Fort Knox Regulation 385-64

Safety

Installation Explosive Management Program

Headquarters

United States Army Installation

Fort Knox, Kentucky 40121

28 February 2023

UNCLASSIFIED

SUMMARY of CHANGE

Chapter 1 para 1-1 **add** DESR 6055.09, AMC 350-4 and DA PAM 385-30
para 1-5 c (20) Review cannon placement prior to firing for unit ceremonial use and review the risk assessment.
Para c. Review construction projects within the range complex. Prepare construction review to be sent to IMCOM and USATCES for approval prior to Building.
Par 1-5 d. (c) For any mishaps / incidents while training in the range area notify Range Operations at 502-624-2125. IAW Fort Knox Regulation 385-22.

Chapter 5
Para 5-6 Request for License will be sent through the Installation Safety Office approved by the Garrison Commander prior to storing ammunition.
Para 5-8 add: THE ARMY RECORDS INFORMATION MANAGEMENT SYSTEM (ARIMS)
Remove: ASP and Range Operations . add Copy's will be maintained at the Installation Safety Office, and DPW.

Chapter 6
Add: Follow guidelines in accordance with DESR 6055-09

Appendix E add:
(1) (e) Will be placed in an accessible low risk area and marked with a contact phone number that is available 24 hours, 7 days a week.
(f) There are five amnesty containers located on Fort Knox at the following locations.
a. USACC Arms Room, Bldg. 5926
b. Boatwright, Bldg. 2770, (outside fence @ main entrance)
c. EUSS parking lot (East end of Bldg. 2380)
d. Wash Rack, Bldg. 9357, (across from Range Operations)
e. ASP at the fence (prior to entering the ASP on Muldraugh Magazine Road)

Appendix G
New locations in Information Paper dated 29 Aug 2019.
Removes: Amnesty Boxes at the following locations: 19th Engineers COFT and Corner of Upton & Main Range Roads Removes all Future Containers.
Remove -Ten Permanent Amnesty Containers: and locations.
Add - Five Permanent Amnesty Containers Located at:
See appendix E.
Remove - Additional Future Permanent Containers
Add – Organizations may use unit controlled temporary containers during Cadet Summer Training (CST).

Appendix K
Update in accordance with the Charter dated 2019.
Add- Charter shall be reviewed annually by ESMP panel members.

Appendix O

1. **Add**: Prior to firing cannon within the cantonment area or in support of activities within the Fort Knox surrounding area, validation shall be conducted by a 0017 or 0018 Safety Specialist Explosive Level II, 89 B or QASAS.

Noise level distance for cannon shoot diagram (following page)

Headquarters
US Army Installation Command
Fort Knox, Kentucky 40121-5719

Fort Knox Regulation 385-64

Effective 28 February 2023

Ammunition and Explosives

FORT KNOX EXPLOSIVES SAFETY MANAGEMENT PROGRAM

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Major General, US Army
Commanding

History. This publication is a new administrative publication. Department of the Army Pamphlet 385-64, Ammunition and Explosive Safety Standards, requires all installations to have a written Explosive Safety Management Program (ESMP).

Applicability. This regulation is applicable to all Fort Knox military units and civilian directorates, all partner commanders and Reserve and National Guard personnel and units training at Fort Knox and to personnel and facilities of contractors conducting work on the military installation. The provisions of Fort Knox Regulation 385-64 apply to peacetime and are advisory for deployed units engaged in combat and off post training operations.

Proponent and exception authority. The proponent of this regulation is the Installation Safety Office, as delegated by the Fort Knox Senior Commander. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. Proponent may delegate the approval authority in writing, to a division chief with this proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by provided justification that include a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. refer to AR 25-30 for specific guidance.

Army management control process. This regulation does not contain management control provisions.

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval of the Installation Safety Office.

Suggested improvements. Users are invited to send suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Installation Safety Office, AMIM-KNG-SO, Fort Knox, KY 40121-5720.

Distribution. This publication is available in electronic media only and is intended for command distribution level A.

Contents (listed by paragraph and page number)

Contents- Continued

Chapter 1
Introduction

1-1. Purpose
To provide guidance specific to Fort Knox for implementing the Explosive Safety Management Program (ESMP). This chapter focuses on the ESMP by directing local policies and procedures that will be implemented. The policies and procedures will supplement DODI 6055.9, AMC 350-4, AR 385-10, DA Pam 385-30, DA Pam 385-64, IMCOM Regulation 385-10, IMCOM Regulation 5-13 and AMC Regulation 385-10 by defining specific rules, guidelines and responsibilities for Fort Knox, partner organizations, units, and personnel training on Fort Knox. In the event of conflicting requirements between this regulation and the regulations of higher headquarters, the most stringent will be followed.

1–2. References
Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms
Abbreviations and special terms used in this pamphlet are explained in the glossary.

1-4. Explosive Safety
The cardinal rule in any ammunition operation is to; Limit the exposure to a minimum number of personnel, for a minimum amount of time, to a minimum amount of explosives consistent with safe and efficient operations.

a. Nonstandard ammunition is ammunition that has not been tested; type classified for Army use and cannot be procured through the Army Supply System. Non-Standard ammunition does not have a National Stock Number (NSN) and/or Department of Defense Identification Code (DODIC). Local procurement of nonstandard A & E circumvents control potentially exposing U.S. military and civilian personnel, to injury or death.

b. Pyrotechnics, A&E, will not be used in the cantonment area except when approved in writing by the Garrison Commander or designated representative; Installation Safety Office (ISO). The cantonment area is identified as any area in close proximity to unit or civilian workforce administrative areas, billets, dining facilities, motor pools, housing areas, military, civilian school areas obstacle courses, Army, and Air Force Exchange Services (AFFES), Defense Commissary Agency Source (DECA) facilities, banks, child development center, education center, restaurants, recreational buildings and Garrison activity areas.

c. Transport of Controlled Inventory Item Code (CIIC) 1 and 2 Cargo. When not in a convoy, all military vehicles transporting CIIC cargo (i.e., weapons, ammunition, explosives (live and/or residue), and high dollar items) will have a senior occupant at the rank no less than corporal, / SGT or above. Units will strictly adhere to the guidance

described in paragraph 7-10 of AR 190-11 regarding security standards for Arms Ammunition & Explosive shipments.

d. Implementation of training requirements for personnel handling, issuing, transporting and storing ammunition in accordance with these regulations: AR 385-10, DA Pam 385-64, IMCOM Reg. 5-13 and AMC Reg. 350-4.

e. When a lightning warning has been issued for lightning within 20 nautical miles (NM) of the installation, the Range 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 actually sighted from the ground at the ASP, all explosive operations being conducted in facilities other than lightning approved protection will be halted and the doors to magazines closed.

f. Field ASP/Ammunition Holding Area (AHA) will not be set up or operated within the cantonment area. Training units will coordinate for field ASP/AHA locations with Range Branch Safety, schedule the area through Range Operations. The owning unit/organization safety office, ISO and Quality Assurance, Specialist Ammunition Surveillance (QASAS) are authorized to conduct no-notice inspections of field ASP/AHA set up and operations.

1-5. Responsibilities

a. Functions of Installation Senior Commander (SC)

(1) Designated the Garrison Commander (GC) to execute the Fort Knox ESMP.

(2) Retains the authority to authenticate Deviation Approval and Risk Acceptance Document (DARAD) of EXTREMELY HIGH-Risk involving Fort Knox units and Garrison/partner organizations. The Garrison Commander (GC) will brief the SC on all DARAD of EXTREMELY HIGH and what the mitigation plans are to reduce the risk to a lower level. Any risk mitigation measure that requires funding or involves Fort Knox units and Garrison/partner organization will be briefed to the SC or his/her designed representative.

b. Functions of Garrison Commander (GC)

(1) Appoint on orders a qualified Explosive Safety Manager to Address organization and staffing, site planning, facilities conformance, emergency response, tenants, master planning, ranges, contractors, mishap prevention program, facility maintenance, demilitarization/destruction, RM, explosives safety issuances, records management, inspections/evaluations/audits, and training.

(2) Identify the safety responsibilities of all organizations (including tenants that will be covered by a memorandum of agreement) with A&E missions and functions (for example, research, testing, manufacturing, transportation, storage, and demilitarization).

(3) Serve as the Installation Approving Authority for appointing members to the Ammunition Handlers Certification Review Board (AHCRB). The appointed board members will review the credential of experience and training for the contractor's ammunition personnel, to include any unit that will be drawing Munitions from the Ammunition Supply Point (ASP). FORSCOM ammunition handlers will be trained IAW FORSCOM Regulation 350-10 and AMC Regulation 350-4. IMCOM ammunition handlers will be trained IAW IMCOM Regulation 5-13.

(4) Provide adequate funds for training ISO personnel with A&E Safety responsibility to meet the requirement in Figure 1-1, DA Pam 385-64.

(5) Provides concurrence on ESSP for Fort Knox facilities and locations.

(6) Authority for licensing all ammunition operations and facilities on properties controlled by Fort Knox. Pyrotechnics, ammunition, blanks and explosive will not be used in the cantonment areas except when approved by the GC.

(7) Participates in or designates a participant in the Installation Executive Explosive Safety Council (EESC).

(8) Retains the authority to authenticate DARAD of HIGH-Risk involving Fort Knox units and Garrison/partner organizations.

c. Functions of Installation Safety Office (ISO)

(1) Serves as the Fort Knox point of contact for all safety related ammunition and explosives actions.

(2) Brief GC, as necessary, to keep the leadership informed of explosive safety requirements, issues, and the status of the Fort Knox ESMP.

(3) Provide funds for training personnel with ammunition and explosive safety responsibility within the ISO.

(4) Ensure that ammunition and explosive safety training as required by DA Pam 385-64, Figure 1-1, and or AMC-R 350-4, Appendix B, is established for each responsible individual that has ammunition and explosive responsibility on Fort Knox.

(5) Coordinate as required, with staff elements of the staff, in the preparation of ESSP and Explosive Site Licenses (ESL). Process license for all unit arms rooms in all locations on Fort Knox. The ISO will maintain the master files for all ESSPs and ESLs on Fort Knox.

(6) Ensure all explosive exposures to military and civilians are indicated on site plans.

(7) Monitor training exercise to ensure field site used by training units for field storage of ammunition.

(a) Locations used on a recurring basis must have an ESSP and ESL.

(b) Units are storing ammunition by compatibility group and have a plan to evacuate ammunition in the event of lightning.

(8) Annually review the installation explosive location map to ensure the routes and sites support the mission of Fort Knox.

(a) Explosives safety clear zones required around each location based on quantity-distance (QD) criteria.

(b) Primary and alternate explosive movement routes through the installation.

(c) Locations outside of designated impact areas for conducting explosives operations to include explosives on/or off-loading and if required combat aviation Forward Rearming Point (FRP).

(d) Any airfield locations for handling hung ordnance and gun-clearing operations.

(e) Tracked vehicle upload and download areas (other than at authorized firing ranges).

(f) Explosives support facilities, such as ammunition holding areas.

(9) Review Quantity Distance (QD) compliance by Net Explosive Weight (NEW) or planned facilities on existing ammunition and explosives sites.

(10) Annually, survey ASP boundary to monitor encroachment with explosive safety arcs and document findings.

(11) Review SOPs, waivers, and DARADs

(12) Review the Deliberate Risk Assessment Worksheet (DELIBRATE RISK ASSESSMENT) and coordinate as required with staff element that submitted DARAD.

(13) Advise each new GC and Safety Director of DARAD involving his/her operations and the impact on the mission if the DARAD is not re-issued.

(14) Conduct annual inspections of all ammunition and explosive storage areas to include the site licenses. In addition, review the QASAS magazine inspection reports.

(15) Monitor units/directorates ammunition uploads and other activities involving transportation and storage of ammunition in other than authorized and licensed storage areas to ensure that pertinent requirements are met.

(16) Participate in the installation master planning process, and review annually the installation master plan to ensure construction is not planned inside explosive safety arcs. When construction, not related to ammunition operations is required within explosive safety arcs, the ESSP and explosive licenses are updated and routed with form 5 through all required personnel and approved at the appropriate level.

(a) Maintaining fire symbols and chemical hazard symbols current with actual ammunition and explosives stored at a particular location to include the unit arms rooms that have ammunition storage approval.

(b) Ensuring that personnel responsible for managing ammunition and explosives keep current information on the type and location of ammunition and explosives storage and provide this information to firefighting, military police and security personnel. This will include the ammunition that is approved for storage in specific unit arms rooms.

(17) Monitor operations involving explosives to ensure that all units training on Fort Knox understand and comply with all explosive safety standards.

(18) Maintenance of Lightning Protection System (LPS) inspection/testing record results will be kept on file for the last six inspection cycles IAW DA Pam 385-64, para 17-29.

(19) Coordinate the installation vegetation control plan IAW DA Pam 385-64, para 6-8c.

(20) Approve pyrotechnic displays and use of explosives in connection with public demonstrations, exhibitions, and celebrations will be submitted to the ISO along with a copy of the Deliberate Risk Assessment.

(21) Review cannon placement prior to firing for unit ceremonial use and review the risk assessment.

(22) Review construction projects within the range complex. Prepare construction review to be sent through IMCOM to USATCES for approval prior to building.

d. Functions of Fort Knox Unit Commanders (to include Tenant and Fort Knox Partners):

(1) Establish a written ammunition program. Elements of the program will include:

(a) The safety and accountability of all ammunition and explosives used on training ranges, training exercises, and operations.

(b) Complete a Deliberate Risk Assessment of all ammunition operations and ensure that all hazards identified, and controls directed in ammunition information notices (AIN) and other safety messages are implemented.

(c) Ensures all unit ammunition shipments comply with the requirements of federal laws, AR 385-10 and DA Pam 385-64.

(d) Requirements to only unpackage the amount of ammunition for immediate training needs of less than 4 hours. All packing material will be maintained for repacking unused training ammunition, and explosives ammunition will be repacked prior to transportation from the training location. There will be no loose or unpacked ammunition transported on any motor vehicle.

(e) Unit commanders may request approval for the storage of operational load ammunition in their unit IAW DA Pam 385-64, para 8-3a; Storage of ceremonial ammunition is not considered an operational necessity.

(f) All leaders and Soldiers with munition responsibilities will receive training on the Military Munitions Rule (MMR) and the elements of the Fort Knox amnesty program. Training for the MMR is found at Defense Ammunition Center website under on-line training. Course is AMMO 68-DL (Military Munitions Rule).

(g) Ensuring that personnel responsible for managing ammunition and explosives keep current information on the type and location of ammunition and explosives storage and provide this information to ISO. This will include the ammunition that is approved for storage in specific unit arms rooms.

(h) Allows the unit to conduct ammunition operations and storage only in authorized areas. An authorized area includes ammunition issue points on ranges, areas with an ESSP and ESL.

(2) Each unit bringing/using A&E on Fort Knox will appoint an Ammunition Officer/NCO to manage their ESMP IAW this regulation.

(3) Units will conduct surveys of their ammunition and explosives transportation activities to ensure:

(a) Those ammunition-carrying vehicles only use the approved ammo route.

(b) Vehicles uploaded with ammunitions move from the storage area to the area of use using authorized ammunition routes.

(4) For any mishaps / incidents while training in the range area, notify Range Operations at 502-624-2125, IAW Fort Knox Regulation 385-22.

e. Functions of Directorate of Public Works (DPW)

(1) Director

(a) Provides funds for training of electrical personnel with Lightning Protection System (LPS) inspection and repair responsibility within DPW.

(b) Ensures LPS technical inspections are conducted every two years and that the LPS inspections meet standards in DA Pam 385-64, DOD 6055.09 v2.E.4.3.2.

1. May use the contracted services of a qualified electrician to evaluate and conduct periodic tests and surveys on the LPS IAW DA Pam 385-64.

2. Prioritizes and directs repair or corrects all deficiencies identified during LPS inspections.

3. Provide the ISO with a copy of the inspection results with any corrective action performed.

(2) Environmental Division, Installation Restoration Program (IPR):

(a) Provide the installation with historical information on closed and inactive ranges for ammunition/explosive areas.

(b) Provide ISO a Point of Contact (POC) for any transferred lands that had been identified or have the potential for ammunition/explosive contamination.

(c) Maintains the unexploded ordnance (UXO) database for the installation.

(3) Recycle Branch:

(a) Maintain safety SOPs that provides procedures for handling/storage of the authorized small arms brass operations.

(b) Maintain all records and documentation of certification of explosive free for spent brass.

(4) Master Planner: The Master Planner will be involved in the ESMP by advising the Installation Safety Manager of any proposed construction plans or considerations in the established installation explosive arcs.

f. Functions of Director of Plans, Training, Mobilization and Security (DPTMS):

(1) Director will provide funds for training of DPTMS personnel with Ammunition and explosive safety responsibility.

(2) Range Branch:

(a) Provide updated ammunition and explosive safety information through SOPs, range briefings and range certification training.

(b) Provide the Installation Safety Manager (ISM) and QASAS with immediate notification of range ammunition or explosive mishaps.

(c) Coordinate all requests for a DARAD through the ISO.

(d) Maintain ranges and restricted areas with signage of hazards IAW AR 385-64, Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat.

(e) Provide the ISO and DPW, Environmental Branch with historical records on ranges and explosive areas.

(f) Maintain appropriate disposal records on all UXO/explosive operations.

(g) Coordination with Range Operations is required before using any Fort Knox range/training area to set off or use any pyrotechnics, ammunition, blanks and explosives.

(3) Training/Schools Branch schedules AMMO 62 course, in conjunction with the Defense Ammunition Center, requirement for Fort Knox personnel with ammunition and explosive responsibility; certificate is good for two years.

(4) Range Geographic Information System (GIS) Analyst: Will assist as needed, DPW GIS analyst is primarily responsible in preparing Ammunition and Explosive Site Maps to include the following information:

(a) Quantity distance zones around each explosive site safety planned location based on QD criteria.

(b) Primary and alternate explosive movement routes through installation provided by the ISO.

(c) Any airfield locations for handling hung ordnance and gun clearing operations provided by G3/DPTMS and coordinated with ISO and ASP.

(d) The overall historical depiction of abandoned range or storage sites.

(e) The current ammunition and explosive sites that has approved or request site licenses.

(f) Upon request, provide above data and maps to the Installation Master Planning Board for use in the installation construction projects review.

(5) Installation Ammunition Manager:

(a) Approves ammunition forecasts and ammunition Deliberate Risk Assessments.

(b) Monitor unit ammunition Risk Assessments for excessive draws for the ranges or time available for ammunition operations.

(c) Provide documentation of the ammunition expenditure reports of ammunitions expended on Fort Knox's ranges to DPW Real Property for permanent archival storage.

(d) Monitor and report to the ISO and QASAS the units that are in violation of ammunition handling, transportation or accountability procedures.

g. Functions of Directorate of Emergency Services (DES):

(1) Fire and Rescue Services:

(a) Ensure the Installation Fire Prevention Program encompasses ammunition and explosive hazards.

(b) Firefighters are trained on the hazards of different classes of the ammunition and explosives.

(c) Firefighters are briefed and trained on the location of the ammunition and explosives at the installation.

(d) The Fire Chief will devise a system that will ensure all responding firefighting vehicles and personnel have access to these potential explosive site (PES) locations know the hazards at the location, Ammunition and Explosive Site Map to include the all areas with approved ammunition licenses are maintained and accessible. Train responding personnel to use computer programs to assist in mitigating hazards to both personnel and equipment.

(e) Firefighters receive training on the hazards on the newer composite materials that may be involved in fires either starting from ammunition incidents or encompassing fire that may include army equipment.

(2) Physical Security

(a) Establish standards for operational loads of security ammunition including unit arms room guards, contract guards and security augmentation forces.

(b) Provides Safe Haven requirements and criteria as outlined in AR 190-11.

(c) Conduct inspections at least every 18 months as in AR 190-11 para 2-6.

h. Functions of Director of Logistics Readiness Center (DLRC):

(1) Director

(a) Provide funds for training for personnel with ammunition and explosive safety responsibility within DLRC.

(b) Enforces a portion of AMC-R 385-10 that pertains to employees and operation under AMC.

(c) Request updated ESSP when new facilities, update of facilities, or changes in operations are made at the Ammunition Supply Point (ASP).

(2) ASP Accountable Officer:

(a) Review all ammunition and explosive items stored in the Fort Knox ASP storage facilities to ensure that storage items do not exceed the site license that has been approved for that facility.

(b) Verify the hazard designation for each storage facility and upon change of hazard designation, immediately provide/inform the DES, QASAS, ISO and PMO, Physical Security of the Fire Hazard symbol change and location of facility (bunker/igloo number).

(c) Is the installation's approval authority for Ammunition Handlers Certification and will sign all certificates of training for the Ammunition Handers.

(d) Provide notification to the ISO and the QASAS personnel when there is a need for a storage facilities change in site license.

(e) Will conduct: LPS, AHA, AMO safety inspections.

(f) Notify the QASAS upon receiving a unit's request to Deliberate Risk Assessment ammunition for other than training purpose.

(g) Ensure procedures are developed and in place for:

1. Maintaining fire symbols and chemical hazard symbols current with actual ammunition and explosives stored at a particular location.

2. Ensuring that personnel responsible for managing ammunition and explosives keep current information on the type and location of ammunition and explosives storage and provide this information to safety, firefighting and security personnel.

(3) Quality Assurance Specialist (Ammunition Surveillance) (QASAS):

(a) Assists ISO in developing ESSPs and ESLs and submitting them through IMCOM and US Army Technical Center for Explosive Safety (USATCES) to Department of Explosive Safety Board (DDESB) for approval.

(b) Develop and review all explosive DARADs for Installation and coordinate with ISO.

(c) Review designs for explosive storage, surveillance, and maintenance for compliance with explosive safety standards.

(d) Conduct safety inspections of ammunition and explosives handling sites, storage facilities, maintenance, and disposal areas at least semi-annually. A copy of these inspections will be furnished to the ISO.

(e) Monitoring ammunition uploads and other activities that involve the transportation and storage of ammunition in other than authorized and licensed storage areas to ensure that pertinent requirements are met.

(f) Review QD compliance of existing and planned facilities, both prior to and after construction.

(g) Review unit SOPs and directives for compliance with explosive safety requirements.

(h) Assist in the installation master planning process and review annually the installation master plan to ensure construction is not planned inside explosive safety areas.

(i) Monitoring operations involving ammunition and explosives to ensure that units understand and comply with the explosive safety standards.

(j) Monitoring and evaluating explosives activities to include the following:

1. The QASAS will conduct ammunition serviceability and management procedures inspections of units that retain ammunition as an operational load, guard load, or salute or burial detail requirement.

2. Ammunition and explosives transportation.

(k) Ammunition and explosive mishap reports and investigations IAW DoD 6055.9, AR 385-10, DA Pam 385-40 and AR 75-1 and document and disseminate explosive lessons learned. Provide copy of report to ISO.

(l) The enforcement of integration of risk management into the ammunition and explosive storage and surveillance operations.

(m) Oversee all ammunition and explosive disposal activities when they occur.

(n) Provide technical assistance with any special exercises and test programs conducted on Fort Knox.

(o) Assist commander and staff with safety concerns associated with real property containing or suspected of containing UXO.

(p) Attend command and staff briefings, as necessary, to keep the leadership informed of explosive safety requirements, issues, and the status of the ESMP.

(q) Participate in the A&E safety inspections.

(r) Maintenance of records to include LPS inspection results, site licenses an inspections result with corrective actions.

(4) Transportation Division:

(a) POC for the ammunition transportation and storage issues.

(b) Inspect unit movements and transportation of ammunition to ensure units comply with Federal Laws and Regulations.

CHAPTER 2
FACILITIES

2-1. Master Planning.

a. The DPW, Master Planner of the installation facilities and operations will be involved in the Ammunition and Explosives Safety Program. The Master Planner and ISO will maintain a map showing all the locations of A&E in the Fort Knox cantonment and range areas. This map will be used when proposing new uses, change in use of or construction on garrison or installation real estate. The Master Planner will assist by advising the ISO Safety Director of any proposed construction plans or considerations in the established installation explosive arcs.

b. The ISO and the QASAS will review annually the explosives' location map to monitor encroachment with ESQD and ensure required explosives safety site plans.

2-2. Site Planning.

a. Before any plans to build, renovate, or increase New Explosive Weight (NEW) to existing or new facilities in any area under the GC authority, coordination between the ISO and requesting unit must be done.

b. Ammunition site and general construction plans are submitted for review before beginning final engineering design of new construction or major modification of existing facilities for explosives.

c. All locations with A&E on Fort Knox must have an approved ESSP as required by DA Pam 385-63 and DA Pam 385-64. All Fort Knox site plans will have the concurrence of the Garrison Commander.

d. The ISO works with the Installation Master Planner and QASAS to identify requirements for proposed site plans. The ISO performs a site inspection and sends the results to the engineers for use in project planning. As part of the evaluation, spreadsheet is prepared that list each explosive site and all facilities impacted to include inhabited building distance, public traffic route, interline and magazine facilities with Geographic Information System (GIS) distances. This information is included with the explosive site safety plan packet. The ISO prepare the submission data, following policy guidance contained in DA Pam 385-63 and 385-64 applicable IMCOM regulations to compile the necessary plans, drawings, and computations and the Explosives Safety Site Plan Developer's Guide written by USATCES. The ISO reviews the submission package and forwards the entire package through installation command channels for the GC's approval and signature, to the SC for all ESSP submittal for approval to the IMCOM Safety Office. Once IMCOM has approved, it will be sent to USATCES and then forwarded to DDESB for final. Any correspondence that includes a certificate of risk with a residual risk of EXTREMELY HIGH risk will be coordinated through the SC.

2-3. Facilities Conformance.

a. Organizations are responsible to ensure facility construction meets requirements of approved explosives safety site plan IAW the DA Pam 385-64.

b. Organizations are also responsible for conducting periodic inspections of their facilities to ensure continued compliance with the approved ESSP and this policy. Organizations are responsible for submitting work orders for facility non-conformances.

c. The ISO Explosive Safety Specialist will review and directly coordinate with DPW to complete work orders pertaining to explosive safety for work completion. ISO staff has the authority to inspect any facility at any time on Fort Knox.

2-4. Facility Maintenance.

a. All organizations will have a program to address facility maintenance. Each program will:

(1) Ensure facility maintenance plans and schedules are in place for explosives related and supporting structures, including documentation of past inspections testing.

(2) Ensure action plans are in place for identifying, funding, and correcting facility deficiencies (repair, replacement, modification).

(3) Ensure work orders are submitted to DPW annually to conduct periodic inspection and trend analysis is conducted on LPS. Testing will be conducted every two years. See DA Pam 385-64 for guidance. DPTMS/DPW will coordinate all LPSs on ranges; LRC will coordinate all LPSs in the ASP.

b. Organizations will ensure specialized training and certification is provided (as required IAW with DA Pam 385-64) to maintain explosives facilitates.

CHAPTER 3
OPERATIONS

3-1. Ranges
The Installation Range Management Authority is designated as the GC's representative for Command and Control (C2) for range and test areas on Fort Knox and will work with all the organizations to accomplish the Fort Knox range and test missions. All tenant activities will coordinate with Range Operations for current test and firing range status. Units/activities, both on- and off-post, using Fort Knox range facilities will follow all policy and procedures IAW Fort Knox Reg 385-22. Any military forces to include Army National Guard and Army Reserves coming onto Fort Knox for training will coordinate and schedule activities through Range Operations and the ISO.

3-2. Arms Room. This section establishes policy and provides general rules on storing ammunition in unit arms rooms.

a. The GC will approve licenses for all ammunition storage facilities on Fort Knox that do not include a document of risk acceptance of EXTREMELY HIGH risk.

b. Storage will be consistent with safety requirements in DA Pam 385-64, physical security requirements of AR 190-11 and accountability requirement of AR 710-2.

c. Storage in an ammunition holding area (AHA) or ammunition supply point (ASP) will be used unless such use would adversely impact operations or result in an unnecessary commitment of resources.

d. The term “limited quantities” is defined as the minimum amount of ammunition required to support operational missions (e.g., for security guard forces, military police, etc.) or the immediate training requirements of the unit owning the facility. For Hazard Divisions 1.2.2 this may not exceed 50 pounds NEW and for HD 1.3 this may not exceed 100 pounds NEW.

e. Prior to a unit storing ammunition in an arms rooms, the GC will consider the need to expose the minimum number of personnel to the minimum amount of explosives for the minimum amount of time possible. The qualifier “operational necessity” is intended to provide commanders flexibility in providing readily available operational necessity munitions without exposing personnel and equipment to unnecessary explosive risks. Key justification for storing ammunitions and explosives in arms rooms is “operational necessity” not “convenience.”

f. Ammunition stored in arms rooms will be stored in original containers and packaging. Unit arms rooms that support guard forces or military police may have more than one outer pack of each caliber of small arms ammunition open for mission use.

g. Combustibles, solvents, petroleum products or radioactive items will not be stored near ammunitions unless otherwise approved by the Senior Commander.

h. Unit commanders wishing to store ammunition in their arms room will:

(1) Prepare a memorandum requesting authorization for storage of authorized ammunition items in an arms room to be forwarded to ISO. Memo will list DODIC, NEW, quantity, reasons for storage, e.g. force protection (Appendix N Example).

(2) Prepare a DELIBRATE RISK ASSESSMENT (as shown in appendix C) for the arms room approved and signed by Battalion Commander or responsible 0-5 or above, as required in DA Pam 385-30 Table 4-1.

(3) Have a current Security Construction Statement, Form 4604. This document is valid for five years from the date of issue and is issued by DPW. Questions regarding Form 4604 may be addressed to DPW, Engineers.

(4) Post all documentation with the license in the arms room and personnel will be briefed annually on the best safety practices applicable to the storage and handling of ammunition.

(5) An arms room must have two fire extinguishers, rated at least 10 BC.

(6) Ammunition Handlers must be appointed on orders by their commander, documentation of security clearance and meet all training requirements outlined in DA Pam 385-64.

(7) Ceremonial ammunition storage in arms rooms is not considered an operational necessity. However, limited quantities of HD 1.3 and HD 1.4 ceremonial ammunitions (e.g.75mm blank, 105mm blank) may be stored in arms room providing there are no other practical alternatives. Storage of HD 1.3 ceremonial ammunitions in arms rooms is limited to units with operational needs for such munitions. The total amount of HD 1.4 and HD 1.3 ceremonial ammunition authorized for storage in arms rooms will not exceed 100 pounds NEW or one full outer pack of ammunition. See HD 1.3 Calculations.

3-3. Ammunition/weapons malfunctions

a. A malfunction of ammunition is defined as an incident in which a munition or weapon properly employed fails to perform as designed and causes injury, damage to the weapon, or renders the weapon temporarily inoperative. Misfires of small arms ammunition, which are corrected by immediate action procedures, are not considered as a malfunction.

b. The OIC in charge of the firing unit will immediately Issue Cease Fire / Freeze the suspected ammunition / weapon and shut down the range, secure the firing site, and immediately notify Range Operations providing the following information:

(1) Range, observation point (OP), firing point, training area and grid coordinates.

(2) Type and caliber of ammunition involved.

(3) Type of malfunction.

(4) Time and date of malfunction.

(5) Name of Officer in Charge (OIC).

(6) Name, unit, and telephone number of person reporting the malfunction.

c. Range Operations will, in turn, notify the QASAS, Range Safety Specialist, the AMC Weapon System Logistics Assistance Representative (LAR), and the ISO Director.

d. Unless overriding safety or security considerations exist, the immediate malfunction area (including equipment and weapons) will not be disturbed before an investigation is conducted. Weapons, ammunition, and brass involving malfunction will remain undisturbed and under guard until cleared, normally by the Range Tech or QASAS, or until incident investigation is completed by all parties. After the initial investigation by the QASAS and ammunition is determined not to be a factor in the malfunction, the unit can coordinate with Range Operations to resume normal operations for the other firing points.

e. After being informed by the firing unit of a malfunction, the QASAS will immediately respond and after their preliminary inspection assisted by Range Operations Safety Officer and AMC LAR, when appropriate, will: gather data as necessary for all reported malfunctions, prepare a preliminary report, locally suspend affected ammunition, and immediately notify all units in possession of suspended stock.

f. The preliminary report will not be delayed if an ammunition officer or QASAS is not available. The range safety specialist will prepare the report on the DA Form 4379.

g. The ISO Director, through IOC, and PAO will make the notification on all information relayed to any off-post agency. The appropriate AMC commodity command will notify the malfunction location within the continental US (CONUS) within 24 hours from receipt of the preliminary report as to whether an on-site investigation will be conducted. Where no on-site investigation is conducted, a local investigation will be conducted by the QASAS, Range Safety Officer, LAR and the ISO.

3-4. Demilitarization and Destruction.

a. Demilitarization or destruction of ammunition, explosives, and propellants will be accomplished by reclamation, open burning/open detonation (OB/OD) incinerations, or other approved methods.

b. The EOD Company is designated as the Garrison Commander's representative for demilitarization and disposal of ammunition and explosives (A&E) on Fort Knox and operates the permitted OB/OD area, and will maintain permit, while ensure compliance IAW permit requirements. Any organization on Fort Knox conducting demilitarization or destruction will have current SOPs in place. Safety managers for these organizations will periodically monitor A&E disposal and demilitarization activities.

c. In accordance with Fort Knox regulation 385-10, units that identify UXO/DUDs will contact the Military Police, Installation Operations Center, Range Operations, or the QASAS who will in turn contact the closest EOD unit, (Fort Campbell) when EOD support is required. EOD will notify (and follow-up with a detailed incident report) to the ISO.

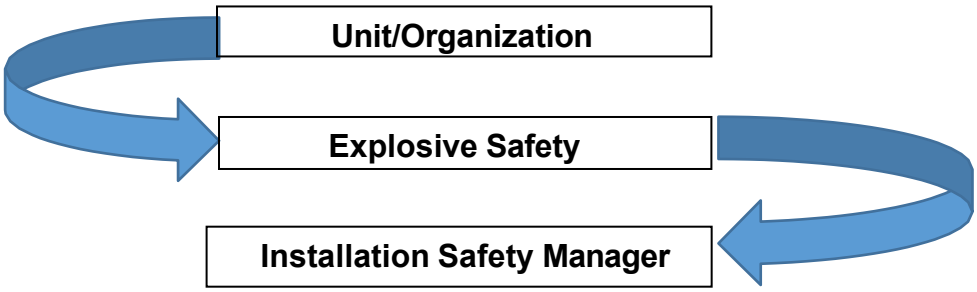
CHAPTER 4
EMERGENCY PREPAREDNESS

4-1. Risk Management.

a. When DoD and Army Explosives Safety regulations and policies cannot be met on Fort Knox, the procedures set forth in DA Pam 385-30 will be followed. A DARAD or a Certificate of Compelling Reason (CCR) will be used for risk acceptance. The risk acceptance process for Fort Knox organizations is shown below in the approval flow chart (Flowchart 4-1). Other government agencies (OGA) and Non-Government

Organizations (NGO) located on Fort Knox will document an equivalent risk acceptance process in their ESMP.

Flowchart Figure 4-1. Risk Acceptance Process



b. Approval authority will be equivalent to Army requirements specified in DA Pam 385-30. All risk acceptances requiring risk acceptance documentation of Fort Knox will be submitted to the ISO for review and DPW Master Planner for repository. All High-level risk acceptances will be submitted to the SC for concurrence.

c. A DARAD/CCR will be the last measure taken after all other controls had been exhausted.

d. Lack of funding, improper planning, or production schedules do not constitute or validate an excuse to deviate away from compliance.

e. If DARAD/CCR is used, strict measures must be in place for speedy corrective action to ensure a compliant state.

4-2. Mishap Prevention Program.

a. All units with an A&E mission on Fort Knox will have explosive safety as an integral part of their mishap prevention plan (safety SOP).

b. The organizational mishap prevention plan (APP) will be tailored to their operations which addresses the requirements states in the AR 385-10 table 1-1 and DA Pam 385-10 as a minimum. A copy of the APP will be provided to the Fort Knox ISO for review.

4-3. Emergency Response.

a. Fort Knox Fire Department will conduct fire prevention inspections in A&E facilities and have the authority to inspect any facility at any time on Fort Knox.

b. All organizations located on Fort Knox with an A&E mission will maintain the proper fire and chemical hazard symbols of explosives present within the facility. In addition, the Fort Knox Fire Department will be notified when those hazards change.

c. In the event of an explosives mishap, the Fort Knox Fire Chief will be the Incident Commander (IC) in charge of the emergency response until the scene is declared safe.

d. Once the mishap site has been declared safe, the scene will be turned over to the DES, Safety, QASAS and command for scene preservation and mishap investigation.

e. The DES will secure the site after completion of the emergency response action. The ISM will control the mishap site until released to the organization.

f. Units must comply with and include provisions for complying with the Emergency Planning Community Right-to-Know Act (EPCRA). Section 302-321, DOD, and DA implementing policies IAW DA Pam 385-64, paragraph 6-20d. The ISO will participate along with the Fire Chief on the Emergency Services Working Group.

g. The EPCRA of 1986 was created to help communities plan for emergencies involving hazardous substances. EPCRA requires hazardous chemical emergency planning by federal, state, and local governments, and industry. It also requires industry to report on the storage, use and releases of hazardous chemicals to federal, state, and local governments.

h. Each organization with A&E missions on Fort Knox will develop emergency action plans (EAP) and will practice their plan at least annually. There will be an annual Fort Knox wide emergency drill specific to an A&E mishap or incident.

i. Army Mishap Investigation teams will be coordinated through the ISM. Class A & Class B Army explosive mishaps may be led by a board from US Army Combat Readiness/Safety Center.

j. Any release of information to the public will be made by the SC or the PAO only.

CHAPTER 5
COMPLIANCE

5-1. Training.

a. Personnel with primary Military and Civilian occupational specialties involving ammunition and explosives require training as outlined in Table 1-1, DA Pam 385-64, and or AMC-R 350-4 Appendix B, Army explosive safety courses (Appendix B in this regulation).

b. All personnel (supervisory and non-supervisory) who operate, handle, transport, maintain, load or dispose of ammunition and explosives must receive initial safety training before performing any of those tasks.

c. Supervisors of civilian employees and contractors responsible for explosive safety or who's position require ammunition handler certification, will ensure workers are trained IAW Table 1-1, DA Pam 385-64 and or AMC-R 350-4.

d. Hazardous cargo certifiers must successfully complete an initial 80-hour hazardous materials (HAZMAT) certification course from one of the Department of Defense (DOD) approved schools listed in DOD 4500.9-R, Part II, Chapter 204, IAW 49 CFR 172.700 through 172.704 and DOD component regulations. Personnel must receive refresher training every 2 years in order to continue to certify shipments of hazardous materials for transportation. Employers will maintain certification training records IAW 49 CFR Part 172.

e. Those personnel at unit levels who will directly handle or who are exposed to munitions during the distribution process (other than the actual consuming Soldier or weapons crew) must obtain and maintain certification through the Installation Ammunition Handlers Certification Review Board. The above on-line courses must be complete before the Explosive Certification Board approves Ammunition Handler Certification. The certification is valid for 2 years from the date of certification. Unit commanders should post a copy of explosives handling/transport certifications along with the Soldiers DA Form 7281 (Command Oriented Arms, Ammunition and Explosive (AA&E) Security Screening and Evaluation Record) in the Soldiers local file prior to allowing or assigning duties to handle AA&E.

f. Commanders will ensure personnel responsible for the development and review of deviations and risk assessments receive risk management training. Risk management classes are available through the CRC website.

g. All personnel will receive 3R (Recognize, Retreat, Report) and UXO safety education training information. Training can be accessed on the Fort Knox Intranet site or the ISO webpage. The range operations OIC/RSO certification course also covers the 3 Rs and UXOs procedures.

h. All units/organizations will maintain training records on their personnel. The ISO can request to see any required training documentation associated with handling / management of weapons and munitions.

5-2. Inspections/Evaluations/Audits.

a. QASAS and ISO will conduct and document annual inspections and/or audits of A&E storage and operating areas to ensure compliance with DoD and Army policies.

(1) Inspections will be conducted at a minimum, annually and will include hazard identification and follow-up of corrective measures of all storage, operating and transit areas for A&E.

(2) Comparison of ammunition actually stored versus what ammunition is authorized by the license or site plans.

(3) Identification of any overages or storage compatibility violations.

(4) Verification of QD separation requirements stipulated in licenses and site plans.

(5) Evaluation of the safety of storage facilities, including adequacy of earth cover on magazines, barricades, and condition of LPS and ventilators.

(6) Review complete inventory by storage facility showing Department of Defense Identification Code (DODIC), nomenclature, quantity, and total new explosive weight.

(7) The results of these inspections will be maintained for three years IAW AR 25-400-2, Army Records Information Management System (ARIMS).

(8) Review and evaluate the latest report for the electrical grounding inspection conducted on the LPS of the ASP ammunition site. LPS files will be retained for six cycles or a total of 12 years at the ISO.

b. ISO will document final A&E facilities acceptance inspections following construction, renovation, or modification of facilities prior to accepting a facility for A&E operations.

c. Range Operations Safety Officer and the ISO will inspect all range facilities (minimum annually) and provide the ISO the written results with findings and HAZLOG.

d. The DDESB and the Defense World Wide Ammunition Logistical Inspections will conduct evaluation of the installation explosives and ammunition safety programs. Additionally, a staff assistance visit may be conducted by USATCES. The results of external inspections will be incorporated into action plans, lessons learned, and will be tracked to remediate inspection deficiencies. The ISO is the primary liaison for these activities. In order to facilitate external evaluations and surveys, an A&E Support Package as required by AR 700-13, para 3-1 will be gathered and provided to the inspectors at the initial briefing on the inspections.

5-3. Executive Explosive Safety Committee (EESC).
The EESC will consist of the Garrison Commander or his designated representative, as chairperson, all commanders, or directors with an A&E mission. It provides a forum to discuss technical policy issues. The EESC is included in the semi-annual Installation Safety Council.

5-4. Ammunition Certification Board.

The **Ammunition Certification Board** meets at least annually and at the discretion of the Chair or ESM. Personnel to be included in the working group will consist of the Logistical Readiness Center Commander or equivalent, ISO Director (ESM), Ammunition Accountable Officer, Lead Quality Assurance Specialist (QASAS), Installation Ammunition Manager (ID-Training), Explosive Safety Manager, Union Rep or COR. The board ensures personnel (Military, ACC and Contractors) are certified for those explosive work tasks and operations required to accomplish the mission. Too include verifying all required refresher courses are completed as detailed in AMC 350-4 Table C and the DA Pam 385-64. Review proposed courses of instruction, and review Ammunition Handlers Training Course to develop training programs in support of the ammunition mission and make appropriate recommendations. It provides a forum to discuss and resolve explosives safety managerial and technical policy issues.

5-5. Explosives Safety Issuances.

a. Explosive safety issuances consist of, but not limited to, local policies, SOPs, Army Regulations, Pamphlets, and other publications.

b. All units/organizations on Fort Knox, with ammunition responsibility, will have SOPs which include A&E safety management. SOPs will be reviewed annually. The recommended format to be used for development of an ammunition SOP is detailed in AMC-R-700-107.

c. SOP's will comply with Army and DoD requirements and will be reviewed by ISO prior to approval.

d. Any compensatory measures to manage a risk will be documented and controls in place to ensure compliance.

e. All personnel involved in A&E operations will be aware of and take precautions with any Hazards of Electromagnetic Radiation to Ordnance (HERO) unsafe munitions. If HERO unsafe munitions are located or if a munition will be rendered HERO unsafe, the QASAS and ISO will be notified.

5-6. Explosive Licenses

a. All A&E facilities will have an explosive license.

b. Request for License will be sent through the Installation Safety Office approved by the Garrison Commander prior to storing ammunition.

c. Licenses have no expiration date but require annual review and validation of munition sources.

d. Licenses can never exceed the DDESB approved ESSP but can be more strict.

e. A copy of the signed license will be kept at the local area and the ISO.

f. Request for license will be sent through the ISO and approved by the GC prior to storing ammunition.

5-7. Deviation Approval and Risk Acceptance Document (DARAD)

a. All request for DARAD is submitted through the ISO to the IMCOM Safety Office for appropriate action. DARADs are requested only after every effort has been made to eliminate the hazardous or substandard condition.

b. The Department of the Army memorandum dated October 10, 2017, the Army will require either a ODESS-approved QD safety submission (i.e., an explosives site plan (ESP)) or a DA Form 7632, Deviation Approval and Risk Acceptance Document (DARAD), which the appropriate level of command has approved, for DoD military munitions operating facilities built before January 1958 and to which Army Commands have applied the exemption, effective 01 October 2018.

c. The DARAD for storage magazines will include a statement that addresses how the storage magazine will be brought into compliance with DoD explosives safety criteria by the end of the Program Objective Memorandum Fiscal Year 2022 to 2026. An ESP will be prepared once the storage magazine is brought into compliance.

5-8. Records Management.

a. All offices having responsibility for A&E in any capacity: administrative, storage, issue, maintenance, transportations, etc., will maintain records as required by the Army Record information Management System (ARIMS) IAW AR 25-400-2.

b. LPS test and inspection records for the past six inspection cycles (12 Years) will be maintained by the ISO and the DPW.

Chapter 6
Hazards of Electromagnetic Radiation to Ordnance (HERO)

6-1. General

a. Electrically Initiated Devices (EID) are inherently safe to store and handle in the nominal ranges of expected use. It is designed to resist inadvertent initiation if exposed to various Electromagnetic Environments (EME). These munitions are tested to ensure they are protected from unintentional initiation.

b. If the EID ordnance is damaged or subjected to unauthorized modifications, it can become susceptible to initiation if exposed to electromagnetic fields. The sources of

these fields come are natural (lightning/electrostatic discharge) and man-made (radio frequency, electromagnetic devices, electronic warfare devices, high-voltage electrical transmission lines, radars, and personal electronic devices).

c. Follow guidelines in accordance with DESR 6055-09

6-2. Procedures

a. Protection of EID:

(1) Remove minimal required munitions from packaging to support mission.

(2) Keep protective covers, wires, sleeves, etc. on rounds until ready for loading into weapon system.

(3) Immediately return all unused munitions to original packaging. Do not store excess munitions on loading pads or in ammunition holding areas outside original packaging materials.

(4) Immediately re-install safety devices to un-fired/download EIDs.

(5) Return damaged munitions to original packaging material, if safe to do so. Contact installation QASAS technicians if unsure of status of munitions.

(6) Never attempt to repair or modify any munitions.

b. Mitigation of Electromagnetic Sources:

(1) Identify organizational equipment that produces an Electromagnetic Environment (EME).

(2) Keep all EME producing equipment clear of EID as specified in appropriate equipment technical manual.

(3) LRC, QASAS and the ISO will develop procedures to prohibit the use of any personal communication, listening, or electronically operated property when EID is present.

(4) Ground or bond EID to dissipate electrostatic accumulation.

(5) Restrict use of EID outside original packaging whenever lightning is occurring in the area. This is mission dependent, but in the training environment suspends operations until the threat of lightning is gone.

(6) Do not store or use EID in close proximity to high-voltage producing sources (high tension lines, transformers, generators).

(7) Follow guidelines in accordance with DESR 6055.9.

Appendix A References

AR 25-30, Army Publishing Program

AR 25-400-2, The Army Records Information Management System (ARMIS),

AR 75-1, Malfunctions Involving Ammunition And Explosives

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

AR 385-10 The Army Safety Program

AR 385-63, Range Safety

AR 700-13 Worldwide Ammunition Logistics/Explosives Safety Review and Technical Assistance Program

AR 710-2, Supply Policy Below The National Level

DA Pam 385-10, The Army Safety Program

DA Pam 385-30, Mishap Risk Management

DA Pam 385-40, Army Accident Investigations and Reporting

DA Pam 385-63, Range Safety

DA Pam 385-64, Ammunition and Explosives Safety Standards

DoD 6055.09-M, DoD Ammunition and Explosives Safety Standards

DTR 4500.9-R, Defense Transportation Regulation

IMCOM Reg 5-13, Installation Ammunition Support

IMCOM Reg 385-10, Safety Program

AMC-R 350-4, Training And Certification Program For Personnel Working In Ammunition Operations

AMC Reg 385-10, US Army Materiel Command (AMC) Safety Program

AMC-R 700-107, Preparation of Standing Operating Procedures for Ammunition Operations (SOP),

FK REG 385-10, The Fort Knox Safety Program

FK REG 385-22, Range Regulation (Training/Impact Areas)

ATP 5-19, Risk Management

49 CFR 172, Code of Federal Regulations Hazardous Materials

Appendix B Army Explosive Safety Courses (Figure 1-1, DA Pam 385-64)

Training course	Title or position held and specific duties performed								
	Safety and occupational health professionals in 0018 and 0803 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[5]	Mandatory	Mandatory	Mandatory	Suggested	Suggested	Mandatory			Mandatory
AMMO-45-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[6] -Annual Refresher Required	Mandatory[6] -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-28-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
Ammo-108-DL					Suggested			Suggested	

Appendix B Army Explosive Safety Courses (Figure 1-1, DA Pam 385-64)

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.

Appendix B Army Explosive Safety Courses (Figure 1-1, AMC-R350-4)

notes from AMC-R 350-4 here (only pages 12 & 13)

Appendix C Deliberate Risk Assessment Work Sheet

DELIBERATE RISK ASSESSMENT WORKSHEET						
1. MISSION/TASK DESCRIPTION Storage of limited quantities of small arms ammunition					**2. DATE (YYYYMMDD)**	
3. PREPARED BY						
a. Name (Last, First Middle Initial)		**b. Rank/Grade**	**c. Duty Title/Position**			
d. Unit	**e. Work Email**		**f. Telephone** *(DSN/Commercial (Include Area Code))*			
g. UIC/CIN *(as required)*	**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 & make decisions (4) Implement controls (5) Supervise and evaluate *(Step numbers not equal to numbered items on form)*						

	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
+ -	Storage of ammunition in arms room	Loss of accountability, theft or pilferage of ammunition	M	*Establish property book accountability of ammo stored in arms room *All ammo will be signed out by the number of rounds and lot number *Monthly inspections of rounds and paperwork *Ammo will be stored in a Class V safe or banded ammo cans, which will be chained to the floor of the arms room *Each can will have a tamper proof seal *Armorer will inspect seals upon entry into the arms room	How: *Posting of arms room SOP *Armorer training on proper procedures/ paperwork Who: Commander, Armorer, QASAS	L
+ -	Storage of ammunition in arms room	Damaged or destruction from mishap al detonation stored ammunition	M	*Stored ammunition is limited to requirements identified on storage license *Net Explosive Weight will not exceed license authorization *Construction certification for storage by facility engineering *Fire extinguishers available for use in immediate area	How: *Posting of arms room SOP *Armorer training on proper procedures/ paperwork Who: Commander, Armorer, QASAS, Installation Safety Office	L

	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
+ -	Storage of ammunition in arms room	Personnel being injured from mishap al detonation of rounds "cooking off" during a fire or mishandling	M	*Fire Dept will be notified by Installation Safety Office, of amount, type, and exact location of rounds on arms room license *Two fire extinguishers will be kept in the arms room at all times *Proper signs will be posted outside the arms room denoting it contains ammunition *Armorers will be taught proper handling skills for ammunition	How: Admin control and inspection of arms room to determine if controls have been met Who: Commander, Armorer, QASAS, Installation Safety Office	L
+ -	Storage of ammunition in arms room	Fire hazards	M	*Combustible and flammable liquids non-essential to storage will be removed *Fire symbol is posted at entrance to arms room	How: Unit arms room SOP Who: Commander, Armorer, QASAS, Installation Safety Office	L
+ -	Storage of ammunition in arms room	Degradation of weapon and ammunition due to excessive moisture or use	M	*Armorer will inspect weapons and ammunition monthly for any signs of degradation *A dehumidifier in arms room is recommended	How: Unit arms room SOP and handlers call for all armorers Who: Armorer, QASAS	
+ -	Storage of ammunition in arms room	Not having ammo - inability to react to force protection	M	Establish an operational load of ammo for the unit	How: Establishment of unit operational basic load Who: Commander, Armorer	L
+ -	Storage of ammunition in arms room	Weapons/ammo storage		Inspection reports from Safety, Fire, Physical Security and QASAS will be posted and or maintained on file	How: DA Pam 385-64. unit arms room SOP Who: Commander, Armorer	L
10. OVERALL RESIDUAL RISK LEVEL *(All controls implemented)*:						

EXTREMELYHIGH HIGH MEDIUM LOW

11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION

Commander, armorer will ensure that only authorized personnel as listed on the most current unaccompanied access control roster will access the Weapons/ammo storage area.

12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK Approve Disapprove

a. Name (Last, First, Middle Initial)	**b. Rank/Grade**	**c. Duty Title/Position**	**d. Signature of Approval Authority**

e. Additional Guidance:

Risk Assessment Matrix

Severity *(expected consequence)*		**Probability** *(expected frequency)* **A** — **Frequent:** Continuous, regular, or inevitable occurrences	**B** — **Likely:** Several or numerous occurrences	**C** — **Occasional:** Sporadic or intermittent occurrences	**D** — **Seldom:** Infrequent occurrences	**E** — **Unlikely:** Possible occurrences but improbable
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

DD FORM 2977, Page 3 of 5

Appendix D Risk Authority

Risk acceptance authority for safety standards deviation

Risk acceptance matrix[2, 3, 4, 5]

	Duration of risk			
	Event waiver	**Waiver**		**Exemption**
Category of risk	1 month or less	1 month to 1 year	1 year to 5 years	Permanent or greater than 5 years
Extremely high risk	General officer (GO)	Army Headquarters Commanding General (CG)	Army Headquarters CG	Army Headquarters CG
High risk	Brigade commanding officer (CO) or responsible O–6	GO	GO	GO
Medium risk	Battalion CO[1] or responsible O–5	Brigade CO[1] or responsible O–6	GO[1]	GO[1]
Low risk	Company CO or responsible O–3	Battalion CO[1] or responsible O–5	Brigade CO[1] or responsible O–6	Brigade CO[1] or responsible O–6

Legend for Table 4-1.:

In organizations led by Army civilian leaders, equivalent civilian grades may be substituted for military ranks (see table 4–2).

The term "Army Headquarters CG" used in the table refers to Army commands (ACOMs), Army service component command (ASCCs) (including Joint Forces Land Component Commands (JFLCC) and GO level Joint Task Forces (JTFs)), direct reporting units (DRUs), and the Director, Army National Guard.

Notes:

[1] May delegate in writing authority to accept at the next lower command level.

[2] For deviations involving violations of AE or chemical agent safety standards during Joint operations planning, training, and execution, refer to CJCSI 4360.

Appendix E Ammunition and Amnesty Found On Post (AFOP)

1. This appendix references requirements and procedures for control, accountability, safety, and security of ammunition and explosives (A&E). A major area of continuing concern has been the lack of written comprehensive ammunition amnesty programs to gain control of loose or uncontrolled ammunition. Reviews have found most amnesty programs did not provide for easy return of ammunition, units had no collection means, and Soldiers were unaware of amnesty.

2. To be effective, amnesty programs must stress the urgency of gaining control of ammunition items outside of the supply system, and provide for interaction of activities concerned, i.e., Military Police, Ammunition Supply Point (ASP), and unit commanders. This program is not intended to circumvent normal turn-ins procedures.

3. For clarification purposes, amnesty is considered small arms ammunition only. Small arms ammunition does not contain an explosive projectile, is up to and including .50 Caliber or smaller or is for shotguns.

4. The following amnesty and AFPO procedures are provided:

a. Personal safety will be the primary consideration at all times. All found ammunition of unknown origin, excluding small arms ammunition .50 caliber and below, will be considered to be hazardous and must not be moved by untrained personnel. Individuals finding ammunition will follow the 3Rs (Recognize, Retreat, Report).

b. No Questions Asked Policy. Commanders will provide a non-intimidating atmosphere for Soldiers or civilians to freely turn-in or report the location of amnesty ammunition. Do not ask personal identification questions (name, address or unit). No attempt will be made to punish or prosecute individuals using the amnesty program since that will discourage use by others in the future. Questions about AFOP, such as where it was found, may be asked so ammunition control can be improved.

c. Turn-in procedures.

(1) The ASP is the primary amnesty and AFOP turn-in point and all ammunition, components, and ammunition residue will be accepted, with or without documentation, from military or civilian personnel, no questions asked.

(2) Persons desiring to turn-in other than small arms items will call the QASAS at (502) 624-2836/5161 during Duty Hours, or after hours call the MP Station. These items will be considered to be dangerous, and personnel should call the QASAS, Military Police, or Installation Operations Center (IOC).

(3) Commanders will ensure all Soldiers have the option to turn-in or report amnesty and AFOP ammunition through their chain of command with NO fear of reprisal.

(4) If A&E is found on a range, mark it, determine location and contact Range Operations, 624-2125. In addition, contact the chain of command.

(5) A&E found off post. When any type of A&E is found outside the installation boundary, contact local civilian authorities or military police. In addition, contact the chain of command.

d. Amnesty containers.

(1) Amnesty containers must:

(a) Prevent unauthorized removal of A&E.

(b) Prevent unauthorized removal of the amnesty container.

(c) Provide protection from weather exposure (such as rain sleet, and snow).

(d) Prevent A&E from accumulating, dropping or falling in such a way that might cause inadvertent initiation.

(e) Will be placed in an accessible low risk area and marked with a contact phone number that is available 24 hours, 7 days a week.

(2) The establishment and use of ammunition amnesty containers on ranges is prohibited.

(3) Amnesty containers must be designed and configured in such a manner so as not to accept ammunition larger than a .50 caliber ammunition rounds. Small arms ammunition containers may be established in unit areas. All containers will be clearly marked ‘AMMUNITION AMNESTY BOX FOR SMALL ARMS AMMUNTION ONLY TO DISPOSE OF OTHER ITEMS, CALL THE AMMUNITION HOTLINE AT 4-AMMO.” Units may obtain approved designs for amnesty boxes from the QASAS or Explosive Safety Manager.

(4) Amnesty containers capable of accepting material larger than .50 caliber may be established ONLY under the following conditions:

(a) Amnesty containers must meet Quantity Distance (QD) and explosives safety requirements for all classes of ammunition, i.e., minimum distance of 670 feet from nearest inhabited building or public traffic route, sand bagged on three sides and barricaded on one side.

(b) Containers must be configured so that trained personnel can determine when items have been placed in the box.

(c) QASAS will check amnesty containers at a minimum monthly, depending on activity. During CST their area container will be checked weekly.

(5) The location of all amnesty containers will be approved by the QASAS and Explosive Safety Manager (ESM). The same action is required upon the addition, deletion and relocation of an ammunition amnesty box.

5. An Ammunition Hotline (502) 624-AMMO (2666), has been established at the Muldraugh Ammunition Storage Area (MASA) that amnesty program users can call 24 hours a day for information on how to turn-in ammunition, directions to turn-in points, or leave information where ammunition may be picked up

6. Commanders will take the following immediate action to implement this program:

a. Brief all personnel on amnesty and AFOP procedures. Establish an atmosphere that does not intimidate Soldiers or prevent individuals from freely turning in or reporting the location of ammunition under the amnesty program. No attempt will be made to punish or prosecute individuals using the amnesty program, since this would discourage its use by others in the future.

b. Military personnel assigned duties associated with A&E will be briefed on the Amnesty Program at least semiannually and prior to operations, exercises or training events that provide access to or require the use of A&E.

c. Develop a Standard Operating Procedures (SOP) outlining individual's responsibilities and the requirements for handling A&E amnesty items. SOP's will be approved by the QASAS, ESM and ESPM.

d. Commanders will monitor the amnesty program to ensure effectiveness of ammunition accountability and that this program is not being used to circumvent normal turn-in procedures.

e. A copy of this policy will be posted on the unit/activity bulletin board along with the amnesty turn-in poster (Encl 1). Posters will contain location of ammunition amnesty turn-in point, telephone numbers and information for potential users. Amnesty box locations are found on Encl 2.

7. Ammunition Surveillance Office with the Installation Safety Office will establish an ammunition amnesty day for the installation annually. The date, location and process will be established and published through email, post newspaper and KNOXINFO channels.

8. The importance of providing a simple and effective means to turn-in and non-intimating atmosphere cannot be overemphasized. If we agree to gain control of misappropriate ammunition, each commander, officer, noncommissioned officer, and

civilian supervisor must understand the urgency and necessity for these programs and assure their best and continuing efforts in making them succeed.

Appendix F Amnesty Program

FORT KNOX AMMUNITION AMNESTY PROGRAM

YOU CAN TURN-IN "OLD", "LOOSE" OR "FOUND" AMMUNITION - WITH NO PAPERWORK AND NO QUESTIONS ASKED!!!

DEPOSIT SMALL ARMS AMMUNITION (.50 CALIBER OR BELOW) **IN** SMALL ARMS AMMUNITION BOXES IN ANY UNIT OR ASP FRONT GATE.

CALL THE QUALITY ASSURANCE SPECIALIST (AMMUNITION SURVEILLANCE) (QASA) AT 502-624-2836 or 4-5161 FOR PICKUP OR DISPOSITION OF LARGER ITEMS OR LARGE QUANTITIES.

TURN-IN ANY AMMUNITION ITEMS, COMPONENT OR PACKING MATERIAL TO THE AMMUNITION SUPPLY POINT (ASP) BETWEEN 0730-1600 MONDAY - FRIDAY (EXCLUDING HOLIDAYS). NO APPOINTMENT NEEDED-NO PAPERWORK-NO QUESTIONS ASKED!!

CALL THE AMMUNITION SUPPLY POINT (ASP) 502-624-8154 FOR MORE INFORMATION!!!

AMMUNITION AMNESTY BOXES FOR -

_____

ARE LOCATED AT-

_____

POST ON BULLETIN BOARDS

Appendix G Location Amnesty Containers:

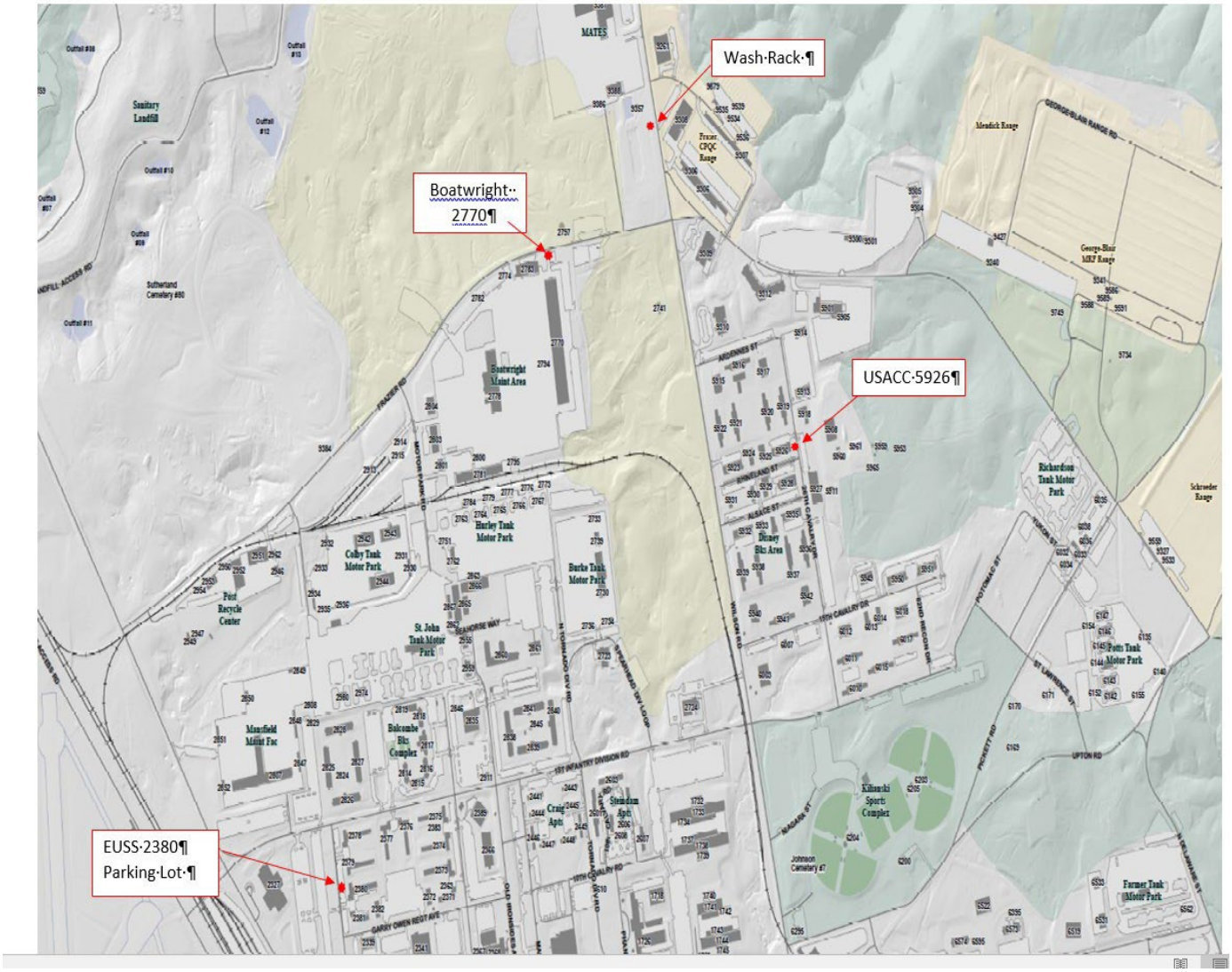
Five Permanent Amnesty Containers:

- **USACC Arms Room, Bldg. 5926**
- **Boatwright, Bldg. 2770 (outside fence @ main entrance)**
- **EUSS Parking Lot (East of Bldg. 2380)**
- **Wash Rack, Bldg. 9357 (across from Range Operations)**
- **ASP (corner of 484th Engineer and Muldraugh Magazine Road)**

Temporary amnesty containers:

- **Contact Explosive Safety Manager for information.**

4·of·5·AMNESTY·BOX·LOCATIONS··JUNE·2021¶



One additional Amnesty Box located in front of the ASP

Appendix H Ammunition Route Policy

1. Policy.

a. IMCOM Regulation 5-13 requires the Installation Safety Office to designate the route ammunition and explosives will move in or through area of the installation.

b. All military and commercial vehicles carrying US Department of Transportation placard amount of Class 1 ammunition or explosives on the installation will follow only the routes designated and specifically approved by the Installation Safety Office.

c. The following are designated route descriptions for delivery to Fort Knox, Muldraugh Ammunition Storage Area (MASA), and on post range areas.

(1) Off post route from north of Fort Knox, via Highway 31W. Travel south on Highway 31W until reaching Brandenburg Station Road, turn right off Highway 31W, proceed under the overpass to top of hill at the intersection with Brandenburg Station Road, turn right and proceed to Brandenburg Gate checkpoint. Stay in the right lane while proceeding through the gate checkpoint. After clearing the load, merge left with traffic, turn left onto Muldraugh Magazine Road, and proceed north until reaching the MASA.

(2) Off post route from west of Fort Knox via Highway 60. At the traffic light, Highway 60/Highway 31W intersection, turn left, proceed north on Highway 31W until reaching the exit ramp for Brandenburg Station Road (approximately 1/8 mile from the light), turn right, and follow the road proceeding to Brandenburg Gate checkpoint. Stay in the right lane while proceeding through the gate checkpoint. After clearing the load, merge left with traffic, turn left onto Muldraugh Magazine Road, and proceed north until reaching the MASA.

(3) Off post route from the south of Fort Knox via Highway 31W. After passing the traffic light, at the intersection of Highway 60 and Highway 31W, proceed north on Highway 31W until reaching the exit ramp for Brandenburg Station Road (approximately 1/8 mile from the light), turn right, and follow the road proceeding to Brandenburg Gate checkpoint. Stay in the right lane while proceeding through the gate checkpoint. After clearing the load, merge left with traffic, turn left onto Muldraugh Magazine Road, and proceed north until reaching the MASA.

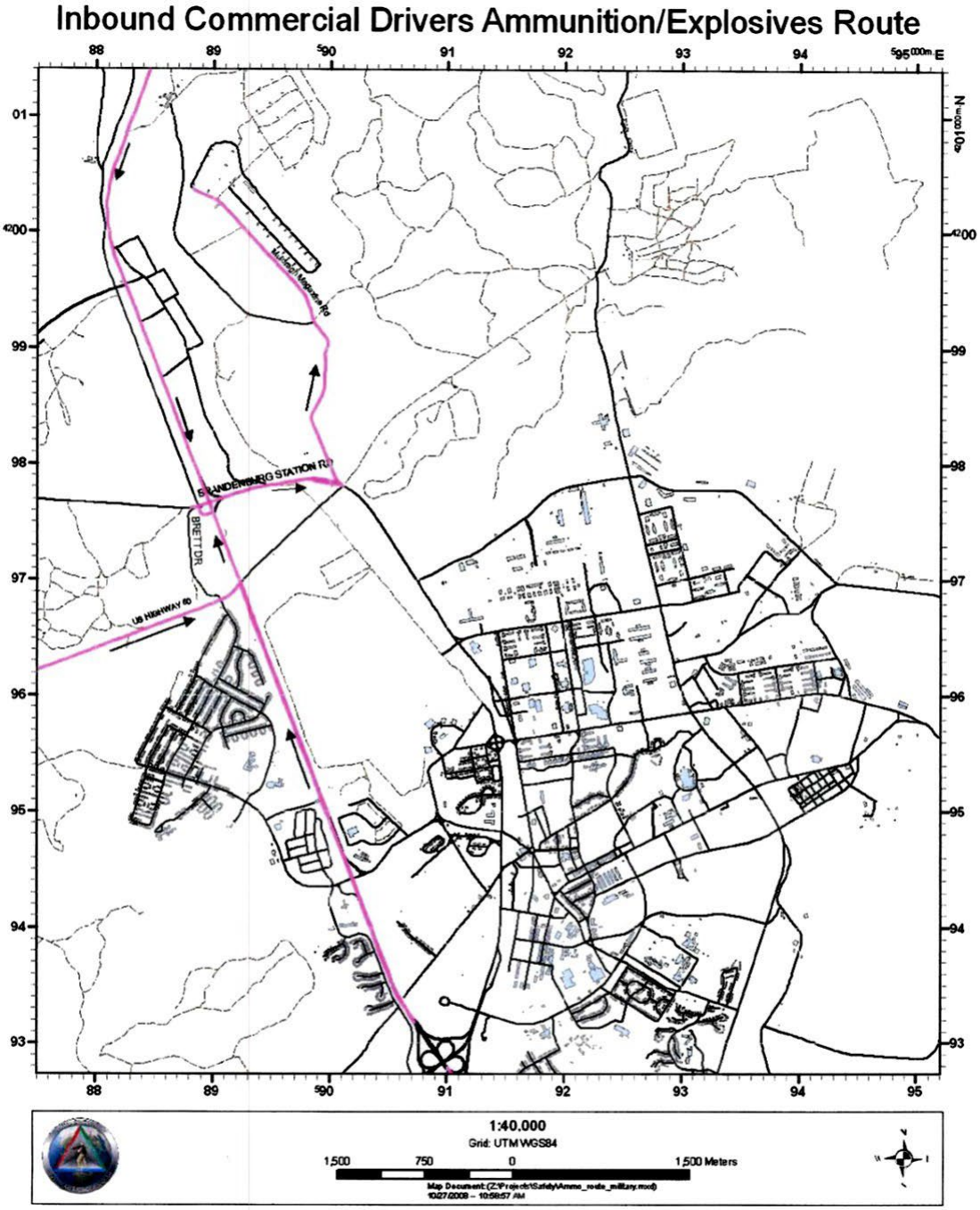
(4) On post ammo routes for ranges east of Highway 31W. Depart the MASA, proceed south via Muldraugh Magazine Road, turn left on 484th Engineer Road where 484th Engineer Road intercepts Baker Road, and turn left on Baker Road. Baker Road runs into Main Range Road. After reaching the intersection with Main Range Road, turn left onto Main Range Road (for delivery to northern training ranges) or turn right, and follow Main Range Road south until reaching the 4-way stop/intersection adjacent to the wash rack (on the right) or Holder Complex (on the left). Turn left at the stop sign,

staying on Main Range Road for delivery to the various ranges east of the cantonment area (reverse the route for returning ammunition/explosives back to MASA).

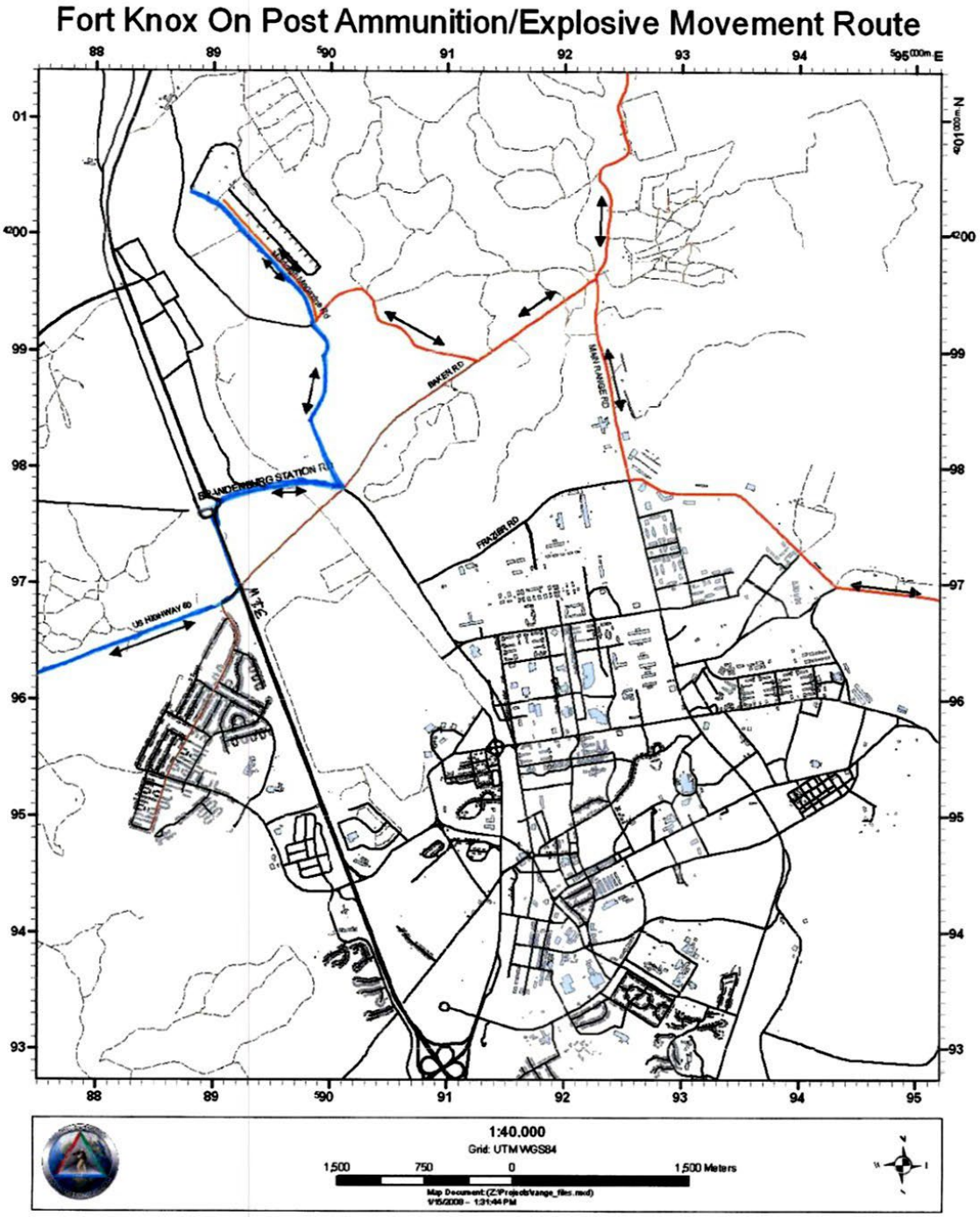
(5) Ammo route to CP37/Densberger Base Camp or CP38. Depart the MASA and proceed south on Muldraugh Magazine Road. Muldraugh Magazine Road intercepts with Brandenburg Station Road adjacent the Brandenburg gate area. Turn right on Brandenburg Station Road, proceed west on Brandenburg Station Road departing the main post area. (Option #1) left onto ramp leading to Highway 31W. At stop sign turn right onto 31W. At the traffic light turn right on Highway 60, proceed west until reaching CP37/Densberger Base Camp or CP38. Turn right into CP38 or CP37/Densberger and proceed to the ammo storage pad on the north side of the K-span (reverse the route for returning ammunition/explosives back to MASA). (Option #2) Proceed straight through gate on Brandenburg Station Road into the training area to CP37.

2. Inbound Commercial Drivers Ammunition/Explosive Route is shown on map at Encl 2. Fort Knox on Post Ammunition/Explosive Movement Route is shown on map at Encl 3.

Appendix I


Inbound Commercial Drivers Ammunition/Explosives Route
BRETT DR
US HIGHWAY 60
1:40,000
Grid: UTM WGS84
1,500 750 0 1,500 Meters

Appendix J


Fort Knox On Post Ammunition/Explosive Movement Route
BRANDENBURG STATION RD
BAKER RD
MAIN RANGE RD
FRAZER RD
US HIGHWAY 60
1:40,000
Grid: UTM WGS84
1,500
750
0
1,500 Meters

Appendix K Fort Knox Installation Ammunition Certification Board

1. Purpose. The Fort Knox Installation Ammunition Certification Board will ensure personnel; Military, Army Civilian Corp (ACC), and Contractors are incompliance with AMC 350-4 and DA PAM 385-64. Review all Ammunition and Explosive (A&E) violations and make recommendations concerning corrective action to include, additional training, recertify, suspension, and revocation of certification to the Board Chairperson. The Explosive Safety Manager (ESM) will monitor and review all records related to explosive training annually. As directed by the Installation Senior Commander (SC) or the designee. Minutes from the training Certification Board will be provided to the SC or designee for review no later than one week prior to the board adjourning.

2. The board will meet annually and at the call of the Chairman (Logistical Readiness Center Commander or equivalent.).

a. The following personnel are Board members for the Fort Knox Installation Records Review Board:

(1) Logistical Readiness Center Commander or equivalent - Chairman

(2) Installation Safety Director / ESM - Co-Chair / Board Member.

(3) Installation Explosive Safety Program Manager / ESPM

(4) Ammunition Accountable Officer LRC - Board Member

(5) Lead Quality Assurance Specialists (QASAS) - Board Member.

(6) Installation Ammunition Manager, ID-Training- Board Member.

(7) Union Rep. or COR - Board Member.

3. Responsibilities of the Certification Board

a. Ensure personnel (Military, ACC, and Contractors) are certified for those explosives work tasks and operations required to accomplish the mission. To include verifying all required refresher courses are completed as detailed in AMC 350-4 Table C, the DA Pam 385-64

b. Review all A&E violations and make recommendations concerning; corrective action, which include but not are limited to; additional training, de-certification, suspension and/or revocation of certification to the LRC Commander/ Chairman or Installation Explosive Safety Manager.

c. Review Ammunition Handlers Training Course annually, develop training programs in support of the ammunition mission, and review any changes or updates to the standards.

d. Review any concerns or safety hazards within the ASP and external units while Deliberate Risk Assessment for ammunition or turn in or any known issues in the range area.

e. Board members will review the Fort Knox Installation Ammunition Certification Board Charter annually prior to meeting. Recommendations for changes will be brought up to the board members for concurrence.

Appendix L ARMS ROOM INSPECTION CHECKLIST

1. DATE:	2. SAFETY:	3. QASAS:
4. UNIT:		5. LOCATION:
6. PERSONNEL IN ATTENDANCE:	7. PHONE:	8. UNIT COMMANDER:

SAT	UNSAT	NA	
☐	☐	☐	9. Is a copy of the Explosion Storage License posted to the bulletin board in the arms room? *AR 190-11, para 1-13, DA Pam 385-64-5-2, DA Pam 710-2-1, part 1-19(1)(e)*
☐	☐	☐	a. Garrison Commander's approval memorandum?
☐	☐	☐	b. Approved copy of the explosive storage license?
☐	☐	☐	c. DPW Physical Security Construction statement?
☐	☐	☐	d. Risk Assessment? Yes ☐ No ☐ Reviewed Annually? Yes ☐ No ☐
☐	☐	☐	e. Ammunition Amnesty procedures and locations
☐	☐	NA	10. Are Hazard Classes (HC) 1.1 and 1.2 (high explosives) ammunition prohibited from being stored in the arms room? Up to 100 lb. of 1.3 and up to 50 lb. of 1.2.2 can be stored. *DA Pam 385-64, para 8-3(b)*
☐	☐	☐	11. Ammunition combat load inspected and inventoried monthly. (Conducted by DODIC Lot Number and Quantity) *DA Pam 385-64, para 3-27e and AR 710-2, para 1-21a (3)*
☐	☐	☐	12. Is ceremonial ammunition (75mm/105mm Blank) being temporarily stored in the arms room (1.3 and 1.4 blank rounds must be less than 100 lb.)? *DA Pam 385-64, para 8-3(d)*
☐	☐	☐	13. Does the total amount of small-arms ammunition (HC 1.4, 50 Cal or less) exceed 1000 rounds? As applicable written authorization by the first Lieutenant Colonel in the chain of command with concurrence of the MACOM may be required. *DA Pam 385-64, para 3-16. a*
☐	☐	☐	a. If items are stored in the arms room, are the appropriate chemical hazard symbols posted? PLACECARDS: *DA Pam 385-64, paragraphs 1-8 and 3-16(a), (b) and (c)*
☐	☐	☐	b. Are safety data sheets (SDS) posted for each hazardous chemical?
☐	☐	☐	c. Are personnel trained in hazard material storage and transportation?
☐	☐	☐	14. Is a company arms room SOP on file that covers storage and handling? *DA Pam 385-64, para 1-7g*
☐	☐	☐	15. Is the correct fire symbol posted at arms room entrance and on locker containing ammunition (Fire symbol #4 for HC 1.4 and #3 for 1.3)? *DA Pam 385-64, table 6-2 and 6-14c*
☐	☐	☐	16. Are NO SMOKING signs posted at the arms room entrance? *DA Pam 385-64, para 46-3b (7)*
☐	☐	☐	17. Are there two 10 lb. serviceable fire extinguishers available? *DA Pam 385-64, para 6-10*
☐	☐	☐	18. Is the arms room free of flame producing, flammable, radioactive items, and combustible liquids? *DA Pam 385-64, para 8-3e (2)*
☐	☐	☐	19. Has the unit commander signed a memorandum authorizing the storage of specific amounts and types of ammunition to be stored in the arms room? If the ammunition belongs to another unit there must be a joint memorandum signed by both commanders (the commander who owns the ammunition and the commander of the arms room storing the ammunition). *AR 190-11, para 1-13 and AR 710-2, para 2-12*

SAT ☐	UN-SAT ☐	NA ☐	20. Verify ample lighting at the entrance/issue area. Light switch accessible to authorized personnel. Correct type of lighting? *AR 190-11, para 5-4*
SAT ☐	UN-SAT ☐	NA ☐	21. Verify outer and inner doors to arms room are secured with "High Security Lock". DA/DOD approved? *AR 190-11, para 5-6*
SAT ☐	UN-SAT ☐	NA	22. Are individuals authorized access to receive, store or issue arms properly trained and undergone security background check? *DA Pam 385-64, para 1-8, figure 1-1 and AR 190-11, para 2-11(b)*
SAT ☐	UN-SAT ☐	NA ☐	23. Is training ammunition (1.4) stored for more than 72 hours in the arms room? *AR 385-1, para 14-7b*
SAT ☐	UN-SAT ☐	NA ☐	24. Is ammunition serviceable and stored correctly? *DA Pam 385-64, para 8-3*
SAT ☐	UN-SAT ☐	NA	a. Are containers marked correctly? *DA Pam 742-1, para 9-2*
SAT ☐	UN-SAT ☐	NA	b. Are they locked class 5 containers? *AR 190-11, para 3-8(h)*
SAT ☐	UN-SAT ☐	NA ☐	c. Do the quantity and lot number match documents? *AR 710-2, para 2-11b (3)*
SAT ☐	UN-SAT ☐	NA	d. Is the seal control program in place? *AR 190-51, appendix D*
SAT ☐	UN-SAT ☐	NA	25. Is there adequate ventilation throughout the stacks? *DA Pam 385-64, para 16-21*

FK FORM 1027, SEP 2017

Appendix M Example of Security Construction Statement

SECURITY CONSTRUCTION STATEMENT
For use of this form see AR 190-11; the proponent agency is PMG.

INSTRUCTIONS

This form will be prepared in three copies. The original will be maintained permanently in the files of the individual signing the form. The first copy will be maintained permanently in the using unit/organizational files. The second copy will filed permanently in the arms/ammunition storage facility. All entries except item 7 will be typewritten.

1. THE CONSTRUCTION OF THIS FACILITY CONFORMS TO THE CRITERIA OF AR 190-11 WHICH IS IN EFFECT ON THIS DATE.

Category II arms may be stored without modifications.

Outer Door: Bank Vault type door ½" steel plate

Inner Door: Dutch Day Door made with Expanded Flattened Metal (10 gauge diamond mesh), door lock is a dead bolt with a slide lock to lock doors together.

Walls: Reinforced Concrete Walls 8" thick

Floor: Reinforced Concrete Floor 6" thick

Ceiling: Reinforced Concrete Ceiling 11" thick

2. ROOM AND BUILDING NUMBER, STREET AND INSTALLATION ADDRESS

1st Theater Sustainment Command
354 Famous 4th Division Road
Building 1741 – Vault 105, Brave Rifles Avenue
Fort Knox, Kentucky 40121

3. THIS APPLIES TO

a. _X_ AN EXISTING STRUCTURE
b. __ CONSTRUCTION OF NEW FACILITY
c. __ MODIFICATION OF EXISTING FACILITY. (Explain)

4. NAME OF OFFICIAL IN ITEM 7 BELOW	GRADE	6. ADDRESS OF OFFICIAL
John Wiseman	**GS-12**	**DPW** **Building 1110A** **Fort Knox, Kentucky**

5. ORGANIZATION

Directorate of Public Works, Engineer Service Division

7. SIGNATURE — DATE SIGNED: SEPT. 3[illegible] 2016

COPY

DA FORM 4604, SEP 2006 APD V1.00

Appendix N Example Memorandum Request

DEPARTMENT OF THE ARMY
HEADQUARTERS [redacted] BATTALION
175 NORTH TORNADO DIVISION AVENUE
FORT KNOX, KENTUCKY 40121

REPLY TO
ATTENTION OF:

AFFJ-EBC-CDR

28 January 2015

MEMORANDUM FOR Garrison Safety Office

SUBJECT: Approval to Store Munitions in Unit Arms Room (Building **20**)

1. I have reviewed the enclosed Risk Assessment and approve the storage of limited amounts of ammunition in the arms room of the **1/24h AVN** Building **20 Vault A.**

2. The type, amount, DODIC, and reason for storage of ammo are as follows:

Type	Amount	DODIC	Reason
a) 9mm Ball	10 rounds	AA49	Force Protection
b) 5.56mm Ball	30 rounds	A059	Force Protection
c) 5.56mm Blank	10 rounds	A080	Funeral

3. The point of contact for this memorandum is the **1/24th BN** Safety OIC, 1LT **Sam, Joe** Mapu, at 573-337.8062.
Joe.sam.mil@mail.mil.

Joe Sam

LTC, EN
Commanding

Appendix O Salute Cannon

2. Guidance for salute cannons within Fort Knox and surrounding area, coordinate with the installation safety office for distance marking and approved areas. Provide a risk assessment for the cannon firing to the safety office prior to the event for review.

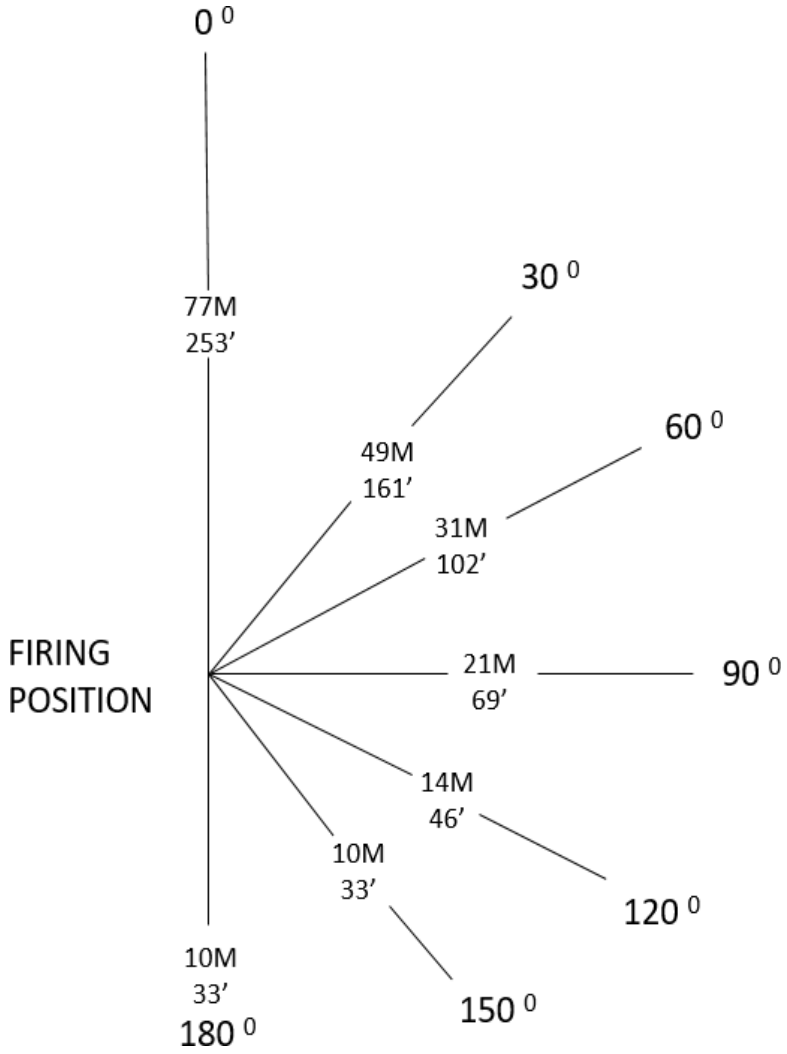
3. This regulation references policy governing the scheduling, planning, preparation, and execution of firing procedures for ceremonial cannon firing with an emphasis on safety protocol for all personnel assigned to Fort Knox.

4. Ensure operating manuals (AR, TM, FM, DRA etc.) are on hand and match type of cannon being fired and ammo being used, to include references for cannon firing procedures, clearing, check fire, and misfire.

5. Prior to firing cannon within the cantonment area or in support of activities within the Fort Knox surrounding area , validation shall be conducted by a 0017 or 0018 Safety Specialist Explosive Level II, 89 B or QASAS.

6. Noise level stand-off distance for all observers during cannon shoot diagram (see attached page)

Appendix O Salute Cannon



SCALE 1:500

140db NOISE LEVEL DISTANCES

75mm CANNON

Appendix P Deviation Approval And Risk Acceptance Document (DARAD)

DEVIATION APPROVAL AND RISK ACCEPTANCE DOCUMENT (DARAD)

For use of this form, see DA PAM 385-30; the proponent agency is DAS.

SITE INFORMATION

1a. Country: United States	1b. State: Kentucky	2. Service: A - Army	3a. Installation Type: FORT
3b. Installation Name: Fort Knox		3c. Type of Site:	

DEVIATION INFORMATION

4. Deviation #:	5a. Effective Date: (Will auto populate from block 14)	5b. Expiration Date:	6. Deviation From: Ammunition/Explosive (AE) Safety Standards
7. Type of Deviation: E - Exemption	8a. Number/Title and Paragraph of Requirement:		
8b. What we need to do that deviates from 8a: *(Synopsis of block 24)*			
8c. Operational, Strategic or Compelling Reason for Violation:			

9. Potential Consequences of Deviation from Approved Standards:	9a. # Fatalities:	9b. # Injuries:	9c. Equip/Fac Loss $:	10. Date Deviation Initiated:
11. Residual Severity: 4 - Negligible	12. Residual Probability: E - Unlikely	13. Residual Level of Risk: L- Low - RAC 4	14a. Safety Professional/ Analyst (POC Info):	
14b. Analyst Signature:	14c. Submitter (POC Info): *(if different from 14a.)*		14d. Submitter Signature: *(if different from 14a.)*	

14 e. REVIEWED BY:

DATE	CONCUR (YES/NO)	ORGANIZATION	PRINTED NAME/TITLE	Attachment	SIGNATURE
				Attachment? ☐	
				Attachment? ☐	
				Attachment? ☐	
				Attachment? ☐	
				Attachment? ☐	
				Attachment? ☐	

DEVIATION APPROVAL/RISK ACCEPTANCE

I have reviewed the risk assessment and understand the hazard and potential consequences. **I am approving this deviation and accepting the additional potential consequences and residual risk based on current operational necessity.**

15. Army HQ:	15b. Unit/Comm:	16a. DATE:	16b. Expiration Date:	17. RANK/TITLE:
17a. PRINTED NAME:		17b. SIGNATURE:		
17c. Comment:				Attachment? ☐

DA FORM 7632, APR 2015 PREVIOUS EDITIONS ARE OBSOLETE Page 1 of 3

RISK ASSESSMENT WORKSHEET

Deviation #:	Effective Date:	Expiration Date:	

RISK ANALYSIS INFORMATION

18. Current Situation: "Provide a description of the situation that necessitates this deviation." — Attachment? ☐

19. Hazard Category:

20. Specific Hazard:

21. Duration of Deviation *(Choose one of the following)*	21a. 1 month or less: *(select the duration (in days))*	0	21b. 1 month to 1 year: *(select the duration (in months))*	0	21c. 1 year to 5 years: *(select the duration (in years))*	0	21d. Permanent or greater than 5 years: *(enter number of years or PERMANENT)*	

22. Deviation Approval Authority: *(or Equivalent)*

23. Mission Impact of Not Accepting Risk: — Attachment? ☐

24. What we need to do that violates 8a: *(Provide a detailed description of the action that deviates from the standards.)* — Attachment? ☐

25. Control Measures: "Measures taken, or will take, to reduce hazards of risk being accepted." — Attachment? ☐

26. Permanent Corrective Actions (with Milestones): Include estimated cost, military construction project number, etc. — Attachment? ☐

27. Alternatives Considered: "Things considered doing but didn't, and why." — Attachment? ☐

Alternative 1:

Alternative 2:

Alternative 3:

28. Attach any supporting documents (i.e. Photos, MOU, ASAP-X, ESS, etc.) — Attachment? ☐

DA FORM 7632, APR 2015

Page 2 of 3

APD LC v1.00ES

AMMUNITION AND EXPLOSIVES WORKSHEET

Deviation #:	Effective Date:	Expiration Date:

INFORMATION ON THE POTENTIAL EXPLOSION SITE (PES)

29a. PES Name/#:	29b. PES Function:	30. PES # People:
31. PES Equip/Fac (Value) $:	32. Required Blast Distance:	33. Required Fragment Distance:
34a. Hazard Division: 1.1: NEW:	34b. Hazard Division: 1.2.1: NEW:	34c. Hazard Division: 1.2.2: NEW:
34d. Hazard Division: 1.2.3: NEW:	34e. Hazard Division: 1.3: NEW:	34f. Hazard Division: 1.4: NEW/MEQ:

35a. QD arcs exceed the installation boundary? YES ☐ NO ☐ Are other Services affected? YES ☐ NO ☐ Was coordination made? YES ☐ NO ☐ Provide other coordination documentation, as necessary.

Why coordination was/was not made:	Coordination paperwork attached? ☐
35b. Is this deviation associated with a hybrid or risk-base safety submission?	35c. If YES, provide site plan #:

INFORMATION ON THE EXPOSED SITES (ES)

36. EXPOSED SITES

						At Required Distance			At Requested Distances			(Attachment?) ☐
FACILITY	DISTANCE: REQUIRED / ACTUAL	# PEOPLE	EQUIP/FAC (VALUE) $	EXPOSURE TYPE	ON/OFF INSTALLATION	FATALITIES	INJURIES	EQUIP/FAC (LOSS) $	FATALITIES	INJURIES	EQUIP/FAC (LOSS) $	VIOLATION?
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO
	0 / 0											NO

EXPECTED POTENTIAL CONSEQUENCES

37. Potential Explosion Site:	a. Fatalities:	b. Injuries:	c. Equip/Fac $:
38. Potential Losses for Exposed Sites (ES) Meeting Criteria:	a. Fatalities:	b. Injuries:	c. Equip/Fac $
39. Potential Loss Being Accepted for Deviating from Approved Standards:	a. Fatalities:	b. Injuries:	c. Equip/Fac $
40. Total Potential Loss (#/$):	a. Fatalities:	b. Injuries:	c. Equip/Fac $

DA FORM 7632, APR 2015

Page 3 of 3
APD LC v1.00ES

Appendix Q
Safety Standing Operating Procedures OD 5000 for Small Arms Ordnance Deformer

1. PURPOSE. This SOP establishes the Recycle Safety Program and prescribes policies and procedures for the safe operation of the OD 5000 Small Arms Ordnance deformer. These procedures supplements all federal occupational safety and health standards relative to this machine. Application of these procedures will ensure that individuals operating, performing maintenance or services will have total control over this machine.

1-2. SCOPE. These procedures apply to the organization's operation, maintenance, and services performed on the OD 5000 Small Arms Ordnance deformer.

1-3. REFERENCES. Required and related publications are DoD 6055.09 V4.E5.18;

a. 1-3. V4.E5.18.1, A demilitarization operation for processing expended .50 caliber and smaller cartridge cases can be treated as a non-explosive operation.

b. 1-3. V4.E5.18.1.1, Cartridge casings to be processed will be screened prior to processing. Screening is intended to ensure that only .50-caliber and smaller are processed, and to remove unused .50-caliber and smaller cartridges.

c. 1-3. V4.E5.18.2, Demilitarization processing equipment is tested to be capable of containing overpressure, fragment, and thermal hazards associated with a worst-case reaction involving a single live round of the most energetic cartridge that could be processed in the equipment.

d. 1-3. V4.E5.18.3, Demilitarization processing equipment is operated with the manufacturer's specifications and restricted only to the processing of expended .50-caliber and smaller cartridge casings.

e. 1-3. V4.E5.18.4, Demilitarization processing equipment is inspected and maintained to ensure safe operation.

f. 1-3. The Fort Knox Environmental Division Reg/SOP

1-4. GOALS AND OBJECTIVES. The Recycle Program's goals and objective are for a safety and health program that will reduce the number of work related injuries and illnesses; recognizes the safety of its employees. Our goal is for zero mishapmishaps and incidents due to demilitarization operations.

a. Employer and Employee Responsibilities:

(1) **Training:** It shall be the responsibility of the site-supervisor or designated appointed in writing certified or qualified trainer who will instruct and train the operators in safe methods of operation for use of the Brass deformer. Workers assigned as operators of brass deforming machine shall ensure, adequate supervision, and that correct operating procedures are followed. Such training shall include the operating instructions provided by the manufacturer for each ordnance deformer and a copy of all training records will be kept on file, to include training of qualified and or certified trainer.

(2) **Maintenance:** It shall be the responsibility of the site supervisor to ensure that operators care for, clean, inspect and properly maintain the machine and ensure that the operator maintains the competency skills for this purpose, in accordance with the manufacturer's recommendations.

(3) **Inspection and Maintenance Records:** It shall be the responsibility of the site supervisor establish and follow a program of periodic and regular inspections of all ordnance deformers and to ensure that all parts, auxiliary equipment and safeguards are in a safe operating condition and adjusted in accordance with the manufacturer's recommendations and procedures. The site-supervisor shall maintain records of these inspections and maintenance work performed.

(4) **Work Area:** It shall be the responsibility of the site-supervisor to provide an adequate and safe work area around the ordnance deformer to permit the employment of safe operation and maintenance practices. It shall be the responsibility of the employer to keep all surrounding floors free from obstructions, waste matter, grease, oil, and water. The work area shall be adequately lighted.

(5) **Lockout Procedures:** A lockout procedure for ordnance deformer equipment will be established and followed by the supervisor and all employees where the power will be shut off completely before and during maintenance or testing.

(6) **Individual Responsibilities:** The safety precautions listed below will be followed for the safe operation of the OD 5000 Small Arms Ordnance Deformer. Operators must understand and apply them at all times during operation. Careless operation and or ignoring of these precautions may cause injury or death.

(7) **Lead Monitoring Requirement**: Lead dust assessment will be completed annual on the brass deforming process. Personnel identified to use the brass deformer will have a lead baseline and will be enrolled into the lead surveillance medical program by occupational health. Lead survey results shall be provided to the ISO no later than 30 days after conducting of survey.

(8) **Hearing Test Requirements:** Personnel required to work around the brass deformer will be required to be enrolled in the hearing conservation program and monitored annually.

(9) **Eye Test:** will be part of the annual physical.

b. **JOB HAZARD ANALYSIS**

Note: Before starting this machine, perform a visual inspection of all moving parts to ensure that a jam will not occur. Ensure that the emergency stop switch is pulled out.

Task or Step: Loading the Hopper.

Hazards: Machine is not rated to handle any ordnance larger then 20mm which is (slightly larger than .50 caliber) and adding larger ordnance may result in damage to the machine, bodily injury or death.

Controls: No ordnance will be deformed without being certified by the Fort Knox ASP. The hopper will only be loaded with .50 caliber and smaller cartridge cases. Personal Protective Equipment (PPE): Operators will wear gloves, eye protection, a utility dust mask, and hearing protection.

Note: No loose-fitting clothes will not be worn when operating this machine.

Task or Step: Operating the Machine Hazards: High Voltage is used in the operation of this machine. Live round discharge is possible.

Controls: Before operating this machine, it must be inspected by a trained certified or qualified appointed in writing QRP maintenance employee for electrical and FW&T.

Note: If the door to the soundproof box needs to be opened after the deformer has been running you must wait 5 minutes prior to opening the door to the soundproof box. Personal Protective Equipment (PPE): Gloves, eye protection, utility dust masks, safety shoes/boots and double hearing protection (Muffs with a rating of 34 NRR and ear plugs with a rating of 32 NRR will be worn).

SAFETY PRECAUTIONS

(1) Testing to determine the deformer's capabilities by intentionally running live ammunition through it is **strictly prohibited**.

(2) Supervisor will ensure that forklift operators utilize a lift rated at 3,000lb. Or higher to move hoppers of Brass, Ordnance to and from the deformer and deforming area.

(3) This Machine is rated as a High Voltage Machine and must be operated with extreme caution.

(4) Never load expended Brass, Ordnance larger than (.50) caliber in this OD5000 Ordnance Deformer.

(5) Always turn power off and follow lockout/tag-out procedures before servicing or cleaning the machine.

(6) Never operate the OD5000 deformer unless all safety guards are in place and properly installed.

(7) Keep the electrical panel closed at all times. Line terminals are alive when the main switch is off.

(8) Do not allow unauthorized persons within 75 feet of the operational area while the deformer is in operation. The operators will wear (PPE) gloves, utility dust mask, and eye and ear protection while machinery is operation. No loose clothing, and jewelry is prohibited while operating this machine. (Jewelry exception wedding ring if gloves are worn at all times.)
(Note: Muffs with a rating of 34 NRR and ear plugs with a rating of 32 NRR will be worn).

(9) Never override or bypass emergency stop switches.

(10) Never put hands or other parts close to any moving part of this machine.

(11) Never stick anything into the rotor chamber while the machine is turned on.

(12) Never attempt to remove objects from moving parts of the machine while the machine is in operation.

(13) Operator will be in a position to immediately press the emergency stop button in case of a jam, or malfunction or hazards.

(14) In case of a jam or live round on the conveyor, immediately stop the conveyor by pressing the emergency stop button.

(15) Always clear jams in the conveyor by using the conveyor direction switch as stated in the **MANDATORY OPERATION STEPS**.

(16) Do not modify or change any part of this machine. Doing so may cause the machine to become hazardous to operate.

DEFORMER CHAMBER CLEANING.
The following procedures will be followed when cleaning the OD5000 Deformer chamber. All wash water and resulting sediment and debris must be captured and disposed of in compliance with the Fort Knox Environmental Division Standards based on the results of laboratory analysis of the water. Until notified otherwise, all waste water, sediment and debris will be disposed of as follows:

(1) Collect all water in buckets or catch pans or a decanter and place into the waste storage drum. (NEVER in a storm sanitary sewer drain)

(2) Dispose of solid sediment and debris collected from catch pans, buckets, etc. into authorized storage drums only.

(3) The deformer chamber will be washed out after use. Note: Cleaning is not necessary if the deformer was not in operation.

(4) Water, sediment and debris accumulated in the normal operation of the deformer is to be handled the same as listed in steps 1-3.

MANDATORY OPERATION STEPS.
The following procedures will be followed when operating the OD5000 Brass/Ordnance Deformer. **Before starting your machine, YOU MUST perform a visual inspection of all moving parts to ensure that a jam will not occur.**

TURN-ON PROCEDURES

(1) Ensure that the emergency stop switch is pulled out.

(2) Load the hopper with expended ordnance .50-caliber or smaller.

(3) Turn the power on at the Main Disconnect.

(4) Turn the crusher on.

(5) Close the flow control gate.

(6) Turn the conveyor on.

(7) Meter the expended ordnance flow with the flow control gate to control the volume of the brass/ordnance on the conveyor.

SHUT DOWN
You can stop the machine at any time; however, the sequence of shut down is important during operation.

(1) Stop the conveyor.

(2) Allow the expended ordnance to clear the deforming drum.

(3) Stop the deformer.

NOTE: The emergency stop should only be used to turn off the ordnance deformer in an emergency situation.

You can load the hopper at any time during operation. Your best production will be achieved if you keep the hopper full.

CLEARING A CONVEY OR JAM

Note: Should a cartridge case become jammed in the conveyor, the conveyor will automatically shut itself down.

(1) Turn the conveyor direction switch to **OFF.**

(2) Push the conveyor switch to **START.**

(3) Turn the conveyor direction switch to **REVERSE** for a short period only. “BUMP” it a couple times as necessary.

(4) If the jam does not clear, contact supervisor. When the jam clears, turn the conveyor direction switch to **OFF.**

(5) Push the conveyor switch to **START** and turn the direction switch to **FORWARD.** The conveyor will resume feeding the crusher.

GLOSSARY

ABBREVIATIONS

A&E – Ammunition and Explosives (collectively referred to as “ammo” in this regulation)
AHCRB – Ammo Handlers Certification Review Board
AIN – Ammunition Information Notice
AMC – Army Materiel Command
MAPP – Mishap Prevention Plan
ASP – Ammunition Supply Point
CCR – Certificate of Compelling Reason
CFR – Code of Federal Regulations
CONUS – Continental United States
CST – Cadet Summer Training
DA – Department of the Army
DA Pam – Department of the Army Pamphlet
DARAD – Deviation Approval and Risk Acceptance Document
DDESB – Department of Defense Explosives Safety Board
DES – Directorate of Emergency Services
DLRC – Directorate of Logistics Readiness Center
DoD – Department of Defense
DODIC – Department of Defense Identification Code
DPTMS – Directorate of Plans, Training, Mobilization and Security
DPW – Directorate of Public Works
DRAW – Deliberate Risk Assessment Worksheet
EAP – Emergency Action Plans
EESC – Executive Explosive Safety Council
ESM – Explosive Safety Manager
ESPM – Explosive Safety Program Manager
ESMP – Explosive Safety Management Program
EOD – Explosive Ordnance Disposal
EPCRA – Emergency Planning Community Right-to-Know Act
ESL – Explosive Site License
ESSP – Explosive Safety Site Plan
ESWG – Explosive Safety Working Group
FORSCOM – Forces Command
FRP – Forward Rearming Point
GC – Garrison Commander
GIS – Geographic Information System

HAZMAT – Hazardous Materials
HD – Hazard Division
HERO – Hazards of Electromagnetic Radiation to Ordnance
IAW – In Accordance With
IC – Installation Commander
ISD – Installation Safety D
ISM – Installation Safety Manager
ISO – Installation Safety Office
IOC – Installation Operations Center
IMCOM – Installation Management Command
LAR – Logistics Assistance Representative
LPS – Lightning Protective System
MMR – Military Munitions Rule
NEW – Net Explosive Weight (in lbs.)
NGO – Non-Government Organizations
OGA – Other Government Agencies
OIC – Officer in Charge
OP – Observation Point
PAO – Public Affairs Office
PES – Potential Explosive Site
POC – Point of Contact
QASAS – Quality Assurance Specialist (Ammunition Surveillance)
QD – Quantity Distance
SC – Senior Commander
SOP – Standard Operating Procedure
USATCES - US Army Technical Center for Explosive Safety
UXO – Unexploded Ordnance