and missiles) or the delivery of bombs; and the use of a Surface Danger Zone (SDZ) and/or Weapon Danger Zones (WDZ) maximizes safety then, the SDZ process may be used IAW DA Pam 385-63. When a munition and/or weapon system does not have an approved SDZ/WDZ, the deviation process contained within DA Pam 385-63 will be followed.

1-13. Imminent danger

When an “imminent danger” situation is discovered, immediately cease operations, withdraw personnel from the hazard and immediately notify supervisor or activity head. (Example, during ammunition operations, severe lightning thunderstorm within 10 nautical miles of FS reservation, etc.).

a. Danger: If the supervisor cannot immediately eliminate the hazard, the supervisor will notify range operations, who will provide technical advice to the on-scene supervisor, who will either correct the condition to allow affected operations to continue or prohibit operations from proceeding and withdraw personnel from exposure. If the on-scene supervisor determines that any corrective action taken would not adequately mitigate the hazard, the supervisor will assess the risk and obtain the commanders, or an authorized representative's, approval to implement measures to mitigate the hazard and restart the operation.

b. Unsafe act: Anyone observing an unsafe act or condition may stop an operation and will immediately report it to a supervisor. Supervisors will halt any unsafe act and address any unsafe condition, ensuring documentation of the unsafe act or condition is provided to the safety office. Commanders may authorize other personnel to document an unsafe act or condition.

1-14. Pyrotechnics

Policy for use of pyrotechnics on the Fort Sill Training Complex is contained in Fort Sill Regulation 385-1. The following procedures will be adhered to when using pyrotechnics elsewhere on Fort Sill. The following policy will be adhered to when pyrotechnic simulators are used:

a. The issue, use, and handling of simulators are restricted to trained officers and Noncommissioned Officers (NCOs). Training will include, at a minimum, the proper use, hazards associated with, and the training value of blanks and simulators. Each device

will be demonstrated to show how it functions and how unsafe employment may cause injury. Untrained personnel will not handle simulators.

b. All training officers and NCOs associated with an exercise in which simulators are used will receive a safety briefing beforehand on correct throwing procedures, potential hazards, precautions, and misfire and dud procedures. All other personnel participating in the exercise will receive the same briefing even though they are not using or handling simulators.

c. Follow instructions Ammunition Information Notices (AINs), Notice of Ammunition Restrictions (NAR's) and Safety of Use Messages (SOUM) provided by the ASP QASAS.

d. Do not disturb any unexploded pyrotechnic, warn others and mark the location.

e. Report all duds and misfires of pyrotechnics to Range Operations.

1-15. Blank Small Arms Ammunition

Policy for use of blank ammunition on the Fort Sill Training Complex is contained in Fort Sill Regulation 385-1. The following procedures will be used when using ammunition elsewhere on Fort Sill:

a. Blank adapters will be always used.

b. The minimum safe distance for unprotected personnel from small caliber ammunition is 15 feet.

c. Approved single hearing protection will be worn.

d. During force-on-force training, approved eye protection will be worn.

1-16. Smoke and Riot Control Agents

Policy for use of smoke and riot control agents for training on the Fort Sill Training Complex is contained in Fort Sill Regulation 385-1. Smoke and riot control agents will not be used for training elsewhere on Fort Sill.

1-17. Ammunition Weapon Malfunction Reporting Procedure

Policy and procedures for reporting smoke and riot control agent malfunctions is contained in Fort Sill Regulation 385-1.

a. Incident is an unintentional or chance event considered likely to result in property damage or injury to personnel. Regarding ammunition and explosives, this specifically

includes the suspected or detected presence of unexploded explosive ordnance that constitutes a hazard to operations, installations, personnel, or materiel.

b. A malfunction is defined as failure of an ammunition item to function as expected when fired or launched, explosive items that fail to function.

(1) Malfunctions include hang fires, misfires, duds, abnormal functioning, and premature functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment.

(2) Malfunctions do not include mishaps or incidents that arise solely from negligence, malpractice, or situations such as vehicle mishaps or fires. Misfires of small arms ammunition, which are corrected by immediate action procedures, are not considered as a malfunction. See AR 75-1 for the four classes of malfunctions.

c. In the event of a malfunction, the commander or person in charge of the firing unit will comply with the following:

(1) Immediately cease firing the suspected ammunition/weapon, shut down the range, secure the firing site, and notify range operations providing the following information to Range Control:

(a) Any fatalities, injuries, weapon malfunction, and type of weapon.

(b) Range, observation point, firing point, training area, and grid coordinate.

(c) Type and caliber of ammunitions include DODIC & LOT #.

(d) Type of malfunction.

(e) Time and date of malfunction.

(f) Name of officer in charge.

(g) Name, unit, and telephone number of person.

(h) Range Operations will notify the Fort Sill-ASP QASAS, Logistics Ammunition Representative (LAR) and Tank Automotive Command (TACOM) LAR when weapons are involved. Explosives Ordnance Disposal (EOD) will be notified if the ammunition is considered hazardous.

(2) Unless overriding safety or security considerations exist, the immediate malfunction area, to include equipment and weapons, will not be disturbed before an investigation is conducted. Weapons, ammunition, and brass involved in malfunctions will remain undisturbed and under guard until cleared by the QASAS/LAR or until all

incident party's complete their respective investigation. After the initial investigation by the QASAS or and ammunition is determined not to be a factor in the malfunction, the unit can coordinate with range support to resume normal operations for the other firing points.

Note: All missile malfunctions will be reported. The reportable rate for misfires and duds is one.

d. Once Range Operations is informed by the firing unit of a malfunction, the Fort Sill- ASP QASAS, Ammo and Weapon LAR's will be contacted for action and guidance.

(1) Following the preliminary inspection (assisted by range support), the local Fort Sill-ASP QASAS, ammo, and the weapon LAR, when appropriate, will gather the necessary data for all reported malfunctions and prepare a preliminary report. If justified The Fort Sill-ASP QASAS will locally suspend affected ammunition and immediately notify all units in possession of suspended stock if applicable.

(2) The preliminary report will not be delayed if an ammunition officer or QASAS is not available. The range safety specialist, or in his/her absence, the LAR's, will prepare the report on the DA Form 4379, Ammunition Malfunction Report.

(3) The appropriate commodity command will notify the malfunction location within the Continental United States (CONUS) within 24 hours from receipt of the preliminary report as to whether an on-site Department of the Army Investigation Team for Malfunctions (DAITM) investigation will be conducted. Where no DAITM on-site investigation is conducted. QASAS, Range Safety Officer, LAR (ammo/weapon), FCoE Safety Office or responsible safety manager will conduct a local investigation.

1-18. Fire Extinguishers

a. A minimum of two fire extinguishers (10lbs Class A, B, C, or greater) suitable for all hazards involved will be available for immediate use when explosives are being handled. Each extinguisher will be placed in a conspicuous and readily accessible location, fully charged, and in an operable condition.

b. Personnel with responsibilities for using fire extinguishers will receive training on general principles of fire extinguisher use and the hazards involved. This training will be documented and maintained on file by the unit/organization.

1-19. Refueling Operations

Vehicles that are transporting A&E must follow Fort Sill 385-1 requirements.

1-20. Tie-Down Procedures

The accepted method of securing loads is the use of tie-down straps. Units are advised to use vehicles equipped with tie-down anchors and are responsible for providing sufficient tie-down straps to secure the load. Tie down straps will be inspected for serviceability prior use and must have current applicable load rating. Other methods are permitted if the load is secured sufficiently and acceptable to QASAS/Ammunition Surveillance Inspectors. Units will adhere to transportation regulations while transporting ammunition within field sites and ranges.

1-21. Designated Ammunition Truck Routes

Ammunition routes will be strictly observed (see Ammunition Routes to and from ASP produced as Appendix H to this regulation). The installation hard surface roads are considered public traffic routes and subject to Department of Transportation requirements. Military vehicles will not transport ammunition and explosives over public highways outside the limits of the installation, without approved clearance by the senior commander or appointed representative.

1-22. Stops during Movement of Ammunition

For brief stops during transport, ensure at least one of the drivers' remains in the cab or within 10 feet of the vehicle, provided the vehicle is within full-unobstructed view. When circumstances require more lengthy stops, ensure that the vehicle is parked at the appropriate location (i.e., Ammunition Holding Area, range area, ATP, or ASP). Vehicle carrying ammunition will not stop in the cantonment area unless loading or unloading ammunition from a licensed unit arms room.

1-23. Static Generating Materials

Personnel who work in a hazardous location or who handle or install unpackaged electro- explosive devices and ammunition must avoid using rags and wearing outer garments made of materials that have high static generating characteristics. Materials of 100 percent polyester, nylon, rayon, silk, or wool are highly static producing. Wool socks, glove inserts, and caps, as well as undergarments of synthetic fabrics or silk, are less of a hazard. Nylon field jacket liners should not be worn as an outer garment. Cotton or cotton-synthetic blend materials are preferred.

1-24. Ammunition Found on Post (AFoP)

a. Ammunition found on post of unknown origin, excluding small arms ammunition (.50 Cal and below) will be consider hazardous and will be reported to the Military Police, Range Operations or EOD as soon as possible. Individuals finding ammunition should not handle it; they will notify the appropriate authorities.

b. During normal operating hours small arms (.50 Cal and below) and residue will

be accepted at the ASP building 2304. During non-business hours small arms munition items can be placed into one of the amnesty boxes located in paragraph 4-4 of this regulation. No paperwork is required, and no questions asked of individuals making the turn-in.

c. The turn-in of ammunition through AFoP program is not a substitution for normal turn-in procedures and will not be used to circumvent the standard supply procedures.

1-25. Commercial Explosives and Fireworks

a. The use of commercial ammunition and explosives is prohibited unless its use is mission essential and specifically authorized by the Installation Commanding General. Requests to handle or store commercial explosives will be sent through the unit's command channels, through the FCoE Safety Office, to the Commanding General. See DA Pam 385-64, chapter 21 for proper procedures.

b. Celebrations Involving the Use of Fireworks:

(1) Only commercial firms or licensed pyrotechnic technicians who meet the operator licensing requirements of National Fire Protection Association (NFPA) 1123, Code for Fireworks Display will transport, set up, or use commercial fireworks on Fort Sill.

(2) The unit sponsoring the event will consult with the Fort Sill Fire Department and the FCoE Safety Office for safety considerations and will complete a risk assessment before the use of commercial fireworks on Fort Sill is authorized.

c. Commercial fireworks used during an event will be transported, set up and fired on the same day of the event. Under no circumstances will commercial fireworks remain on the installation overnight. If commercial explosives or fireworks are confiscated or found on the installation, the Department of Emergency Services (DES) will request EOD support.

Chapter 2 Councils and Boards

2-1. Explosive Safety Council

a. To provide proper integration of A&E responsibilities, an FCoE Explosive Safety Council (ESC) will be established.

b. The Senior Commander (SC) or designated representative shall serve as Chairperson of the Explosives Safety Council.

c. The Explosives Safety Council shall meet periodically, but no less than semi-

annually, to review the FCoE Explosive Safety Program, products, tools, discuss recommended changes, and conduct other A&E business as required.

d. Representatives from any organization with an A&E mission may participate in the council. At a minimum, representatives from the following organizations/offices shall be included or represented on the council:

- (1) SC or designated representative
- (2) FCoE Safety Director or designated representative
- (3) Garrison Safety Manager or designated representative
- (4) Director, LRC, 407th Army Field Support Brigade (AFSB)
- (5) DPW representative
- (6) DES representative
- (7) Fort Sill-ASP QASAS
- (8) Logistics Assistance Representative (Ammo)
- (9) Tenant Brigade Safety Officers/Managers
- (10) Explosives Ordnance Detachment
- (11) ASP Accountable Officer
- (12) BDE Ammunition Warrant Officer (890)
- (13) BDE/BN 89 MOS series SFC or above

2-2. Ammunition and Explosives Handler Certification Board

a. All personnel involved in ammunition handling, planning and explosive operations must be properly trained and certified prior to their assignment IAW DA Pam 385-64 figure 1.1.

b. Certification will ensure that only properly vetted and certified personnel participate in planning and conducting ammunition and explosives operations. This will increase A&E safety awareness, technical knowledge, and operational proficiency resulting in enhanced safety of our installation facilities and personnel. Minimum training required to certify personnel is reflected in Appendix C, figure C-1.

c. The board will:

(1) Establish and document a local procedure to govern the local certification process. It should include, but not limited to, such aspects as the board's authority and responsibility; training requirements; timeline for training; granting and revoking certification; local records, etc.

(2) Identify positions requiring certification in conjunction with supervisors and COR.

(3) Determine which courses are required for individuals involved in A&E operations or planning IAW DA Pam 385-64 figure 1-1.

(4) Provide the certifying official with recommendations of qualified personnel for certification. Recommend qualified personnel to the certifying official or recommend revoking certification of individuals Ammunition Handlers Card.

(5) Ensure that copies of all applicable actions are maintained in appropriate records. The board will decide where and who will maintain the records.

d. The Senior Commander (SC) has overall responsibility for the installation A&E safety program and designates the FCoE Ammunition Warrant Officer as the ESCB Certifying Official.

e. Representatives from the following organizations/offices will be included in the certification board process:

(1) FCoE Ammunition Warrant Officer (Certifying Official)

(2) Fort Sill QASAS

(3) Fort Sill LRC Director or designated representative

(4) FCoE Safety Director or designated representative

(5) USAG Safety Manager or designated representative

(6) ASP Manager

(7) EOD

(8) COR if applicable for contract A&E operations

f. At a minimum, the certification board will convene quarterly or as changes occur in requirements.

Chapter 3

Ammunition and Explosive Storage

3-1. Explosive Safety Site Plans (ESSP)

a. An approved ESSP will be obtained:

(1) Prior to starting new construction for a PES or an Exposed Site (ES within ESQD arcs of a PES or otherwise covered by explosives safety criteria.

(2) Prior to starting construction to modify existing facilities within ESQD arc or otherwise covered by explosive safety criteria.

(3) Prior to starting new explosives operations not previously sited.

(4) Prior to modifying existing explosives operations where there will be an increased risk, such as increasing the sited explosives limits or changing the hazard division.

b. Limited exceptions, to these requirements for explosive safety site approval, are provided in DA Pam 385-64 and DA Pam 385-65.

c. All ESSPs be reviewed, processed, and submitted to the United States Army Technical Center for Explosives Safety (USATCES) by the FCoE Safety Office.

d. ESSPs will be coordinated with the installation master planner, facility engineers, QASAS, fire prevention, security, environmental, facility user, and range operations.

e. All site plans will be signed by the SC and submitted through command safety channels via the FCoE Safety Office to the USATCES director with a copy provided to the requesting unit/organization.

f. Explosives sites and general construction plans will be submitted for review prior to the final engineering design of new construction or major modification of existing facilities for explosives.

g. The organization having the A&E mission is responsible for providing information for ESSP development.

h. The FCoE Safety Office will maintain a copy of approved site plans for master planning purposes.

3-2. Safe Storage Principles and General Requirements

a. Boxes, cases, and other containers of ammunition will be clean and dry before

being stored.

b. Ammunition must be protected against moisture and excessive changes in temperature and have means of adequate ventilation.

c. Tops of ammunition stacks will be no closer than 18 inches from the ceiling and the bottom layer must be raised from the floor about 3 inches.

d. Stacks of ammunition must be level and if necessary, dunnage, shims, or wedges will be used to prevent the stacks from tipping. Stacks of ammunition will not be so high that ammunition or its containers in the lower layers will be crushed or deformed.

e. Empty containers, excess dunnage, or tools are not permitted to remain in a magazine after completion of assigned work. When multiple lots are stored, all items or containers of a single lot will be stored together and the line of separation between lots must be clearly indicated with a DA Form 3020-R, Magazine Data Card. Using DA Pam 700-16, provides instructions on the use of the DA Form 3020-R.

f. Lots of ammunition will not be mixed. The ASP should be contacted if ammunition should become mixed by lot or type for any reason.

g. Arms rooms will not be utilized for general supply storage, excess materials, and unnecessary tools/equipment.

h. In buildings such as arms rooms where heat is permissible, only authorized heating equipment is to be used IAW DA Pam 385-64 and the NFPA standards.

i. Good housekeeping practices are required IAW DA Pam 385-64 to ensure magazine, arms room and field storage areas are kept in a safe, clean, and orderly condition.

j. Matches and flame or spark-producing devices into an A&E storage area are strictly prohibited.

k. Unauthorized persons will not be allowed in the controlled ammunition area.

l. A 50-foot firebreak will be maintained around aboveground magazines, A&E operating buildings, outdoor A&E storage sites, and ready explosives facilities. A 5-foot firebreak will be maintained around earth-covered magazine ventilators.

m. A 5-foot firebreak will be maintained on both sides of fence near the magazine. In the event the outside of the fence is inaccessible, a 10-foot firebreak will be maintained on the inside of the fence.

n. At no time will explosives be stored temporarily in any other location such as living quarters or office buildings.

o. Fragment barriers of min ¼ inch of steel plate, layer of sandbags, or equivalent protection are required for storing Hazard Class/Division (HD) 1.2.2.

p. Munitions will be stored in their original container with original packaging. (Only exception: Military Police (MPs)/Criminal Investigation Detachment (CID) may have one outer pack of small arms open).

q. Munitions will be stored in metal storage containers or cabinets.

r. No combustibles, solvents, petroleum products, flammables, etc. will be stored near the ammunition.

s. The fire symbol that applies to the most hazardous material present will be placed on the entrance of the storage container when ammunition and or explosives are present.

t. The appropriate chemical hazard symbols will be posted when chemical munitions (such as colored smokes) are present.

u. When no munitions are stored, symbols will be removed.

v. The Fort Sill Fire Chief and FCoE Safety will be notified whenever fire or chemical protection symbols change.

w. A "No Smoking" sign will be posted at the entrance of the storage container/building.

x. The unit will post the license, and DRAW inside the licensed storage facility, and review annually; the physical security construction statement will also be posted.

y. Dummy or inert ammunition will not be stored with live ammunition except as noted below.

(1) If live and inert must be stored in the same magazine or arms room, they will be segregated by two separate locked containers, clearly marked, and inspected prior to issue and turn-in.

(2) Inert or empty ammunition components (including ammunition cans/boxes) will be stenciled, painted, and labeled, etc., with the word "INERT", "EMPTY" or "DUMMY" IAW Military Standard 129R, Military Markings for Shipment and Storage.

(3) Only trained and technically qualified personnel are authorized to certify A&E as inert.

3-3. Explosive Licensing

- a. All explosives' facilities will be licensed IAW DA Pam 385-64 and this pamphlet. Units will use the FS Form 700 as their license.
- b. Commanders, directors, and tenants will ensure that ammunition and explosives are stored only in licensed locations. Quantities will not exceed the amounts authorized on the license.
- c. Units needing to store A&E will complete and submit the FS A&E Storage request packet to the FCoE Safety Office. (See appendix D for forms and examples).
- d. Units storing A&E without an DDESB approved ESSP will store no more than 100 pounds Net Explosive Weight (NEW) in the approved storage container at any one time with no more than 50 of those pounds being 1.2.2 and no more than 100 pounds of 1.3 IAW DA Pam 385-64, paragraph 8-3b.
- e. Installation QASAS, Fire Protection and Prevention, Physical Security and FCoE Safety will inspect each facility prior to licensing. Facilities not meeting DOD and DA standards will not be licensed.
- f. The unit will review operations involving A&E to identify and manage risk IAW risk management procedures in DA Pam 385-30 and ATP 5-19. A risk assessment for storing A&E will be completed using most current DA Form 2977.
- g. Personnel working with A&E will be trained in the tasks to be performed. They must understand the hazards, standards, procedures, and precautions that apply to the facility and its hazardous working environment.
- h. Each licensed A&E facility will maintain an SOP that includes safety requirements and procedures.
- i. The unit and the FCoE Safety Office will review the license on an annual basis.

3-4. Transportation Requirements for A&E

- a. All DOD personnel (Military, Civilians, and Contractors) participating in the shipment and movement of ammunition and explosives must comply with the requirements of DTR 4500.9, DoD Directive 4715.11 Defense Transportation Regulation, Part II, Chapter 204; DA Pam 385-10; and DA Pam 385-64. AMMO-67-DL meets federal Department of Transportation and DTR 4500.9 requirements for transporters of hazardous material. Personnel who transport ammunition and explosives will complete AMMO-67-DL or equivalent within 90 days of assuming duties and every two years thereafter.

b. Prior to loading motor vehicles with ammunition and explosives, the operating unit will perform an inspection utilizing a DD Form 626 (Motor Vehicle Inspection Transporting Hazardous Materials). The completed DD Form 626 will be provided to the vehicle operator and must remain with vehicle throughout the transporting of A&E.

c. All vehicles transporting ammunition and explosives will be equipped with two 10lb ABC or greater portable fire extinguishers.

d. Requirements for drivers who transport A&E are as follows:

(1) Military members who transport ammunition and explosives must have a current military driver's license, Optional Form (OF) 346, annotated with authorized vehicle type(s) and Hazardous Materials (HAZMAT) training endorsements along with a civilian driver's license.

(2) Civilian and contract employees who transport ammunition and explosives must have a Commercial Driver's License (CDL) with a HAZMAT endorsement, and a current DOT medical certificate if required.

e. Drivers, both military and civilian/contractor, will ensure they have a copy of the Fort Sill approved written route plan in their vehicle while transporting ammunition and explosives. Units will NOT transport ammunition and/or explosives through any housing area.

f. Once the motor vehicle is loaded with ammunition and explosives, the vehicle operator will be provided a DD Form 2890, DOD Multimodal Dangerous Goods Declaration for Hazardous Materials Transported by Government Vehicles. Emergency Response number(s) must be annotated on the DD Form 2890. The operator will be instructed to maintain the DD Form 2890 in the vehicle while transporting ammunition and explosives and transfer it to each successive operator during delivery.

g. Vehicles loaded with ammunition and explosives will be placarded IAW 49 Code of Federal Regulations (CFR), parts 100-185.

h. All A&E (HAZMAT) will be certified for transport entering or exiting Fort Sill on shipping documents (DD Form 2890) by a qualified certifier IAW DOD 4500.9, Part II, Chapter 204. All personnel involved with the classification, preparation of items and/or shipping papers, inspection of vehicles and/or shipments, loading or unloading of ammunition vehicles, driving, or other duties that directly involve the transportation of ammunition and explosives will be trained and certified IAW DOD 4500.9, Defense Transportation Regulation, Part II, Chapter 204; 49 CFR, parts 100-185. A qualified certifier:

(1) Must be appointed in writing by the unit commander or designated representative.

(2) Must complete an approved initial 80-hour classroom certification course such as AMMO-62, Technical Transportation of Hazardous Materials.

i. There are only two exceptions to the requirement of having all shipments of A&E certified by a qualified and trained certifier as follows:

(1) Transporting limited quantities of 1.4S if it is packaged IAW Title 49 CFR 173.63(b).

(2) Returning from a firing range with all the following stipulations:

(a) A qualified person or Officer-in-Charge (OIC) or NCOIC must line through the original certifier's signature.

(b) Sign verifying the HAZMAT is properly repackaged and secured (i.e., blocked, braced, tied down) prior to transportation.

(c) Make the required changes to the original DD Form 2890 IAW DTR Part II, Chapter 204, paragraph G7.

3-5. Arms Room Storage

a. Units can store limited quantities (not to exceed limits set in the explosive safety site license) of ammunition to support the operational necessity and ensure mission accomplishment. Units will use the Fort Sill Form 700 Ammunition Storage License and have it signed by each organization listed in blocks 15 through 20 and renew it annually. Operational necessity is a mission associated with war or peacetime operation, in which the consequences of an action justify the risk of loss of equipment and personnel. The intent is to give the operational commanders the capability to achieve mission accomplishment, and not a matter of convenience. By having the commander sign the FS 700 this serves as the commanders' authorization to store small quantities of ammunition for operational purposes. DA Form 581 must accompany this FS 700 Form.

b. At no time will the cumulative total of all ammunition stored in the arms room exceed 100 pounds NEW. The limit for ammunition storage is HD 1.2.2 (not to exceed 50 pounds NEW), HD 1.3 (not to exceed 100 pounds), and HD 1.4. Prior to storing A&E in an arms room, the unit commander or the responsible authority will follow the arms room licensing requirement checklist and then prepare the request memorandum and the deliberate risk assessment worksheet that justifies the storage based on operational necessity and safety considerations.

c. Post the risk assessment and memorandum at the arms room and brief all arms room personnel at least annually or after a change of personnel on its contents.

d. Ammunition which may be stored in a unit's arms room will be classified either as operational readiness, training, or ceremonial.

(1) Operational readiness ammunition involves ammunition for wartime, contingency, or peacetime operations in which consequences of the ammunition storage justify the risk of loss of personnel, equipment, and resources. The qualifier “operational necessity” is intended to provide commanders the flexibility to ensure mission success without a waste of resources. It is not intended to allow such storage for convenience.

(2) Training ammunition is defined as limited quantities of ammunition stored temporarily in a unit’s arms room to facilitate personnel training on ranges or in the field when receiving and returning ammunition from and to an ammunition holding area or supply point would adversely delay the unit’s training. Units that are conducting weapons qualification during inactive duty training may, when required, store limited quantities of HD 1.4 munitions inside an arms room for a limited period. Access for convenience is not considered valid justification for storage.

(3) Ceremonial ammunition is not considered an operational necessity. A limited quantity of HD 1.3 and HD 1.4 ceremonial ammunition such as 75 mm blank or 105 mm blank may be stored in an arms room provided no other practical alternative exists. The amount of HD 1.3 and HD 1.4 stored will not exceed the lesser of 100 pounds NEW or one full outer pack of ammunition.

e. The term “limited quantities” is defined as the minimum amount of ammunition required to support operational missions (i.e., Access Control Points, Crisis Response Battalion and Military Police) or the immediate training requirements of the unit. Operational ammunition will be separated from training ammunition as much as possible. Ceremonial ammunition will be separated from training and operational ammunition. All combustible, solvents, petroleum products, or radioactive items must be stored in an approved cabinet for that specific type and not near the ammunition.

f. All ammunition will be maintained in its original shipping container and sealed. One package of each caliber of operational ammunition may be opened if required to support mission execution (i.e., guard ammunition). Training ammunition must be closed and sealed unless returning from the range or field, in which case the ammunition will be repacked in its original package closed and secured shut. Ceremonial ammunition outer packs will remain closed and if possible secured with their original seal.

g. Property books, hand receipts, accountability and inventory procedures will be consistent with 710 series regulation and pamphlets.

h. Installation Fire Department will be notified when an arms room is vacated of munitions for indefinite periods (i.e., Deployments) and when its use for storage of munitions is initiated or resumed.

3-6. Fire Symbols

- a. The appropriate fire symbol will be placed on entrance to the arms room and at the main entrance of the building exterior. Where explosives are stored in an ISO or similar container, the container will also be marked with the appropriate fire symbol.
- b. Each of the four fire divisions is indicated by one of four distinctive symbols recognizable to the firefighting personnel approaching the fire scene.
- c. Fire symbols on buildings will be the right size, metal, and removable. Painting fire symbols on buildings or storage lockers is unauthorized.
- d. Symbols will be removed, covered, or reversed if the explosives are removed from a facility or location.
- e. Fire symbol signs can be obtained at base supply center or by submitting a work order to the DPW Sign Shop. Drawings of required signs must be included with proper dimensions. See Appendix H of this document for proper dimensions and stock numbers.

3-7. Mixed or “Z” Compatibility Storage

- a. Mixed or “Z” compatibility storage will follow the guidance outlined in DA Pam 385-64 and ATP 4-35.1. Mixed storage will not be for convenience and will only be granted on a temporary basis.
- b. Storage of A&E within Fort Sill will be IAW AR 385-10, DA Pam 385-64, and this ESMP. A&E will only be stored in buildings approved for this purpose and have posted A&E storage limits.
 - (1) Supervisors are responsible for ensuring all storage requirements are met.
 - (2) The FCoE Safety Office will be notified immediately when conditions are such that storage requirements cannot be maintained IAW approved explosives limits.
- c. All facilities containing explosives and ammunition will be kept clean and orderly, with proper aisle clearance always maintained. QASAS are available to provide technical assistance on ammunition and explosives operations. They will also inspect all facilities on an annual basis IAW DA Pam 742-1.

3-8. Lightning Warning System

- a. When a lightning warning has been issued for lightning within 25 Nautical Miles (NM) of the installation, the Fort Sill-ASP QASAS, ASP supervisor/lead, or the ASP Accountable Officer (AO) will make the decision to halt all ammo operations inside the

ASP. The ASP contractor supervisor/ operations will put out a net call, within the ASP, advising workers and Soldiers of the impending storm. When a lightning warning indicating lightning within 10 NM is received or is sighted from the ground at the ASP, all explosive operations being conducted in facilities other than lightning approved protection will be halted all personnel will evacuate to IBD and the doors to magazines closed.

b. The QASAS, ASP supervisor/lead or the ASP AO can listen to the current weather situation or an information alert that affects Fort Sill by contacting Range Operations, or IOC. The onsite QASAS, ASP supervisor/lead or AO will confirm that there is no lightning within 10 NM of the installation prior giving the go ahead to resuming A&E operations.

c. See Fort Sill Regulation 385-1 and 385-10 for range operations procedures during severe weather.

3-9. Lightning Protection System and Grounding

a. Commanders with facilities containing Lightning Protection Systems (LPS) and/or grounding systems will ensure work orders are submitted for required electrical testing IAW the schedule listed in Table 17-1, DA Pam 385-64. If the LPS or grounding system is installed on a building that contains explosives, the commander will ensure that the FCoE Safety Office is provided with the test results.

b. The FCoE Safety Office will:

(1) Maintain testing reports of lightning protection and grounding systems of explosives facilities for a minimum of six cycles.

(2) Record and perform trend analyses on electrical test records to highlight variances over time. Analyze variances to determine the cause and contact DPW in the event repairs are indicated.

3-10. Nonstandard Ammunition

Nonstandard ammunition is ammunition that has not been tested; type classified for Army use and cannot be procured through the Army Supply System. For additional guidance refer to AR 385-63 paragraph 2-3 and Fort Sill Reg 385-1 para 1-6a.

3-11. Delinking/linking

Units are only authorized to delink/link a single DODIC of small arms ammunition or medium caliber ammunition for the adjustment for the belt length in support of training/qualification or mission. Units are prohibited from delinking a single DODIC of small arms ammunition or medium caliber ammunition or alter the DODIC's original

configuration as follows:

- a. Removing tracers from ball/tracer belts due to range conditions (i.e., range restrictions due weather conditions),
- b. Removal of individual rounds for use in single fire weapon, such as in sniper rifles and,
- c. Prohibited from delinking/linking two or more DODIC's of small arms ammunition or medium caliber ammunition into a nonstandard ammunition configuration. Contact the Fort Sill-ASP QASAS for the most current AIN.

3-12. Pyrotechnics/blanks

Pyrotechnics/blanks will not be used in the cantonment area except when approved in writing by DES. The cantonment area is identified as any area near unit or civilian workforce administrative areas, billets, dining facilities, motor pools, housing areas, military and civilian school areas, obstacle courses, Army and Air Force Exchange Services (AAFES) and Defense Commissary Agency Source (DeCA) facilities, banks, child development centers, the education center, restaurants and recreational buildings and areas.

3-13. Transport of Controlled Inventory Item Code (CIIC) I and II Cargo

When not in a convoy, all military vehicles transporting CIIC cargo (i.e., weapons, ammunition, and explosives (live and residue) and high dollar items) will have a senior occupant of the rank of Sergeant/E-5 or above. Units will strictly adhere to the guidance described in paragraph 7-10 of Army Regulation 190-11, Physical Security of Arms, Ammunition, and Explosives, regarding security standards for Arms Ammunition & Explosive shipments. Will have armed Guards/Escorts while transporting category I and II A&E.

3-14. Field ASP/Ammunition Holding Area

Field ASPs/Ammunition Holding Areas (AHA) will not be set up or operated within the cantonment area. Training units will coordinate IAW Fort Sill 385-1 for field ASP/AHA locations with Range Operations.

Chapter 4

Ammunition and Explosive Safety and Training

4-1. Required Ammunition and Explosives Training

- a. For all organizations with an A&E mission at Fort Sill operating under DOD 4145.26M, DOD Contractor's Safety Manual for Ammunition and Explosives, training of

personnel will be IAW Appendix C-1. Personnel shall receive appropriate training and list training on Ammunition and Explosives Handlers Certification Form listed in Appendix B, before performing work that involves exposure to A&E. The training shall be IAW DA Pam 385-64 figure 1.1.

b. The training shall include specific safety and health hazards and emergency procedures to include shutdown and safe work practices applicable to the employee's job tasks IAW DA PAM 385-64 figure 1.1.

c. Contractors shall ensure that each employee involved in an A&E process has received and understood the training and receives appropriate refresher training as required. The contractor shall prepare a record that contains the identity of the employee, the date of training and the means used to verify that the employee understood the training. Organizations are responsible for ensuring subcontractors supporting their A&E operations receive appropriate A&E training to meet contractual requirements.

d. All A&E personnel operating under Army Regulations at Fort Sill will be trained IAW DA Pam 385-64, Figure 1-1. Training shall be recorded on Ammunition and Explosives Handlers Certification Form listed in Appendix B. Contractors may have a memorandum that suffices. This form or (memorandum for contractors) shall be submitted through the organization's leadership to the Explosives Safety Certification Board for processing in order to receive an AMMO Handlers Certification Card. Personnel responsible for the development and review of deviations and risk assessments will be trained in explosives risk management.

(1) On-line courses can be found at <http://www.dactces.org/>. Military personnel working in the Military Occupational Specialty (MOS) 89B do not require additional training in those areas already covered by the MOS; however, they must receive other required training based on mission if not covered by their designated MOS.

(2) All personnel who transport A&E must be trained IAW DOD 4500.9, Defense Transportation Regulation, Part II, and Chapter 204. AMMO-67-DL meets federal and DOD requirements for transporters of hazardous material. Personnel involved in the transport of ammunition and explosives will complete AMMO-67-DL within 90 days of assuming duties and every two years thereafter, and must have the Hazmat certification endorsement on their OF 346, Government Motor Vehicle Operator's Identification Card.

(3) All personnel (government or contractor) involved with the classification and inspection of A&E loaded on vehicles and subsequent preparation of shipping papers DD Form 2890, DOD Multimodal Dangerous Goods Declaration, must be appointed, trained, and certified IAW DOD 4500.9, Defense Transportation Regulation, Part II, Chapter 204; 49 CFR, parts 100-185. The Army provided training to meet this requirement is AMMO-62, Technical Transportation of Hazardous Materials, consists of an 80-hour classroom certification course.

4-2. Demilitarization and Destruction

a. Demilitarization or destruction of ammunition, explosives and propellants will follow the guidance IAW DA Pam 385-64, at a minimum. The 761st EOD is the designated Fort Sill representative for emergency demilitarization and disposal of A&E on Fort Sill.

b. Any organization or tenant on Fort Sill conducting demilitarization or destruction training will have a current SOP in place. Safety managers for those organizations will periodically monitor A&E disposal and demilitarization activities.

4-3. Unexploded Ordnance (UXO)

a. Ammunition and explosive devices were designed to kill and destroy the enemy. When military munitions do not function as intended during use, they frequently become unexploded ordnance or UXO. Many people refer to UXO as “duds”. Most military munitions contain some form of propellants, explosives, or pyrotechnic mixes to make them function properly (explode, propel, or produce intense smoke or light). UXO is extremely dangerous with age and weather, safety devices may no longer work. Old explosives may become even easier to explode and should never be touched or moved because duds may explode unexpectedly and cause serious injury or death.

b. Military munitions are produced in many different sizes, shapes, and colors. Their size and shape depend on how the military intends to use them. All shapes, sizes and types of explosives ordnance have been used in the United States for weapon system testing and troop training activities such as hand grenades, rockets, guided missiles, projectiles, mortars, sub munitions, bombs, rifle grenades, and small arms.

c. Follow the Three R's of UXO Safety:

(1) Recognize it: Recognizing when you may have encountered munitions is the key to reducing the risk of injury or death. If you encounter or suspect you may have encountered munitions, consider it extremely dangerous. Remember, munitions are sometimes hard to identify.

(2) Retreat: Leave the same way you entered the area. Be calm and do not panic! Leave the area following the same path on which you entered. If you can, mark the general area, not the munitions, in some manner (i.e., with a hat, piece of cloth, or tying a piece of plastic to a tree branch).

(3) Report it: Call the Police or the Fire Department (call 911 Fort Sill). The Fort Sill EOD Company also has a 24-hour emergency telephone number (580) 442-2313.

d. Awareness Training. UXO awareness training is required for all workers performing excavation, demolition, or any other activities that require disturbing the ground.

e. UXO safety education training or information to schools on or near the installation will be provided annual training by EOD personnel and Fort Sill PAO. It will be based on and incorporate the Army's Three Rs (Recognize, Retreat, Report) message and safety education material available at <https://www.denix.osd.mil/uxosafety>.

4-4. Amnesty Program

a. IAW standard DOD policy as described in the Munitions Rule Implementation Policy, the amnesty program is intended to ensure the maximum recovery of standard military ammunition from outside the normal supply system. The program is established to provide an opportunity for individuals to return ammunition that has been stolen, misplaced, or erroneously left in the possession of an individual. These returns are intended to promote safe turn-in of unauthorized ammunition and explosives, while reducing fear of facing punishment. Therefore, amnesty turn-ins will not be the basis for initiation of an investigation of individuals making the turn-in. The Ammunition Amnesty Program is not a substitute for normal turn-in procedures and will not be used to circumvent standard supply procedures.

b. QASAS personnel will monitor and manage the amnesty program.

c. There are only four amnesty-collection containers located on Fort Sill. The locations are at Minor Road Wash Rack, Dodge Hill Powder Burn Area, the main gate to the Ammunition Supply Point (ASP) and the main gate to the Ammunition Holding Area (AHA). No other official amnesty locations are authorized.

d. Commanders with elements that use or expend A&E will develop an amnesty program that aligns with and supports the Fort Sill amnesty program. Command elements will monitor their amnesty program to ensure turn in procedures are enforced.

(1) Ensure assigned personnel are briefed on amnesty procedures twice a year and before each exercise or training event involving A&E.

(2) Develop an A&E SOP that provides responsibilities and requirements for handling amnesty items.

(3) The SOP shall include:

(a) The location and design of amnesty container

(b) How to check container

(c) Recovering and repacking ammunition

(d) Handling unfamiliar ammunition

4-5. Ammunition and Explosive Operations

Under no circumstance will A&E operations, i.e., trans-loading, segregation, re-fueling, etc., be conducted in the cantonment areas to include the Ammunition Holding Area (AHA) and Residue Yard. The only authorized areas for A&E operations are Fort Sill ASP and the current unit occupied range. Contact Range Operations for proper schedule and procedures.

4-6. Inert or Empty Ammunition & Explosives and Inert Ammunition & Explosives Components

a. These include practice and service A&E, including A&E components (such as, projectile bodies) manufactured or made empty or inert for use in training, on desk nameplates or stands, on display boards, in demonstrations or public functions, in offices or work areas of engineers or other personnel, or similar purposes. The process of classifying A&E as inert is an explosive operation that will only be performed by technically qualified and authorized personnel. Empty or inert A&E and inert A&E components used for any of the above or similar purposes will be properly identified and marked.

b. The following procedures apply to each empty or inert A&E used for the above or similar purposes:

(1) Stenciling, painting, applying decals, or labeling "EMPTY" or "INERT." Markings must be clear and obvious.

(2) Four holes no smaller than one-fourth (1/4) inch will be drilled through each complete item. The holes will be 90 degrees apart.

(3) Inert A&E on permanent display in Army museums if such drilling would diminish their historical value, are suitably identified when permanently marked (for example, metal stamped) "INERT," "EMPTY," or "DUMMY."

(4) The small arms ammunition or small inert A&E components mounted on wall plaques or display boards, in display cases, or permanent museum exhibits will have the word "INERT" on an attached plate. The plate could be of metal, wood, or plastic permanently affixed to the display.

(5) For more information on procedures to mark and A&E item as inert see DA Pam 385-64, para 3-5.

4-7. Forward Area Rearm/Refuel Points (FARRPs)

FARRP is a temporary (or permanent) facility/location that is organized, equipped, and deployed as far forward, or widely dispersed, as tactically feasible to provide fuel and

ammunition necessary for the sustainment of aviation maneuver units during training or combat. Establishing a FARRP allows commanders to extend the range of their aircraft or significantly increase time on station by eliminating the need for aircraft to return to the aviation unit's central base of operations to refuel and rearm.

a. FARRP operation within the Fort Sill Training Complex is contained in Fort Sill Regulation 385-1. The FARRPs will be separated by Inhabited Building Distance (IBD) from all non-associated inhabited buildings.

b. Ammunition placement sites will be a prudent fire distance away from fuel storage sites, but in no case less than 100 feet. Fuel supplies will be placed downhill from the ammunition and explosives.

c. Fort Sill Training Complex has two areas designated for FARRP operations. One on the East Range area for aviation 1.4S operations only. The second is currently located just west of Mo-way training complex. Potential for another AVN A&E operation being conducted out at Falcon Range on west Quanah range.

4-8. Deviation Approval and Risk Acceptance Document (DARAD)

a. When intentionally deviating from written safety standards, documentation will include specifics regarding the initial and residual levels of risk associated with the deviation, the policy and/or standard from which the operation will deviate, the control measures selected, and the required level of risk acceptance per DA Pam 385-30, table 4-1.

b. Deviations (waivers, exemptions, and secretarial certifications) involving A&E or chemical agents must be documented using DA Form 7632, DARAD.

c. The following support documentation must accompany the DA Form 7632 for A&E or chemical agent deviations: map or diagrams which depict the hazard area including quantity-distance arcs and/or downwind hazard areas, preferably unclassified, clearly identifying locations and/or facilities of concern; timeline, listing milestones, to eliminate the need for deviation; and other supporting documents as necessary.

d. See DA Pam 385-30, Appendix C for instructions on completing DA Form 7632.

4-9. Secretarial Certification

A Secretarial Certification is required for all new construction involving A&E and chemical agent safety regulatory deviations. A certificate is written authority, granted by the Assistant Secretary of the Army for Installations, Energy and Environment to build or perform a major modification on a facility or structure in violation of the provisions of AR 385-10 dealing with A&E or chemical agents, DA Pam 385-61, Toxic Chemical Agent Safety Standards or DA Pam 385-64. See DA Pam 385-30, Paragraph 4-6 (e) for more details.

4-10. Risk Management

a. When DOD and Army explosives safety regulations and policies cannot be met, the procedures set forth in DA Pam 385-30 will be followed. Other Government Agencies and Non-Government Organizations operating within Fort Sill will specify an equivalent risk acceptance process in their SOP. Contractors shall abide by contractual requirements.

b. Deviation Approval Risk Acceptance Document (DARAD) approval authority will be IAW Army requirements specified in CG Risk Acceptance Authority Policy. Submit all deviations from DOD and Army Regulations requiring a DARAD to the FCoE Safety Office for review prior to obtaining the approval authority's signature. Copies of approved DARADs will be maintained by the FCoE Safety Office and submitted to USATCES for record.

4-11. Explosive Safety Issuances

a. ESMP issuances consist of, but are not limited to, local policies (SOPs), ARs, pamphlets and other publications. All Organizations with an A&E mission on Fort Sill will have a safety policy and SOPs that include A&E safety management.

b. All Organizations with an A&E mission at Fort Sill will review SOPs on a bi-annual basis. The originating organization will obtain FCoE safety support for review and concurrence of hazard analysis and SOPs.

c. All explosives safety policies will comply with Army and DOD requirements and will be reviewed by FCoE Safety prior to approval.

d. Any safety control measures required, such as through ESSP requirements or hazard analysis to manage A&E risk, will be documented with controls implemented and periodically monitored to ensure compliance.

4-12. Hazards of Electromagnetic Radiation to Ordnance

a. All organizations with an A&E mission at Fort Sill will be aware of and take precautions with any HERO unsafe munitions. With more powerful antenna systems and wireless communications, systems coming online, ammunition handlers must remain vigilant to the hazards of Electromagnetic Radiation (EMR) to Electrically Initiated Devices (EIDs) in ordnance. Common electrically initiated ordnance includes electrically primed cartridges, electrically fired rockets, and items containing electrically initiated detonators. See DA Pam 385-64, Table 17-3 for proper separation distance. Some common control measures are:

b. Turn off all Radio Frequency (RF) emitters while uploading unpackaged ammunition.

c. Shield uploaded unpackaged ammunition from RF emissions that could pose safety or reliability issues to prevent accidental initiation or degradation of the ordnance.

d. Monitor the proximity of RF sources to ammunition storage areas to ensure that adequate safe separation distances are maintained from all possible transmitter sources.

e. Cell phones will not be used inside an A&E facility or within 10 feet of ammo or explosives stored outdoors per Technical Bulletin (TB) 43-0250 Ammunition Handling, Storage and Safety.

4-13. Records Management

a. All organizations with an A&E mission on Fort Sill will maintain records as required by ARs. Records will be available for review during external program reviews/audits.

b. LPS test and inspection records for the past six inspections cycles will be maintained by the FCoE Safety Office and ASP Manager.

c. All organizations with an A&E mission on Fort Sill will maintain A&E inventory records to control NEW, HD, and compatibility requirements per site plans and licensing.

d. DOD titled nonstandard ammunition in storage or transportation will always have the Interim Hazard Classification (IHC) physically present with the ammunition.

4-14. Explosive Safety Assistance

Always remember that explosives safety assistance can be obtained from FCoE Safety Director at (580) 442-4701 or 442-2266 or QASAS personnel at (580) 442-4408, located at the ASP. If additional assistance is needed, request assistance from the USATCES at DSN 956-8787 or (918) 420-8787 in McAlester, Oklahoma or submit any questions through Ammo Help on the website; <https://www3.dac.army.mil/es/usatces>.

4-15. Exceptions for the Military Working Dogs (MWD)

Due to the delicate mission of the Explosive Detector Dog Team (EDDT) and the rigorous training required to keep Explosive Detectors Dogs Teams at the proper level of proficiency. The Military Police Kennel Section will be allowed to transport explosive to certain areas within the cantonment area. Providing that the following requirements are met:

a. The EDDT Training plan is approved and signed by the Garrison Commander.

b. The facility or the training area must be identified in the training plan.

- c. A DD Form 2977 Risk Assessment must be completed and signed by commander before training is conducted.
- d. The vehicle transporting the AE is inspected before the AE is loaded. Document the inspection using DD Form 626. Vehicle has the proper placard in all four side of the vehicle.
- e. Fort Sill Fire Department must be notified before and after training is conducted.
- f. Ammunition routes must be followed as much as possible. Cantonment area main roads must be avoided as much as possible tank trails are desirable.

Appendix A

References

Section I

Required Publications

AR 5-13, Total Army Munitions Requirements and Prioritization Policy, 31 March 2021 (superseded AR 5-13, 10/8/2015)

AR 15-6 Procedures for Administrative Investigations and Boards of Officers, 01 April 2016

AR 75-1, Malfunctions Involving Ammunition and Explosives, cited in para 1-6c (19), 9 February 2017

AR 190-11, Physical Security of Arms, Ammunition, and Explosives, 17 January 2019

AR 210-20, Real Property Master Planning for Army Installations, 16 May 2005

AR 385-10, The Army Safety Program, 24 February 2017

DA Pam 385-10, Army Safety Program, 23 May 2008

DA Pam 385-30, Risk Management, 02 December 2014

DA Pam 385-40, Army Accident Investigations and Reporting, 18 March 2015

DA Pam 385-61, Toxic Chemical Agent Safety Standards, 01 November 2018

DA Pam 385-63, Range Safety, 16 April 2014

DA Pam 385-64, Ammunition and Explosives Safety Standards, 24 May 2011

DA Pam 385-65, Explosive and Chemical Site Plan Development and Submission, 01 February 2008

DA Pam 700-16, The ARMY Ammunition Management System, 26 June 2017

DA PAM 742-1, Inspection of Supplies and Equipment: Ammunition Surveillance Procedures, 22 November 2016

DOD 4145.26-M, DOD Contractor's Safety Manual for Ammunition and Explosives, 09 April 2005

DOD Directive 4715.11 Environmental and Explosives Safety Management on Operational Ranges Within the United States, dated 31 August 2018

DOD 6055.09-M, Vol.1 DOD Ammunition and Explosives Safety Standards: General Explosives Safety Information and Requirements, 29 February 2008, effective date

incorporating change 1, 12 March 2012

DODD 6055.9E, Explosive Safety Management and the DOD Explosives Safety Board, 18 November 2016, effective date incorporating change 3, 26 June 2019

DODI 6055.16, Explosive Safety Management Program, 29 July 2008, incorporating change 3, 31 August 2020

DTR 4500.9-R, Defense Transportation Regulation, 19 October 2020

FS Reg 385-10, Fort Sill Safety Regulation, 10 October 2018

FS Reg 385-1, Fort Sill Post Range Regulation, 24 June 2016

IMCOM Reg 385-10, Installation Management Command Safety Program, 05 April 2013

ATP 4-35.1, Techniques for Munitions Handlers, 08 November 2016

ATP 5-19, Risk Management, 08 September 2014

Military Standard 129R, Military Markings for Shipment and Storage, 18 February 2014

49 CFR Parts 100-185, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Revised as of 01 October 2011

Section II Prescribed Forms

DD Form 2890, DOD Multimodal Dangerous Goods Declaration

DD Form 2977 Deliberate Risk Assessment Worksheet

DA Form 626, Motor Vehicle Inspection (Transporting Hazardous Material)

DA Form 2028, Recommended Changes to Publications and Blank Forms

DA Form 3020-R, Magazine Data Card (LRA)

DA Form 4379, Ammunition Malfunction Report

DA Form 4604, Security Construction Statement

DA Form 7632, Deviation Approval and Risk Acceptance Document (DARAD)

OF 346, U.S. Government Motor Vehicle Operator's Identification Card

Appendix B

Ammunition and Explosives Handler's Certification Form

Ammunition and Explosives Handler's Certification Form		
Section I. Ammunition & Explosives (A&E) Handler's Information		
1. Name (Last, First, MI):	2. DODID	3. Date:
4. Organization:	5. Job Title:	
6. Type of Certification: <input type="checkbox"/> Interim <input type="checkbox"/> Initial <input type="checkbox"/> Re-certification		
Section II. A&E Course Completion Information (must attach course certificate or ATTRS transcript and all other support documents)		
7. Unit Ammo Handlers Required Courses		
<input type="checkbox"/> AMMO 45 <input type="checkbox"/> AMMO 68 <input type="checkbox"/> AMMO Handlers Course <input type="checkbox"/> DA Form 7281/7708		
8. ASP Workers Required Courses		
<input type="checkbox"/> AMMO 45 <input type="checkbox"/> AMMO 63 <input type="checkbox"/> AMMO 64 <input type="checkbox"/> AMMO 68 <input type="checkbox"/> AMMO 112 <input type="checkbox"/> DA Form 7281/7708		
Section III. Organizational Review		
I certify that the above named individual has completed all required education, training (including OJT), and other experience requirements for the listed job title and recommend certification approval.		
9. 1 st Line Supervisor:	10. Command Representative:	
Signature: _____	Date: _____	Signature: _____ Date: _____
Section VI. Explosives Certification Board Review and Concurrence		
11a. Name	11b. Title	11c. Signature/Date
Section V. Applicant Certification		
12a. Board Chairman Name	12b. Certified <input type="checkbox"/> Not Certified <input type="checkbox"/>	12c. Board Chairman Signature
Section VI. Explosives Certification Board Log		
13a. Log ID Number:	13b. Date:	13c. Expiration Date:

FS Form 385-64

Figure B-1

General Instructions

Items 1 through 11 will be completed by the unit/organization prior presenting packet to the certification board. Items 12 through 14 will be completed by the board members.

Section I. 1 through 4, Ammunition & Explosives (A&E) Handler's Information self-explanatory

- Item 1. Enter complete ammo handler name
- Item 2. DODID from Common Access Card (CAC)
- Item 3. Date packet was completed by the unit/organization.
- Item 4. Enter the name of the ammo handler or inspector unit/organization
- Item 5. Individual job title i.e., ammo handler, ammo inspector, clerk, supervisor, etc.
- Item 6. Type of certification marked (X) with the appropriate certification

Section II. A&E course completion information certificates or transcripts must be included in the packet

- Item 7. Unit Ammo Handlers required courses certification
- Item 8. ASP worker required courses certification

Section III. Organizational review

- Item 9. Individual unit/organization 1st line supervisor i.e., platoon sergeant/leader, supervisor, program manager for contractors
- Item 10. Individual command representative i.e., unit commander, contractor representative, directorate representative

Section IV. Explosives Certification Board Review and Concurrence

- Item 11a. Board members complete name
- Item 11b. Board members Title
- Item 11c. Board members signature and date

Section V. Certifying Official

- Item 12a. Complete name of the Board Certifying Official
- Item 12b. Must check either certified or not certified
- Item 12c. Board Certifying Official signature

Section VI. Explosives Certification Board Log

- Item 13a. The record keeping member will assign a log number which will reflect on the certification card
- Item 13b. Date that the packet was completed

Item 13c. Date of the expiration one year from completion of the packet

Appendix C

Ammunition and Explosive Certification Program Matrix IAW DA PAM 385-64

AMMUNITION & EXPLOSIVE CERTIFICATION PROGRAM MATRIX		
Required Training	Unit Level AMMO Handlers	Title of Course
AMMO-45-DL	9E-F67/920-F35 (DL)	INTRODUCTION TO AMMUNITION
AMMO-68-DL	4E-F46/645-F30 (DL)	MILITARY MUNITIONS RULE
Resident Training	Conducted by ASP	AMMO Handlers Course. Must complete course and training listed above to obtain AMMO Handlers Certification
Required Training	ASP Workers	Title of Course
AMMO-45-DL	9E-F67/920-F35 (DL)	INTRODUCTION TO AMMUNITION
AMMO-63-DL	4E-F44/645-F28 (DL)	U.S. ARMY EXPL SAFETY FAMILIARIZATION
AMMO-64-DL	4E-F45/645-F29 (DL)	CLASS V ISSUE & TURN-IN PROC FOR USING UNITS
AMMO-68-DL	4E-F46/645-F30 (DL)	MILITARY MUNITIONS RULE
AMMO-112-DL	4E-F28/645-F12 (DL)	AMMUNITION & EXPLOSIVES STORAGE SAFETY
Required Training	Safety Professionals	Title of Course
AMMO-28-DL**	4E-F45/645-F29 (DL)	ARMY ELECTRICAL EXPLOSIVE SAFETY
AMMO-45-DL	9E-F67/920-F35 (DL)	INTRODUCTION TO AMMUNITION
AMMO-63-DL	4E-F44/645-F28 (DL)	U.S. ARMY EXPL SAFETY FAMILIARIZATION
AMMO-68-DL**	4E-F46/645-F30 (DL)	MILITARY MUNITIONS RULE
AMMO-78-DL	4E-F62/645-F46 (DL)	AMMUNITION PUBLICATIONS
AMMO-97-DL**	4E-F64/645-F48 (DL)	MUNITIONS HISTORY PROGRAM
AMMO-99-DL**	4E-F65/645-F49 (DL)	APPLICATION OF US ARMY ESQD PRINCIPLES
AMMO-100-DL**	4E-F25/431-F9 (DL)	ARMY EXPLOSIVE SAFETY SITE PLANNING
AMMO-107-DL	4E-F26/431-F10 (DL)	INTRODUCTION TO EXPLOSIVE SAFETY MANAGEMENT
AMMO-112-DL**	4E-F28/645-F12 (DL)	AMMUNITION & EXPLOSIVES STORAGE SAFETY

NOTE: ** Denotes Required Training for Safety Professionals with Explosive Safety Responsibilities

Figure C-1

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Appendix D

Arms Room Ammunition Storage Request Packet Example and Forms

Items needed for Fort Sill Arms Room Ammunition Storage License

Complete and return the listed items to the FCoE Safety Office via e-mail to: howard.g.gaede.civ@army.mil and michael.l.martin.civ@army.mil, or in person to building 2868, RM 112 (South entrance door). For any questions about the License Packet please call (580) 442-2266/2212.

Item 1. A memorandum requesting the issue of an ammunition storage license, containing the mission, and duration of mission from – to dates, and QTY, NOMEN, DODIC of ammo requested. (See below example for content)

Item 2. DD2977, Deliberate Risk Assessment Worksheet (DRAW) NOV 2020 or later – (see below example) - signed IAW DA-PAM CG Policy Memo #3A (attached).

Item 3. FS Form 385-64-A, Arms Room Ammunition Storage Safety Inspection completed and signed by BN (or higher) Safety or Ammo Officer. (See Attached).

Item 4. FS Form 385-64-B Unit Arms Room Licensing Commander Compliance Checklist, completed and signed by the commander requesting the storage. (See attached)

Item 5. Current, valid construction statement for the arms room (DA Form 4604) if necessary, request from DPW by submitting a DA Form 4283 through work control POC Mr. Eric Mitchell, (254) 442 4664, Bldg 1950, email: eric.e.mitchell.civ@army.mil. The arms room number must match across the request memo, DA 4604 and the DD 2977.

NOTES:

The completed license will be released to the QASAS, who will return the license to FCoE Safety upon completion of their inspection.

QASAS Contact Numbers: (580) 442-4408.

Maximum quantity of ammo authorized for storage in unit arms rooms is 100lbs Net Explosives Weight (NEW) of 1.4S, and 1.3 HC/D, and 50lbs of 1.2.2 HC/D.

Allow 10 Working days to process request and complete the storage license.

Ammunition for training (i.e. FTX, Weapons Qualification/Familiarization) **IS NOT AUTHORIZED** for storage in Arms Room IAW FS REG 385-64. The Ammunition Holding Area (AHA) is licensed for that storage.

Fire Department inspection contact: The best way for contact is via email to: dwayne.m.harris4.civ@army.mil The unit will need to let the Fire Dept. know the building number and what service (arms room inspection) they're requesting, POC, phone number. As soon as the email is received FD will pass it on to the assigned fire inspector for that facility and they will contact the POC to schedule their inspection.

Figure D-1



DEPARTMENT OF THE ARMY
CHARLIE BATTERY, 2nd BATTALION, 120th FIELD
ARTILLERY 1ST FIRES BRIGADE
FORT SILL, OKLAHOMA 73503

REPLY TO
ATTENTION OF

AFYB-FBC-CO

Day / Month / Year

MEMORANDUM THRU Commander, 2-120 FA, 1st Fires Brigade, ATTN: S-2, Fort Sill, Oklahoma, 73503

Commander, 1st Fires Brigade, ATTN: S-2, Fort Sill, Oklahoma, 73503

FOR Commander United States Army Fires Center of Excellence, ATTN: FCoE Safety Office, Fort Sill, Oklahoma, 73503

SUBJECT: Storage of Ammunition in Unit Arms Room

1. References:

a. Department of the Army Pamphlet 385-64, Ammunition and Explosives Safety Standards, 24 May 2011 (RAR 10 October 2013).

b. Fort Sill Regulation 385-64, Explosives Safety Management Program (ESMP), 10 December 2021.

2. Request to store the following operational ammunition in the (EX: C 2-120 FA Arms Room, Bldg 12345, Room 123 or Naval Armory SN 10-04-1358 (ARMAG) (choose one type), on Fort Sill, Oklahoma. Ammunition is required for (EX: Ceremonial/Funeral detail, Crisis Response Battalion or Operational Load. List the specific mission/reason). (choose one or explain why) for the period from (DATE) to (DATE).

XXXX rounds CTG. 5.56MM Ball M855 CLPD (DODIC A059) HC/D 1.4S

Additional lines as necessary

3. Required DD 2977, Deliberate Risk Assessment Worksheet; FS Form 385-64-A, Arms Room Ammunition Storage Safety Inspection; FS Form 385-64-B, Unit Arms Room License Requirements, and DA Form 4604, Security Construction Statement are enclosed.

4. Ammunition is packed in the approved metal containers and secured. The fire symbol appropriate for the fire hazard ("2", "3", or "4" as applicable) is displayed at the entrance outside the building and by the arms room door, visible to all personnel at all times.

Figure D-1 (continued)

5. POC is the undersigned at (xxx) xxx-xxxx or email joe.rambo.mil@mail.mil.

Encls
as

Signature

Joe Rambo
CPT, FA
Commanding

Figure D-1 (continued)

DELIBERATE RISK ASSESSMENT WORKSHEET						
1. MISSION/TASK DESCRIPTION AND EXECUTION DATE(S) Storage of Mission Essential ammunition in (Your Unit Arms Room (Bldg 12345, Room 678) for CRB / ACP / OPL / Ceremonial / Funeral Honors (Select and insert the appropriate mission(s))) For the period From: YYYYMMDD to : YYYYMMDD						2. DATE PREPARED
3. PREPARED BY						
a. NAME (Last, First, Middle Initial) Kirk, James T.			b. RANK/GRADE SSG/E-6		c. DUTY TITLE/POSITION Unit Safety Officer	
d. UNIT B 2-5 FA		e. WORK EMAIL james.t.kirk53.mil@army.mil			f. TELEPHONE (DSN, Commercial (Include Area Code)) 580.123.4567	
g. UIC/CIN (as required) WE09DFA		h. TRAINING SUPPORT/LESSON PLAN OR OPORD (as required)			i. SIGNATURE OF PREPARER	
Five steps of Risk Management: (1) Identify the hazards (2) Assess the hazards (3) Develop controls & makes decisions (4) Implement controls (5) Supervise and evaluate (Step numbers not equal to numbered items on form)						
<input type="checkbox"/> + <input type="checkbox"/> -	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<input type="checkbox"/> + <input type="checkbox"/> -	Storage of ammunition in battery arms room	Losing ammunition; risk of having it misused or stolen	H	Establish accountability of ammo stored in arms room. Sign out all ammo by the number of rounds and lot number. Implement monthly inspections of rounds and paperwork. Store ammo in banded ammo cans which are chained to the floor of the arms room. Each can will have a tamper proof seal. armorer will inspect seals upon entry into arms room. Amnesty program will be established and amnesty box will be available.	How: Arms room SOP, armorer's course training Who: Leaders, armorer	L
	Crush injuries from rack falling over	Crush injuries from rack falling over	M	Secure racks with bolts, chains, or zip-tie racks. to prevent tipping over or slipping off	How: Arms room SOP, bolt, chain or zip-tie racks together Who: Leaders, Armorer	L

Figure D-1 (continued)

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div>+</div> <div>-</div> <div>+</div> <div>-</div> <div>+</div> <div>-</div> <div>+</div> <div>-</div>		Injury from accidental detonation of rounds "cooking off", during a fire or mishandling an unloaded weapon	H	Notify DES of amount, type, and exact location of rounds in the arms room. Keep two fire extinguishers in the arms room at all times. Post proper signs outside the arms room notifying that there is ammunition in the arms room. Teach armorer proper handling skills for ammo. Ensure all weapons are cleared of ammo.	<div>How: Admin control and inspection of arms room to determine if controls have been met</div> <div>Who: Leaders Armorer</div>	L
		Degradation of ammunition due to excessive moisture, causing powder instability	M	Armorer will inspect ammunition monthly for any signs of degradation. Use a dehumidifier in arms room and empty daily or weekly depending on moisture level	<div>How: Arms room SOP, ammo handlers certification</div> <div>Who: Leaders, armorer</div>	L
		Humidity in Arms Room causing rust on ammunition	M	Armorer will inspect ammunition monthly for any signs of rust. Use a dehumidifier in arms room and empty daily or weekly depending on moisture level	<div>How: Arms room SOP, ammo handlers certification</div> <div>Who: Leaders, armorer</div>	L
		Equipment/ammunition being stolen from arms room	H	Armorer and physical security/safety OIC will ensure alarms in arms room are functioning and perform quarterly inspections to ensure its functionality.	<div>How: Arms room SOP, weekly inspections</div> <div>Who: Leaders, armorer</div>	L

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Figure D-1 (continued)

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div>+ -</div> <div>+ -</div> <div>+ -</div>		Damaged or destruction from accidental detonation of stored ammunition.	M	<p>Stored ammunition is limited to requirements identified on FS Form 385-64-1(Storage License).</p> <p>Net Explosive Weight will not exceed license authorization.</p> <p>Commander must have a signed memorandum listing type and amount of ammunition in arms room for storing Privately Owned Weapons and ammunition for personnel living in barracks.</p> <p>Construction certified for storage by facility engineering.</p> <p>Fire extinguishers available for use in immediate area.</p> <p>Ammunition will be stored in original or approved metal containers or lockers.</p>	<p>How: FS Form 385-64-1 updated annually</p> <p>Who: Armorer, Commander</p>	L
		FIRE	M	<p>2 Fire extinguishers rated (minimum) 1A-10BC readily available. Will be permanently mounted on wall or in tip over container bottom of canister must be min 4in from floor and lever cannot exceed 5ft from the floor.</p> <p>Combustible and flammable liquids non-essential to storage will be removed.</p> <p>Appropriate Fire Symbol, LAW license, is posted adjacent to arms room.</p>	<p>How: Arms Room SOP, Fire marshall training</p> <p>Who: Armorer</p>	L
		Heat injury	M	<p>In non air conditioned rooms the time spent in arms room will be to a minimum, to allow personnel to cool off</p>	<p>How: SOP, Work rest cycle from TRADOC REG 350-29</p> <p>Who: Leaders, Armorer</p>	L

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Figure D-1 (continued)

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div>+</div> <div>-</div> <div>+</div> <div>-</div> <div>+</div> <div>-</div> <div>+</div> <div>-</div> <div>+</div> <div>-</div>		Live/Blank ammunition is confused or mixed with Blank/Dummy ammunition	H	<p>Ammo will be stored separately in marked, banded ammo cans with tamper proof seals</p> <p>All ammo in arms room will be signed out by number of rounds and lot number</p>	<p>How: Establish Battery Ammo SOP within the Arms Room. Armorer will inspect each box to ensure no tampering. For loose rounds Armorer along with 1SG/Commander shall inspect each loose round and ensure they are in correct containers.</p> <p>Who: Armorer, 1SG, Commander</p>	L
		Asphyxia from using Purple K Fire Extinguishers	H	<p>Purple K Fire Extinguishers depletes the oxygen in the room causing the fire to smother out. Using Purple K extinguishers may cause oxygen to deplete in small areas causing ASPHYXIA. NO Purple K extinguishers will be used only 10 lb ABC extinguishers</p>	<p>How: NO purple K Extinguishers shall be used in arms room only 10lb ABC extinguishers</p> <p>Who: Armorer, Leaders</p>	L
		Lifting injuries	M	<p>Large ammunition containers, or containers weighing over 30 lbs shall have a two man lift at all times</p>	<p>How: SOP, Armorer, Leaders will enforce</p> <p>Who: Leaders, Armorer</p>	L
		Stray Voltage	M	<p>Ensure all electrical equipment complies with grounding standards IAQ NFPA 70</p>	<p>How: DA PAM 385-64 NFPA 70</p> <p>Who: Leaders, Armorer</p>	
		Exposure of persons unrelated to munitions handling.	M	<p>Always expose. The minimum number of personnel to the minimum amount of explosives, for the minimum amount of time possible.</p>	<p>How: DESR 6055.09 DA Pam 385-64</p> <p>Who: Leaders, Armorer</p>	

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Figure D-1 (continued)

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
+					How:	
					Who:	
-					How:	
					Who:	
10. OVERALL RESIDUAL RISK LEVEL (All controls implemented):						
<input type="checkbox"/> EXTREMELY HIGH <input type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input checked="" type="checkbox"/> LOW						
11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION						
12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK <input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE						
a. NAME (Last, First, Middle Initial)		b. RANK/GRADE	c. DUTY TITLE/POSITION	d. SIGNATURE OF APPROVAL AUTHORITY		
Approval Authority based on CG Policy Memo #34			Commander			
e. ADDITIONAL GUIDANCE: If ammunition is being stored in the arms room, it will be in the proper storage containers. Proper signs will be posted. If ammunition is considered operational load (OL), ammo will be added to the CDR's property book.						

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Figure D-1 (continued)

RISK ASSESSMENT MATRIX		Probability (Expected frequency)				
		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity (expected consequence)		A	B	C	D	E
Catastrophic: Mission failure, unit readiness eliminated; death, unacceptable loss or damage	I	EH	EH	H	H	M
Critical: Significantly degraded unit readiness or mission capability; severe injury, illness, loss or damage	II	EH	H	H	M	L
Moderate: Somewhat degraded unit readiness or mission capability; minor injury, illness, loss, or damage	III	H	M	M	L	L
Negligible: Little or no impact to unit readiness or mission capability; minimal injury, loss, or damage	IV	M	L	L	L	L
LEGEND: EH - Extremely High Risk H - High Risk M - Medium Risk L - Low Risk						
13. RISK ASSESSMENT REVIEW (Required when assessment applies to ongoing operations or activities)						
a. DATE	b. LAST NAME Must send to FCoE Safety	c. RANK/GRADE	d. DUTY TITLE/POSITION	e. SIGNATURE OF REVIEWER		
14. FEEDBACK AND LESSONS LEARNED						
15. ADDITIONAL COMMENTS OR REMARKS						

Figure D-1 (continued)

Instructions for Completing DD Form 2977, "Deliberate Risk Assessment Worksheet"	
<p>1. Mission/Task Description and Execution Date(s): Briefly describe the overall Mission or Task and execution date(s) for which the deliberate risk assessment is being conducted.</p> <p>2. Date Prepared: Enter date form was prepared.</p> <p>3. Prepared By: Information provided by the individual conducting the deliberate risk assessment for the operation or training. Legend: UIC = Unit Identification Code; CIN = Course ID Number; OPORD = operation order; DSN = defense switched network; COMM = commercial</p> <p>4. Subtask/SubStep of Mission/Task: Briefly describe all subtasks or substeps that warrant risk management.</p> <p>5. Hazard: Specify hazards related to the subtask in block 4.</p> <p>6. Initial Risk Level: Determine initial risk level. Using the risk assessment matrix (preceding block 13), determine level of risk for each hazard specified. Use probability and severity to determine risk level; enter risk level into column.</p> <p>7. Control: Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in block 5.</p> <p>8. How to Implement / Who Will Implement: Briefly describe the means of employment for each control (i.e., OPORD, briefing, rehearsal) and the name of the individual, unit or office that has primary responsibility for control implementation.</p> <p>9. Residual Risk Level: After controls are implemented, determine resulting probability, severity, and residual risk level.</p> <p>10. Overall Risk After Controls are Implemented: Assign an overall residual risk level. This is equal to or greater than the highest residual risk level (from block 9).</p>	<p>11. Supervision Plan and Recommended Course of Action: Completed by preparer. Identify specific tasks and levels of responsibility for supervisory personnel and provide the decision authority with a recommend course of action for approval or disapproval based upon the overall risk assessment.</p> <p>12. Approval/Disapproval of Mission/Task: Risk approval authority approves or disapproves the mission or task based on the overall risk assessment, including controls, residual risk level, and supervision plan.</p> <p>13. Risk Assessment Review: Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission or activity and controls to provide valid input on changes or adjustments needed. If the residual risk rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.</p> <p>14. Feedback and Lessons Learned: Provide specific input on the effectiveness of risk controls and their contribution to mission success or failure. Include recommendations for new or revised controls, practicable solutions, or alternate actions. Submit and brief valid lessons learned as necessary to persons affected.</p> <p>15. Additional Comments or Remarks: Preparer or approval authority provides any additional comments, remarks, or information to support the integration of risk management.</p> <p>Additional Guidance: Blocks 4-9 may be reproduced as necessary for processing of all subtasks/substeps of the mission/task. The addition and subtraction buttons are designed to enable users to accomplish this task.</p>

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Figure D-1 (continued)

ARMS ROOM AMMUNITION STORAGE SAFETY INSPECTION					
Unit: _____		Bldg. #: _____			
Unit Commander: _____		Telephone #: _____			
Unit Armorer: _____		Telephone #: _____			
	ARMS ROOM / EXPLOSIVE SAFETY	GO	NO GO	N/A	Remarks
1.	Are 2 fire extinguishers present, serviceable, and readily available? (Minimum 10BC Rated)				
2.	Have fire extinguishers been inspected annually by a qualified/trained individual?				
3.	Are fire extinguishers located and properly/secured mounted?				
4.	Are flammable liquids NOT stored inside arms room?				
5.	Are dirty rags stored in a metal container with a lid?				
6.	Is storage of combustible materials kept to a minimum and in neat and orderly state?				
7.	Are appropriate fire symbols legible, and posted on exterior of building and outside of arm room's entrance, or removed if no A&E is stored?				
8.	Are ammunition/explosives containers and/or cabinets properly marked with appropriate fire symbol?				
9.	Are materials not stored within 18 inches of sprinkler heads, or within 24 inches of ceiling in other areas?				
10.	Are electric space heaters NOT used inside the unit arms room?				
11.	Are extension cords NOT used to supply power from the ordinary power source?				
12.	Are light fixture exposed to breakage (covers in place, protective sheaths on fluorescent bulbs)?				
13.	No training ammunition being stored in the arms room?				
	** Ammunition/explosive storage quantities are limited to the amounts and hazard class/divisions approved by ammo surveillance personnel and Fort Sill Explosives Safety Manager.				

To be completed and signed by the BN (or Higher) Safety or Ammo Officer

Approved: _____ Disapproved (See remarks): _____

Inspector: _____ Date: _____ Telephone #: _____

Signature: _____

Additional Remarks:

FS Form 385-64-A, SEP 2022

Figure D-1 (continued)

Unit Arms Rooms Licensing Compliance Checklist		
Ammunition storage in unit arms rooms requires an approved explosive storage license		
The FCoE Safety Office is the issuing authority		
NOTE: A copy of all the documents listed below will be available to any inspecting activity at the time of inspection.		
		YES NO
1	Has the unit prepared a memorandum requesting the issuance of a license for storage of authorized ammunition items in an arms room?	<input type="checkbox"/> <input type="checkbox"/>
2	Has the unit prepared a risk assessment (DD 2977) for the arms room approved by the appropriate risk acceptance authority LAW CG Policy Memo #3A?	<input type="checkbox"/> <input type="checkbox"/>
3	Has a current Security Construction Statement (DA Form 4604-R) been obtained and posted? (This document is valid for five years from the date of issue).	<input type="checkbox"/> <input type="checkbox"/>
4	Is a record of an Installation Physical Security AA&E record inspection, conducted by the FS Office of the Provost Marshal/DES within the last year, on hand?	<input type="checkbox"/> <input type="checkbox"/>
5	Is a record of a FS Fire Department inspection, conducted within the last year, on-hand?	<input type="checkbox"/> <input type="checkbox"/>
6	Does arms room have two fire extinguishers, rated at least 10 BC, mounted on wall, serviceable and readily available?	<input type="checkbox"/> <input type="checkbox"/>
7	Does unit have the correct fire symbol displayed upon receipt of the ammunition? When ammunition is no longer being stored the signs must be covered or removed.	<input type="checkbox"/> <input type="checkbox"/>
8	Does the arms room have a current arms room (A&E) SOP, and approved access roster?	<input type="checkbox"/> <input type="checkbox"/>
9	Does the unit have Ammunition Handlers that have been appointed on orders by their commander and meet all training requirements outlined in FS REG 385-64?	<input type="checkbox"/> <input type="checkbox"/>
10	Has the armory team completed the Ammo-45 (DL) and Ammo 68 (DL) courses via ATTRS?	<input type="checkbox"/> <input type="checkbox"/>
11	Has all the above mentioned documentation been gathered for posting with the issued license in the arms room?	<input type="checkbox"/> <input type="checkbox"/>
12	Is the ammunition added to the property book for the duration of the license? A QASAS inspected item.	<input type="checkbox"/> <input type="checkbox"/>
NOTE: You must have all "YES" to be compliant with the license requirements. The license will be relinquished by the QASAS after the inspection.		

Signature of Requesting Commander:

Date:

FS Form 385-64-B, SEP 2022

Figure D-1 (continued)

IAW DA PAM 385-64

1-8. Explosives safety training

a. All personnel (supervisory and non-supervisory) who conduct AE-related activities shall complete explosives safety training appropriate for the activities that they perform. Such personnel shall receive periodic refresher training to help ensure the requisite level of knowledge of and competency in explosives safety.

b. In addition to any explosives safety training specified for career programs in AR 690-950 and related publications and training mandated by local, state, or federal requirements, explosives safety training shall be accomplished by ACOMs, ASCCs, DRUs, garrison, or installation and unit level as indicated in figure 1-1.

Training course	Title or position held and specific duties performed								
	Safety and occupational health professionals in 001B and 0003 job series	Safety and occupational health professionals with explosives safety responsibilities	Quality Assurance Specialist/ Ammunition Surveillance (QASAS)	Ammunition area and operation supervisors and planners	Ammunition handling and operating personnel	Personnel who prepare, review, or recommend approval of site plans	Personnel who test/inspect grounding, bonding, and/or lightning protection systems	Personnel who handle or manage waste military munitions	Personnel who monitor the safety of contractors handling ammunition or explosives
AMMO-107 or 107-DL ⁽²⁾	Mandatory	Mandatory	Mandatory	Suggested	Suggested	Mandatory			Mandatory
AMMO-46-DL	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory		Mandatory	Mandatory
AMMO-31-DL		Suggested	Suggested	Suggested	Suggested			Mandatory	
AMMO-63-DL	Mandatory	Mandatory	Mandatory	Suggested	Suggested	Mandatory		Mandatory	Mandatory
AMMO-78-DL	Mandatory	Mandatory	Mandatory	Suggested	Suggested	Mandatory			Mandatory
AMMO-54-DL		Mandatory	Mandatory	Mandatory	Suggested	Suggested	Suggested		
AMMO-68-DL	Suggested	Mandatory-Annual Refresher Required	Mandatory-Annual Refresher Required	Mandatory ⁽³⁾ -Annual Refresher Required	Mandatory ⁽³⁾ -Annual Refresher Required			Mandatory-Annual Refresher Required	Mandatory-Annual Refresher Required
AMMO-65		Suggested	Suggested	Suggested					Mandatory
AMMO-82 or AMMO-99-DL	Suggested	Mandatory	Mandatory	Suggested	Suggested	Mandatory			
AMMO-29-DL	Suggested	Mandatory	Mandatory				Mandatory		Mandatory
AMMO-112-DL	Suggested	Mandatory	Mandatory	Suggested	Suggested				Mandatory
AMMO-100-DL		Mandatory	Mandatory			Mandatory			
AMMO-101-DL		Mandatory	Mandatory			Mandatory			
AMMO-103-DL		Mandatory	Mandatory			Mandatory			
Advanced Explosives Safety Management Workshop	Suggested	Mandatory	Suggested						Suggested
Explosives Safety in Tactical Environments Workshop		Mandatory	Mandatory						
Explosives Safety in RDTE and Industrial Environments Workshop		Mandatory ⁽⁷⁾	Suggested						
AMMO-87-DL		Mandatory ⁽⁸⁾	Mandatory					Suggested	
AMMO-90-DL		Mandatory ⁽⁸⁾	Suggested						
AMMO-97-DL		Mandatory ⁽⁸⁾	Mandatory						Suggested

Figure 1-1. Army explosives safety course (applicable to military and civilian personnel) 1, 2, 3, 4

Figure D-1 (continued)

Legend:

AMMO-107 or 107-DL: Introduction to Explosives Safety for Safety Professionals
AMMO-45-DL: Introduction to Ammunition
AMMO-31-DL: Environmental Considerations for Ammunition Personnel
AMMO-63-DL: U.S. Army Explosives Safety Familiarization
AMMO-78-DL: Ammunition Publications
AMMO-54-DL: Risk Management for and Preparation of SOPs for A&E Operations
AMMO-68-DL: Military Munitions Rule
AMMO-65: DOD Contractors' Explosives Safety Standards
AMMO-82: Explosives Safety Quantity Distance
AMMO-99-DL: Application of U.S. Army ESQD Principals
AMMO-28-DL: Electrical Explosives Safety for Army Facilities
AMMO-112-DL: Explosive Safety in Storage
AMMO-100-DL: U.S. Army Explosives Safety Site Planning Course
AMMO-101-DL: Tutorial for DDESB QD Calculator
AMMO-103-DL: Explosives Safety Siting and Army Site Submission Electronic Tool (ASSET)
AMMO-87-DL: Military Munitions Response Program (MMRP)
AMMO-90-DL: Munitions Response Site Prioritization Protocol
AMMO-97-DL: Munitions History Program

Notes:

- 1 - AMMO designated numbers are U.S. Army Defense Ammunition Center course numbers.
- 2 - Course numbers ending with DL indicate a distance learning course.
- 3 - See chapter 20 for certification and training requirements associated with the transportation of AE.
- 4 - USACE Ordnance and Explosives Safety Specialists (OESSs) shall follow the minimum requirements of DDESB TP-27 and the CP12 Explosives Safety Handbook.
- 5 - Pre-requisite courses for AMMO-107 are: AMMO-45-DL, AMMO-63-DL, and AMMO-78-DL.
- 6 - Commanders will designate the Ammunition Area/Operation Supervisors and Ammunition Handling and/or Operating Personnel for which this training is mandatory based on their duties.
- 7 - Mandatory for safety professionals with explosives safety roles and responsibilities in industrial and RDT&E missions and functions; recommended for safety professionals with explosives safety roles and responsibilities in munitions response missions and functions.
- 8 - Mandatory for safety professionals with explosives safety roles and responsibilities in munitions response missions and functions.

The specific duties that an Armor is required to perform is Ammunition Handling and Operating Personnel. The two mandatory ATRRS distance learning (DL) classes are Ammo 45 and ammo 68.

AMMO 45 ATRRS Course number 9E-F67/920-F35

Ammo 68 ATRRS Course number 4E-F46/645-F30

<https://www.atrrs.army.mil/atrrscc/>

Figure D-1 (continued)

Example Explosive Storage Limits and License

Page 1 of 1

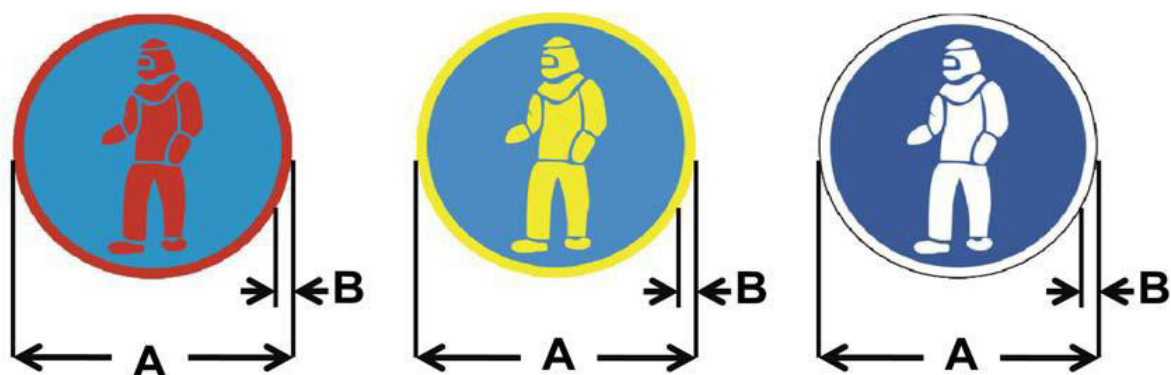
Fort Sill Regulation 385-64, 1 February 2023

Colors (per Federal Standard 595A and GSA Catalog)			
Background: Orange #12246 Numbers: Black # 17038			
Dimension	Large Symbol (inches)	Small Symbol	(inches)
A	24	12	
B	7	3.5	
C	10	5	
D	8	4	
Number (height)	10	5	
Number (thickness)	2	1	

Figure E-1 (continued)

Appendix F

Chemical hazard symbols



Symbol 1. Wear full protective clothing.

Background is blue (#15102). Figure and rim are as follows:

Red (#11105) is for Set 1 Protective Clothing:

24 inch: NSN 7690-01-081-9586

12 inch: NSN 7690-01-081-9585

Yellow (#13538) is for Set 2 Protective Clothing:

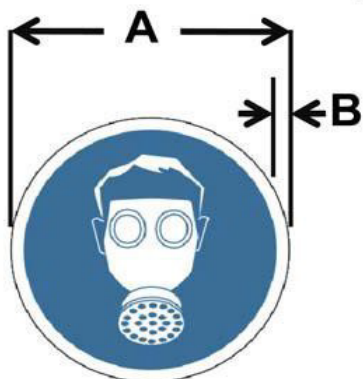
24 inch: NSN 7690-01-081-9587

12 inch: NSN 7690-01-082-0291

White (#17875) is for Set 1 3 Protective Clothing:

24 inch: NSN 7690-01-083-6272

12 inch: NSN 7690-01-081-9588



Symbol 2. Wear breathing apparatus.

Background is blue (#15102).

Figure and rim are white (#17875).

24 inch: NSN 7690-01-081-9589

12 inch: NSN 7690-01-082-6710



Symbol 3. Apply no water.

Background is white (#17875).

Circle and diagonal are red (#11105).

24 inch: NSN 7690-01-082-2254

12 inch: NSN 7690-01-082-0292

Dimension	Large Symbol (inches)	Small Symbol (inches)
A	24	12
B	.5	.25
C	2	1

Figure F-1

Appendix G

Fire Symbol Hazard and Emergency Withdrawal Distances

DA Pam 385-64, Table 6-2
Fire symbol hazards and actions

Fire symbol	Materials	Hazard	Action/remarks
1	1. 1 explosives, ammunition, and liquid propellants	Mass detonation	Will not be fought unless a rescue attempt is being made. 2. If there is suitable separation between nonexplosive and symbol 1 material and if approved by the fire chief, fire-fighting forces may attempt to extinguish the fire. If personal safety is in doubt, take suitable cover.
2	1.2 ammunition and explosives	Explosion with fragments	Give the alarm and attempt to extinguish the fire if in an early stage. 2. Firefighting forces should fight the fire, until the explosive material becomes involved in the fire or the fire chief determines the risk is too great. If not possible, prevent the fire from spreading. Detonations of items occur. Provide protection from fragments.
3	1.3 ammunition and explosives	Mass fire	May be fought if explosives not directly involved. 2. If WP munitions are involved, smoke is liberated. WP munitions may explode. WP should be immersed in water or sprayed with water continuously. 3. For fire involving HC and incendiaries, water should not be used unless large quantities are available. Use dry sand and/or dry powder agent in the early stage. 4. For fires involving pyrotechnics and magnesium incendiaries, protect adjacent facilities and equipment. Do not use CO2 or water on or near the munitions. Allow magnesium to cool unless upon flammable material. In this case, use a 2- inch layer of dry sand or powder on the floor and rake the burning material onto this layer and smother.
4	1.4 ammunition and explosives	Moderate fire	Fight the fires. Expect minor explosions and hot fragments.

Figure G-1

Legend: HC- hexachloroethane; WP- white phosphorous; CO2- carbon dioxide

DA Pam 385-64, Table 6-3

Emergency withdrawal distances for nonessential personnel

Hazard class/division	Unknown quantity NEW	Known quantity NEW
Unknown, located in facility, truck and/or tractor	4,000 feet (approximately .75 mile)	4,000 feet (approximately .75 mile)
Unknown, located in railcar	5,000 feet (approximately 1 mile)	5,000 feet (approximately 1 mile)
HD 1.1 (see note 1)	Same as unknown HD	<p>For transportation: Use 2,500 feet minimum distance for NEW > 500 lbs. (b) Use 5,000 feet minimum distance for railcars with NEW < 500 lbs. and 4,000 feet for other modes. (c) Use 4,000 feet minimum distance for bombs and projectiles with caliber 5 inch (127 mm) and greater</p> <p>For facilities: Use 2,500 feet minimum distance for NEWQD > 15,000 lbs. b. Use 4,000 feet minimum distance for NEWQD > 15,000 lbs. and 50,000 lbs. or less. c. Above 50,000 lbs., use $D=105 W^{1/3}$.</p>
HD 1.2 (See note 1.)	2,500 feet	2,500 feet
HD 1.3 (See note 2.)	600 feet	Twice the IBD distance with a minimum distance of 600 feet
HD 1.4	300 feet	300 feet

Notes:

¹ For HD 1.1 and 1.2 items, if known, the maximum range fragments and debris will be thrown (including the interaction effects of stacks of items, but excluding lugs, strong backs, and/or nose and tail plates).

² For accidents involving propulsion units, it is unnecessary to specify emergency withdrawal distances based upon the potential flight ranges of these items.

Legend: **D**-distance; **NEW**-net explosive weight; **QD**-quantity distance; **W**-weight; **HD**-hazard class/division; **IBD**-inhabited building distance

Figure G-2

Appendix H

Ammunition Transportation Routes

1. This information is provided to inform units training on FCoE and Fort Sill of the routes that are authorized for transporting ammunition from the Ammunition Supply Point (ASP) to the East and West Range training areas. These are the only designated routes for vehicles transporting Hazard Class 1.1 and 1.2 ammunition. You may transport limited quantities of Hazard Class 1.3 and 1.4 ammunition on alternate routes to meet mission requirements (i.e., storage in unit arms rooms where permitted by regulation).

2. Routes from ASP to the East Range.

a. Primary Route. Depart the ASP through the North Gate by Ammunition Holding Area onto Hanson Road. Go to the end of Hanson Road and turn right on Randolph Road. Turn left on to the howitzer trail between building 7290 and 1490. Turn right at the first “Y” intersection in the howitzer trail. Follow the howitzer trail to White Wolf Bridge. Cross White Wolf Bridge and immediately turn left on to Punch Bowl Road. Turn right onto the howitzer trail that runs parallel to Apache Gate Road and proceed to Knob Hill howitzer trail. Turn right on Knob Hill howitzer trail and cross Apache Gate Road to Knob Hill Road. Follow Knob Hill Road to Quinette Road. Turn left on Quinette Road and proceed to East Range training areas.

b. Alternate Route. Depart ASP through the East exit and continue right on Hirsch Road to the howitzer trail and turn left. Continue on howitzer trail to I 44 under pass to Berry Road. Turn left on Berry Road to Hoyle Bridge low water crossing. Use this route only when you cannot use the primary route.

3. Routes from ASP to the West Range. Depart the ASP through the North Gate by Ammunition Holding Area onto Hanson Road. Go to the end of Hanson Road and turn left on to Artillery Ridge Road.

a. To travel to the southern section of the West Range. Turn left onto the howitzer trail parallel to Tower Two Road. Turn right on the first howitzer trail and cross Tower Two Road. Follow the howitzer trail to Mow-Way House. Continue to McKenzie Hill Road. Turn right on McKenzie Hill Road. Proceed to the southern section of the West Range.

b. To travel to the northern section of the West Range. Turn right onto Tower Two Road. Proceed to the northern section of the West Range.

4. Commercial ammunition carriers entering the post.

a. Primary Route. Enter Apache Gate and park in the vehicle inspection area until cleared by ASP personnel. Upon the completion of the inspection the vehicle continues straight on Apache Gate Road to Currie Road. Follow Currie Road to Searight Road and turn right. Turn left on Hirsch Road. Follow Hirsch to Burrill Road. Turn right on Burrill

Road. Follow Burrill Road to the Van Gate entrance to the ASP. Turn right at the Van Gate entrance. The Van Gate entrance to the ASP is across from the water tower north of Babcock Road.

b. Alternate Route. Enter Key Gate West and Continue on Sheridan Road and turn right onto Currie Road go to on Searight Road and turn left. Proceed to Hirsch Road and turn left. Follow Hirsch to Burrill Road. Turn right on Burrill Road. Follow Burrill Road to the Van Gate entrance to the ASP. Turn right at the Van Gate entrance.

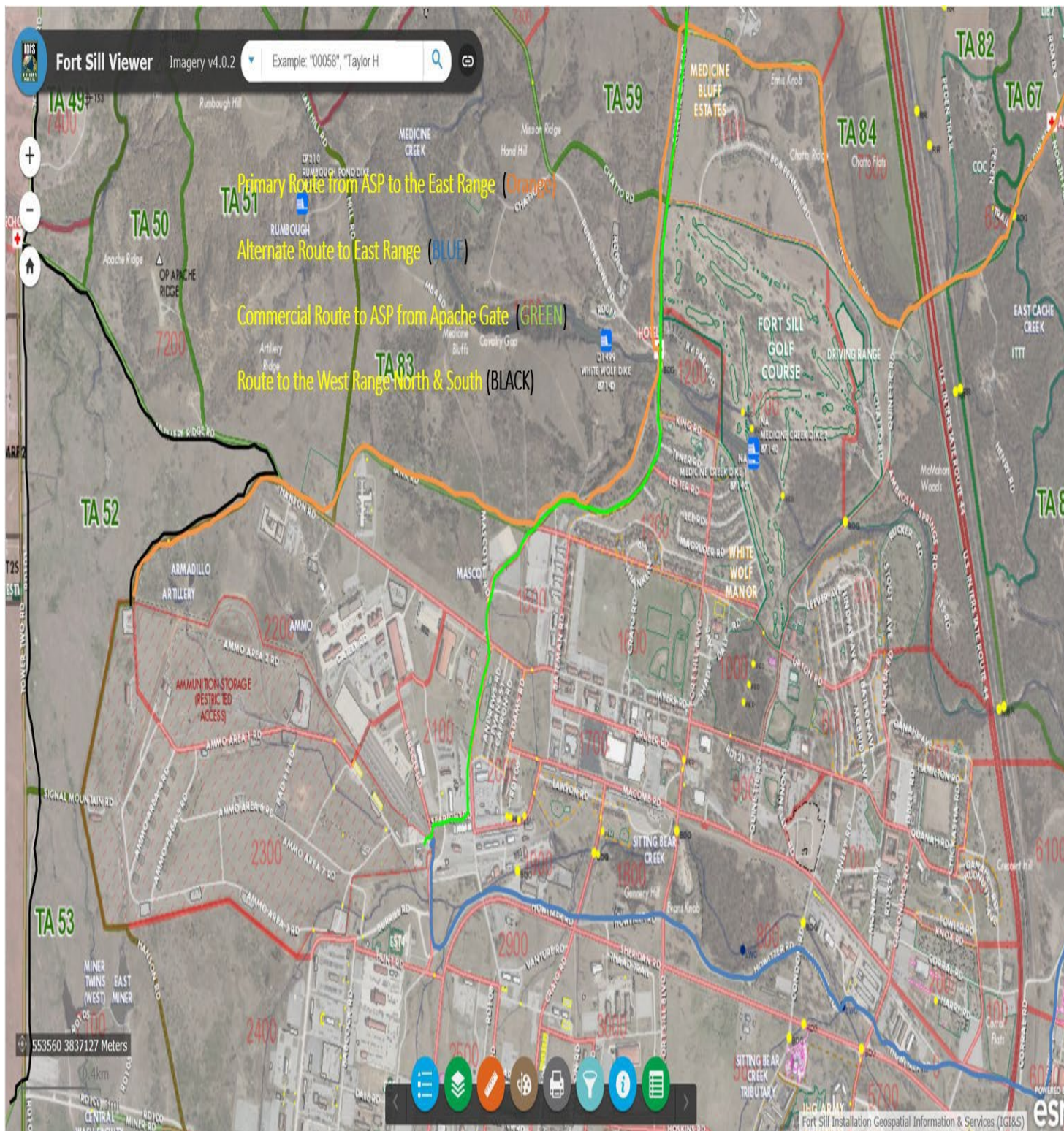
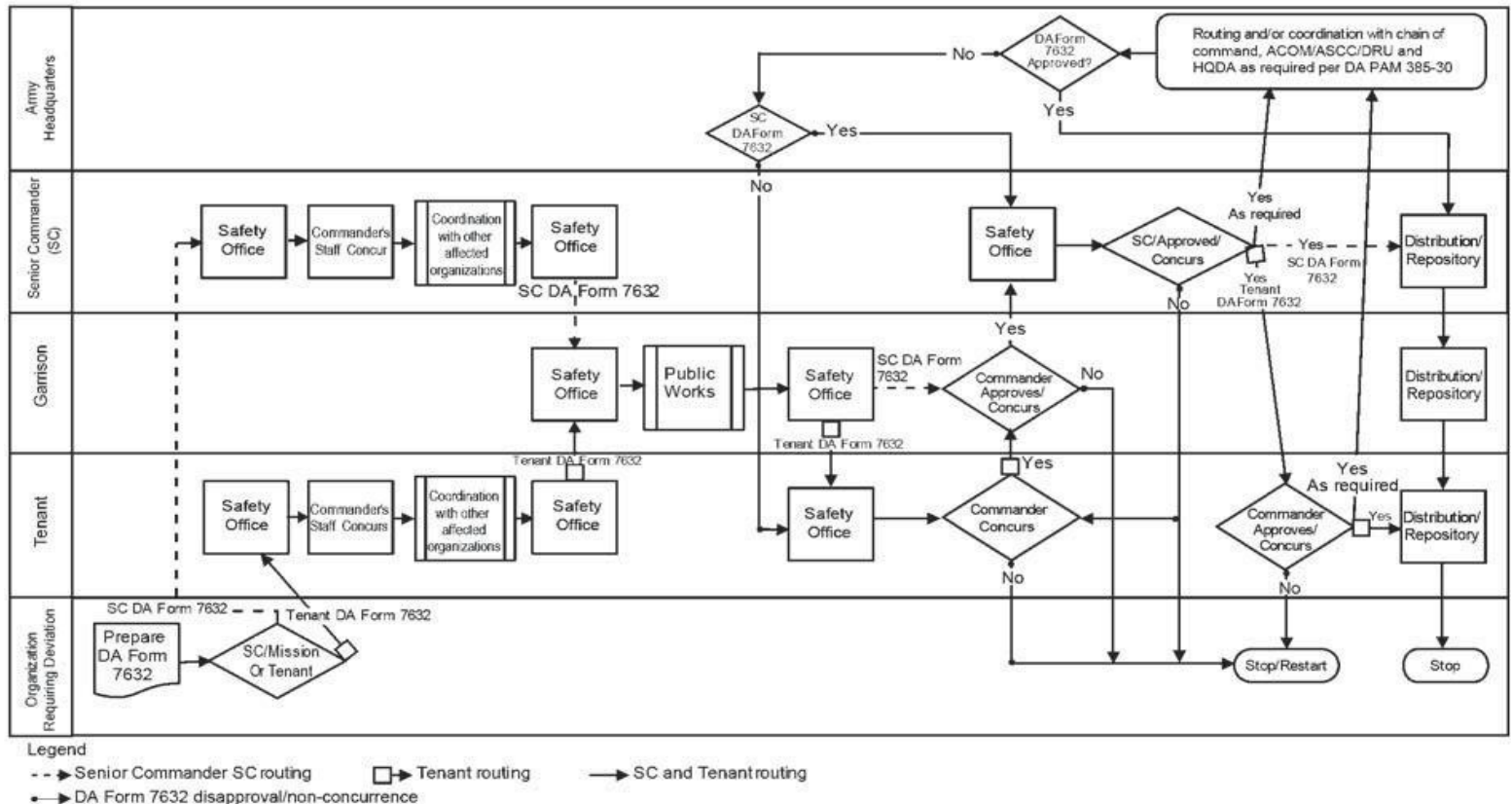


Figure H-1

Appendix I Risk Assessment Routing

Example of DA Form 7632 routing



Notes:

1. Risk acceptance, per FCoE CG Risk Acceptance Authority policy, may occur at various stages of this process, depending on the risk level.
2. The SC lane and the term "SC DA Form 7632" encompass DA Forms 7632 initiated by any local activity falling under the SC's command, including both garrison and mission organizations.
3. The "Safety Office" in the SC lane refers to the SC's designated safety office.

Figure I-1

Appendix J

Helpful Websites

<https://www3.dac.army.mil/> (Defense Ammunition Center)
<https://safety.army.mil/groundsafety/SAFETYPROGRAMS/ExplosivesSafety/tabid/519/Default.aspx> (Explosive Safety)
<http://www.dactces.org/> (Online Training)
<http://www.transcom.mil/dtr/part-ii/chapters.cfm> (The Defense Transportation Regulations)
<https://www3.dac.army.mil/es/usatces> (US Army Technical Center for Explosives Safety)
<http://www.apd.army.mil/> (Army Publishing Directorate)
<http://www.denix.osd.mil/uxo/index.cfm> (Unexploded Ordnance) <https://acc.dau.mil/ammo> (Ammunition Forum)
<https://www.atrrs.army.mil> (Army Training Requirements and Resources System)
<https://www.us.army.mil/suite/page683804> (Army Explosive Safety Knowledge Network)
<http://www.youtube.com/user/DefenseAmmoCntr> (Defense Ammunition Center (DAC) YouTube channel)
<http://digitraining.com/free-security-awareness-training/> <http://www.csregs.com/8-hour-hazwoper-refresher-new-computers/> Security Awareness Training and In-Depth HAZMAT Security Training

Mobile applications

<http://itunes.apple.com> or <https://play.google.com/store/>

- Yellow Book
- Ammo Storage Compatibility Groups
- Explosives Safety Quantity-Distance
- Soldier Safety

Appendix K

Helpful Phone Numbers

Police or Fire Department 911 (Fort Sill) or (580) 442-2101
IOC (580) 442-3240
EOD (580) 442-2313
Garrison Safety Manager (580) 442-4466
QASAS C (580) 483-2390 O (580) 442-4408
Range Operation Desk (580) 442-2008
Army Technical Center for Explosives Safety DSN: 956-8787 or (918) 420-8787

Glossary

Section I Abbreviations

A&E

Ammunition and Explosives

AAFES

Army and Air Force Exchange Service

AFSB

Army Field Support Brigade

AHA

Ammunition Holding Area

AIN

Ammunition Information Notice

ALARACT

All Army Activities

AO

Accountable Officer

ASCC

Army Service Component Command

ASP

Ammunition Supply Point

ATP

Ammunition Transfer Point

ATP

Army Techniques Publications

C2

Command and Control

CDL

Commercial Driver License

CFR

Code of Federal Regulations

CG

Commanding General

CIIC

Controlled Inventory Item Code

CO

Commanding Officer

CO2

Carbon Dioxide

CONUS

Continental United States

COR

Contracting Officer Representatives

CS

Chlorobenzalmalononitrile

DA

Department of the Army

DAC

Defense Ammunition Center

DAITM

Department of the Army Investigation Team for Malfunctions

DARAD

Deviation Approval and Risk Acceptance Document

DCMA

Defense Contract Management Agency

DoD

Department of Defense

DDESB

Department of Defense Explosives Safety Board

DeCA

Defense Commissary Agency

DES

Directorate of Emergency Services

DFARS

Defense Federal Acquisition Regulations Supplement

DPTMS

Directorate of Plans, Training, Mobilization and Security

DODIC

Department of Defense Identification Code

DPW

Directorate of Public Works

DRAW

Deliberate Risk Assessment Worksheet

EID

Electrically Initiated Devices

EMR

Electromagnetic Radiation

EOC

Emergency Operations Center

EOD

Explosive Ordnance Disposal

ES

Exposed Sites

ESC

Explosives Safety Council

ESCB

Explosives Safety Certification Board

ESMP

Explosive Safety Management Program

ESSP

Explosives Safety Site Plan

FARRP

Forward Area Rearm/Refuel Points

FCoE

Fires Center of Excellence

FCoEFS

Fires Center of Excellence & Fort Sill

FORSCOM

United States Army Forces Command

FUDS

Formerly Used Defense Sites

GC

Garrison Commander

GO

General Officer

GS

General Schedule

GSO

Garrison Safety Office

HAZMAT

Hazardous Material

HC

Hexachloroethane

HD

Hazard Class/Division

HERO

Hazards of Electromagnetic Radiation on Ordnance

HQDA

Headquarters, Department of the Army

IAW

In Accordance With

IBD

Inhabited Building Distance

IG

Inspector General

IHC

Interim Hazard Class

IMCOM

Installation Management Command

IOC

Installation Operations Center

IRO

Installation Range Officer

JMC

Joint Munitions Command

LAR

Logistics Assistance Representative

LPS

Lightning Protection System

LRC

Logistics Readiness Center

MEC

Munitions and Explosives of Concern

MICC

Mission and Installation Contracting Command

MOUT

Military Operations in Urban Terrain

MOS

Military Occupational Specialty

NAR

Notification of Ammunition Restriction

NCO

Noncommissioned Officer

NEW

Net Explosive Weight

NFPA

National Fire Protection Association

NM

Nautical Mile

NOTAM

Notice to Airmen

NSN

National Stock Number

O

Officer

OIC

Officer in Charge

OF

Optional Form

PAM

Pamphlet

PAO

Public Affairs Office

PES

Potential Explosion sites

POL

Petroleum, Oils, and Lubricants

PPE

Personal Protective Equipment

PWP

Plastic White Phosphorous

PWS

Production Work Schedule

QASAS

Quality Assurance Specialist-Ammunition Surveillance

Q&D

Quantity-Distance

RDT&E

Research, Development, Test and Experimentation

RF

Radio Frequencies

RFMSS

Range Facility Management Support System

RP

Red Phosphorous

RPMP

Real Property Master Planning

RPPB

Real Property Planning Board

SDZ

Surface Danger Zones

SES

Senior Executive Service

SOP

Standing Operating Procedure

SOUM

Safety of Use Message

SPO

Support Operations

U.S.

United States

USAG

United States Army Garrison

USAG FSOK

United States Army Garrison Fort Sill, Oklahoma

USATCES

United States Army Technical Center for Explosives Safety

UXO

Unexploded Ordnance

WDZ

Weapon Danger Zones

WP

White Phosphorous