Headquarters
US Army Garrison Fort Stewart/
Hunter Army Airfield
SOP 385-64

Safety

The Garrison Explosive Safety Management Program (ESMP)

Headquarters
USAG FS/HAAF
Fort Stewart Georgia 31314
30 Dec 2022

UNCLASSIFIED

US Army Garrison
Ft Stewart/Hunter Army Airfield, GA

*Headquarters USAG FS/HAAF
Standing Operating Procedures 385-64

Safety

The Garrison Explosive Safety Management Program

Approved by:

RAMIREZ.MANUEL.FERNANDO.1108739815 Digitally signed by RAMIREZ.MANUEL.FERNANDO.1108739815 Date: 2023.01.06 15:36:47 -05'00'

MANUEL A. RAMIREZ
COL, MI
Commanding

Reviewed by:

BROWLEY.MICKEY.MANTLE.1113926879 Digitally signed by BROWLEY.MICKEY.MANTLE.1113926879 Date: 2023.01.03 13:43:30 -05'00'

MICKEY M. BROWLEY
USAG FS/HAAF
Safety Manager

History. This SOP establishes the USAG FS/HAAF Explosives Safety Management Program IAW DA and IMCOM regulatory requirements. This SOP will be applied in unison with the overarching Garrison Safety Program SOP 385-10 and supports but does not replace the Senior Commander's ESMP.

Summary. This SOP outlines the Garrison Explosive Safety Management Program. It assigns responsibilities and prescribes policies and procedures for operations involving ammunition and explosives throughout the Garrisons Area of Responsibility.

Applicability. This SOP is in line with IMCOM ESMP guidance and applicable to all USAG FS/HAAF Soldiers, Department of Army civilians (DAC), dependents, contractors, and other personnel assigned or attached which have an Ammunition and Explosives or support mission. Commanders, Directors and Staff are accountable for safety within their areas of responsibility as outlined in this SOP.

Suggest Improvements. The proponent agency of this SOP is the Safety Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications) to the Commander, USAG FS/HAAF, ATTN: AMIM-SHG-SO, FT Stewart GA 31314. The USAG Safety Manager is tasked with and has the authority to update, change and interpret this SOP as required.

Distribution. This SOP is available in electronic media only. It may be obtained from the Garrison Safety Office Web page: (https://home.army.mil/stewart/index.php/about/Garrison/garrison-staff-offices/safety-office) It is the responsibility of the user to ensure they are working with the most current procedure.

PERIODIC REVIEWS

Contents

Chapter 1

Introduction, *page 1*

Purpose • 1-1, *page 1*
References • 1-2, *page 1*
Explanation of abbreviations • 1-3, *page 1*
General • 1-4, *page 1*

Chapter 2

Garrison Explosive Safety Management Program, *page 2*
Policy and Goals • 2-1, *page 2*
Responsibilities/Duties • 2-2, *page 2*
Organization and Staffing • 2-3, *page 8*
Tenants • 2-4, *page 9*
Contractors • 2-5, *page 9*
Master Planning • 2-6, *page 9*
Explosives Safety Council • 2-7, *page 9*

Chapter 3

Ammunition and Explosive Operational Safety, *page 10*
Deviation Approval and Risk Acceptance Document (DARAD) or Munitions Risk Decision • 3-1, *page 10*
Explosive Safety Site Plans • 3-2, *page 12*
Explosives Licenses • 3-3, *page 13*
Facility Conformance • 3-4, *page 13*
Facility Maintenance • 3-5, *page 13*
Operational Range Safety • 3-6, *page 14*
Demilitarization/Destruction • 3-7, *page 14*
Emergency Action Plan • 3-8, *page 14*
Emergency Response • 3-9, *page 14*
Explosive safety Inspections/Evaluations/Audits • 3-10*, page 15*
Explosives Safety Issuance • 3-11, *page 16*
Records Maintenance • 3-12, *page 17*
Explosive safety training • 3-13, *page 17*

Chapter 4

Garrison Ammunition and Explosives General Safety, *page 19*
Security • 4-1, *page 19*
Instructions • 4-2, *page 19*
Fire Safety • 4-3, *page 20*
Fighting Fires • 4-4, *page 21*
Fire symbols and Chemical Hazard Symbols • 4-5, *page 21*
Lightning Protection System (LPS) • 4-6, *page 24*
Material Handling Equipment (MHE) • 4-7, *page 24*
Load out operations • 4-8, *page 25*
Transportation of Ammunition and Explosives • 4-9, *page 27*
Ammunition and Explosives Transport Requirements • 4-10, *page 28*
Ammunition and Explosive Transportation Surveys • 4-11, *page 28*

Chapter 5

Amnesty Program, *page 29*
Purpose • 5-1, *page 29*
Responsibilities • 5-2, *page 29*
FS/HAAF Amnesty Point • 5-3, *page 30*
Amnesty Day • 5-4, *page 31*
Ammunition Supply Point (ASP) • 5-5, *page 31*

Chapter 6

Hazards of Electromagnetic Radiation to Ordnance (HERO), *page 32*
General • 6-1, *page 32*
Procedures • 6-2, *page 32*

Appendix

A. References, *page 35*
Section I, Required Publications, *page 35*
Section II, Forms, *page 37*

B. Glossary, *page 39*

C. Explosives Safety Site Plan Approval Process (Flow Chart), *page 44*

D. License Compliance Checklist, *page 45*

E. A&E Event Lessons Learned, *page 46*

Chapter 1 Introduction

1-1. Purpose

This SOP outlines the Garrison Explosive Safety Management Program (ESMP). It assigns responsibilities and prescribes policies and procedures for operations involving ammunition and explosives throughout the Command. The Garrison ESMP supports the Senior Commander (SC) ESMP but does not replace it. The SC, IAW DA guidance provided in AR 600-20, is also identified as the Installation Commander.

1-2. References

Required and related publications are listed in Appendix A.

1-3. Explanation of Abbreviations

Abbreviations used in this regulation are explained in the glossary (Appendix B).

1-4. General

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 ammunition and explosives (A&E) circumvents control, potentially exposing United States (U.S.) military and civilian personnel, to injury or death.

b. A&E pyrotechnics will not be used in the cantonment area except when approved in writing by the Installation Safety Office (ISO), Directorate of Plans, Training Mobilization and Security (DPTMS) Range Branch and Mission Support Element Training Management Division. 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 and civilian school areas, as well as, Obstacle courses, Army and Air Force Exchange Services (AAFES) and Defense Commissary Agency Source (DECA) facilities, banks, child development centers, the education center, restaurants and recreational buildings and areas.

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 in the rank of E5 or above. Units will strictly adhere to the guidance described in para 7-10 of AR 190-11 regarding security standards for Arms Ammunition & Explosives (AA&E) shipments.

d. Implementation of training requirements for personnel handling, issuing, transporting and storing ammunition must be completed IAW AR 385-10, Department of Army Pamphlet (DA PAM) 385-64, 49 CFR and DTR4500.9-R.

e. When a lightning warning has been issued for lightning within 25 nautical miles (NM) of the installation, the Quality Assurance Specialist, Ammunition Surveillance (QASAS) or the Ammunition Supply Point (ASP) operations officer 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 Nautical Miles (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 will be closed. The ASP operations officer will monitor the current weather situation or receive an information alert from and can confirm with the Range Branch Operations Fire Desk at 435-8777/8184.

f. Field ASPs and ammunition holding areas (AHA) will not be set up or operated within the cantonment area. Training units will coordinate for field ASP and/or AHA locations with Range Control IAW the Fort Stewart Range Guide, schedule the area through the Range Facility Management Support System (RFMSS) website and submit “Notices to Airmen” (NOTAM) information within 14 days to the Air Space Manager prior to establishing a field ASP or AHA. Safety Officers and QASAS are authorized to conduct no-notice inspections of field ASP and AHA set-up and operations.

Chapter 2
Garrison Explosive Safety Management Program

2-1. Policy and Goals

The Garrison Explosive Safety Management Program will address the safety of Ammunition and Explosive (A&E) during production, transportation, storage, handling, use, inspection, testing, maintenance, munition response actions, demilitarization, and disposal. USAG FS/HAAF Directorates or supported units will conduct all operations involving ammunition or explosives in a manner that exposes the minimum number of people to the smallest quantity of A&E for the shortest period of time consistent with conducting the operation. This approach supports the Garrisons and SC goal to protect all personnel from work-related deaths, injuries, and occupational illnesses as a result of Army operations. This also includes the general population that is exposed to A&E operations.

2-2. Responsibilities/Duties

The Garrison Commander (GC) has overall responsibility of the Garrison ESMP. The day-to-day explosives program management and oversight responsibility on all elements of the Garrison ESMP are assigned to the Garrison Explosives Safety Specialist or Safety Manager, as the designated Safety Point of Contact (SPOC)/action officer. Subordinate Directorate/Unit leaders/ Commanders will be responsible for their daily operations and actions relative to the ESMP.

a. Commander will:

(1) Appoint an Occupational Safety and Health Director per AR 385-10, qualified under the Office of Personnel Management Standards, as the point of contact for all aspects of the Army Safety Program, including management of the ESMP by means of the standard appointment memorandum.

(2) Ensure servicing quality assurance specialists, ammunition surveillance (QASAS) are

integrated into the ESMP for their technical assistance.

(3) Ensure tenant organizations safety posture meets or is compatible with the Installation/SC and Army ESMP requirements. Each Directorate/Battalion, Company and Detachment level organization must have a memorandum of agreement (MOA) or policy that outlines the ESMP requirements and responsibilities.

(4) Ensure all contracts involving A&E will include Defense Federal Acquisition Regulation Supplement (DFARS), Subpart 223.370 (Safety precautions for ammunition and explosives). Subpart 223.370 will not be removed without authorization. All contracts involving A&E will be coordinated with the Garrison to assure applicable safety requirements are addressed including Mishap reporting provisions and compliance with the Installation/SC, Garrison and Army ESMP as required by AR 385-10 and DA Pam 385-64.

(5) Ensure Explosives Safety Site Plans (ESSPs) and/or Deviation Approval and Risk Acceptance Documents (DARADs), requests are coordinated with the following organizations: Safety; Master Planning; QASAS; Facility Engineering, Public Works, Logistics, Environmental and Health, Security, Fire Department, and other stakeholder exposed to the proposed facility/operation. Ensure the risk management procedures and Mishap prevention plans are included in the document packet. Submit all requests through the initiators chain-of-command to the Garrison Explosives Safety manager.

(6) Ensure personnel who initiate and review explosives safety DARADs for A&E related operations, facilities or equipment are qualified to provide the Commander/Director with the information needed to make an informed decision regarding the risk being accepted.

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

(8) Ensure units have current installation maps showing approved Explosives Safety Quantity Distance (ESQD) arcs for approved ESSPs and/or DARADs with risk-based evaluations and risk acceptance are maintained.

(9) Ensure all units comply with the garrison policy when requesting changes or additions to the Real Property Master Plan (RPMP). Real Property master planning is a collaborative and integrated process, reflecting mission requirements.

(10) Ensure explosive storage and operations facilities, as well as facilities exposed to them, are documented on the ESSP documentation. Facilities must meet construction requirements including fire suppression and electrical safety standards, lightning protection, electrical dissipation systems and consideration of glass breakage hazards.

(11) Ensure action plans are in place for A&E storage facility deficiencies (e.g., repair, replacement, modifications).

(12) Validate periodic inspection and trend analysis are conducted on lightning protection systems, and the required documents are on file as a part of the safety inspections/audits.

(13) Ensure commanders with A&E related operations have procedures in place for responding to an emergency. The plan will provide guidance on who is in command during the response, and when and to whom command responsibility is turned over once response actions are complete.

(14) Ensure all A&E related operations (e.g., storage, transportation, training, handling, maintenance, etc.) are inspected semiannually. These inspections/audits are in addition to the Command Inspection Program (CIP). Ensure documents are recorded and on file for review and verification purpose when audited.

(15) Ensure precautions are taken with any Hazards of Electromagnetic Radiation to Ordnance (HERO), formally known as Electro-Magnetic Radiation (EMR), unsafe munitions on the installation. Ensure procedures are in place if HERO unsafe munitions (munitions that EMR could cause them to function) are located on the installation. HERO is normally associated with Electro Explosives Devices (EED), and special consideration must be given to properly shield/isolate EEDs from exposure to an environment of EMR in the air.

(16) Ensure the Safety office maintains the A&E related records (e.g., DARADs, Site Plans, etc.). All range waivers and range operational records are managed by DPTMS. All waiver packets will be reviewed by the Garrison and Installation/SC Safety Office prior to final submission for approval.

(17) Ensure all personnel (Soldiers, DA Civilians and Contractors) who conduct A&E related activities shall complete explosives safety training appropriate for the activities that they perform. Such personnel (supervisory and non- supervisory) shall receive periodic refresher training to help ensure the requisite level of knowledge of and competency in explosives safety. Ensure only the trained personnel are involved in A&E operations. All heavy equipment operators, including forklift operators, will be trained on the equipment they operate. In addition, all equipment ground guide personnel in A&E operations will be trained on ground guiding procedures. Ensure the records are documented and maintained on file.

b. The Garrison Safety Manager will:

(1) Function as the Garrison Commander executive agent to ensure all elements of the Army explosives safety standards are in compliance and to provide general guidance to the USAG Explosives Safety Specialist for proper execution of the Garrison ESMP.

(2) Advise the Commander immediately when corrective actions are needed to ensure an effective program.

c. Explosive Safety Specialist will:

(1) Serve as the point of contact for all Garrison ESMP related actions.

(2) Identify requirement for explosives licenses, explosives safety site plans, safety submissions, and explosives safety Risk Decisions, existing waivers and exemptions, and CCRs, and coordinate, as appropriate, with staff (for example, J-3/G-3/S-3, J- 4/G-4/S-4, engineering, and logistics elements) and garrison, installation, and/or unit support personnel.

(3) Ensure all potential explosion sites (PESs) and exposed sites (ES), both military and civilian, are indicated on approved explosives safety site plans and submissions.

(4) Ensure that plans and protective construction designs for explosive manufacture, testing, storage, surveillance, maintenance, response actions, demilitarization, and disposal facilities, if applicable, are reviewed for compliance with safety standards, by appropriately trained personnel.

(5) Ensure a safety inspection is conducted at least annually for all areas where Ammunition and Explosives (AE) related activities (for example, production, handling, storage, use, maintenance, munition response, demilitarization, and disposal routinely occur). Maintain a list of all such areas and records of inspections

(6) Monitor AE uploads and other activities that involve the transportation and storage of AE to ensure that pertinent requirements are met.

(7) Serve as the focal point for and coordinate ESMP requirements with tenant unit Commanders/Directors; and provide concurrence on tenant unit ESMPs.

(8) Review the garrison or installation master plan and quantity-distance (QD) compliance for planned facilities on existing AE sites both prior to and after construction.

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

(10) Review deviation approval and risk acceptance documents for completeness and accuracy prior to forwarding for approval.

(11) Maintain a list of approved certificates of risk acceptance (Historical/Current), deviation approval and risk acceptance documents, waivers, exemptions, and/or deviations; and advise incoming commanders of such and plans for correction of such situations.

(12) Actively participate in the garrison or installation master planning process and annually review the installation master plan to ensure construction is not planned inside explosives safety quantity distance (ESQD) arcs. When construction that is not related to AE operations is required within ESQD, ensure explosives safety site plans, submissions and explosives licenses are updated and approved at the appropriate level.

(13) Ensure procedures are developed and in place for-

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

(b) Ensuring that personnel responsible for managing AE keep current information on the type and location of AE storage and provide this information to safety and firefighting personnel.

(c) Training of personnel responsible for AE-related operations, operational personnel including security personnel and firefighters in fire symbols and chemical hazard symbols and in precautions and procedures for fighting fires when AE is involved. Ensure safety personnel communicate with firefighting, security, emergency response and ammunition surveillance and storage personnel.

(d) Maintenance of current maps, showing all explosives locations with fire and chemical hazard symbols, and current facility response cards and notebooks for AE storage by fire station communication centers.

(14) Annually review (and document the review) the garrison's or installation's explosive's location map to monitor encroachment within ESQD and ensure required explosives safety site plans, submissions and explosives licenses are accomplished.

(15) Monitor selected AE operations conducted on the installations to ensure all DOD, Federal, State, local, and contractor participants understand and comply with applicable explosives safety standards.

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

(a) AE storage, handling, and operating sites.

(b) AE transportation activities.

(c) AE disposal and demilitarization activities (If Applicable).

(d) Munitions response actions and access to Munitions Response Site (MRS).

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

(f) Planning for contingencies.

(g) Combat load and reload operations.

(h) Explosives safety training records for unit personnel.

(i) Public demonstrations. (i.e., Organization Days, Open Houses, Change of Commands, and 4th of July type activities).

(17) Assist Commanders/Directors and staffs with resolving explosives safety concerns associated with real property known or suspected to contain Munitions and Explosives of Concern (MEC).

(18) Investigate and report AE incidents and mishaps, per DESR 6055.09, AR 385-10, and DA Pam 385-40, and document and disseminate explosives safety lessons learned. A snapshot of the incident/mishap with recommendations to prevent future occurrences will be distributed for display on unit Safety Boards (Appendix E).

(19) Brief the command and staff, as necessary, to keep the leadership informed of explosives safety requirements and issues and the status of the Commander's ESMP.

d. 406th AFSBn will:

(1) Army Field Support Battalion (AFSBn)-Stewart will maintain supervision over the procurement, storage, issue, inspection, and accountability of Class V material. Provide technical assistance to the command safety office for site plans, waivers, exemptions, Department of Defense Explosive Safety Board (DDESB) submissions, Mishap investigations, etc.

(2) Ensure Quality Assurance Specialists, Ammunition Surveillance (QASAS) personnel are adequately trained and qualified in ammunition/explosives safety, as well as ammunition surveillance to support the SC and Garrison A&E mission. Utilize QASAS to provide technical assistance to commanders, Safety Directors/Managers and the Explosive Safety Specialist in the following areas:

(a) Developing explosives safety site plans, submissions, and explosives licenses.

(b) Preparing explosives safety Deviations, Risk Decision and CCRs

(c) Reviewing protective construction designs for AE operational facilities (for example production, manufacture, testing, storage, surveillance, maintenance, demilitarization, and disposal facilities) for compliance with explosives safety standards.

(d) Conducting safety inspections of AE handling, storage, use, maintenance, and disposal areas at least annually.

(e) Monitoring AE uploads and other activities that involve the transportation, storage or conduct of other AE related operations for which a certificate of risk acceptance, deviation approval and risk acceptance document, or CCR has been approved or is awaiting approval to ensure that pertinent requirements are met.

(f) Reviewing quantity-distance (QD) compliance of existing and planned facilities, both prior to and after construction.

(g) Reviewing SOPs and directives for compliance with explosives safety requirements.

(h) Assisting in the garrison or installation master planning process and reviewing, annually, the garrison or installation master plan to ensure construction is not planned within ESQD.

(3) Develop and maintain internal and external SOPs to provide guidance for units, commanders and personnel who have and/or execute a A&E mission. Monitor A&E operations to assist units with understanding and complying with ESMP requirements. Monitoring and evaluating

AE related activities, including the following:

(a) Production, storage, handling, maintenance, operating.

(b) Demilitarization and disposal.

(c) Transportation.

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

(e) Contingency planning *(as applicable)*.

(f) Combat load and reload operations.

(g) Explosives safety training.

(4) Assisting in AE Accident, Incident and Mishap investigations.

e. Unit Commanders will:

Unit commanders are required to establish a written ammunition program. Elements of the program will include:

(1) Ensure each military unit Safety Manager is appointed on orders.

(2) Ensure military unit safety personnel are qualified to initiate and review explosive safety site plans; facility designs; DARAD; and provide the commander with essential risk assessment data required to abate deficiencies in A&E program areas. If unavailable, request support from next higher command.

(3) The safety and accountability of all A&E used on training ranges, training exercises, and operations.

(4) Conduct Risk Management on all ammunition operations and ensure that all hazards are identified and controls directed in ammunition information notices and other safety messages are implemented.

(5) Ensure all unit ammunition shipments comply with the requirements in Title 49, Code of Federal Regulations, AR 385-10 and DA PAM 385-64.

(6) Requirements to only un-package the amount of ammunition for immediate training needs for less than eight hours. All packaging material will be maintained for repacking unused A&E. Unused A&E will be repacked prior to transportation from the training location. There will be no loose or unpacked ammunition transported on any vehicle or aircraft.

2-3. Organization and Staffing

The Garrison Safety Manager is responsible for overseeing the Garrison explosive safety program and the Garrison A&E Safety Specialist is responsible for the management and execution of the program. The A&E manager(s) will be identified in writing using the standard appointment order

format. IAW DA Pam 385-64, ensure servicing Quality Assurance Specialists, Ammunition Surveillance (QASAS) are integrated into the ESMP for their technical assistance as well as the organization's Safety office.

2-4. Tenants

Tenants' explosive safety posture will meet or will be compatible with the Garrison and SC ESMP requirements. Each Battalion/Directorate, Detachment or organization that conducts operations with A&E must have a memorandum of agreement (MOA) or policy that outlines their ESMP requirements and responsibilities.

2-5. Contractors

All contracts involving A&E are required to include DFARS, Subpart 223.370 IAW reference 1 e Subpart 223.370 of the DFARS mandates the use of the DOD contract safety manual and safety oversight. This clause cannot be removed without authorization from the appropriate command level. Coordinate all contracts involving A&E with the Garrison Safety Office to assure applicable safety requirements are addressed including Mishap reporting provisions and compliance with the ESMP as required by AR 385-10 and DA Pam 385-64.

2-6. Master Planning

Real Property master planning is a collaborative and integrate process, reflecting mission requirements. In order to maintain this process all garrison activities and tenant units will comply with the garrison policy when requesting changes or additions to the Real Property Master Plan (RPMP). The Safety Manager/A&E Specialist will participate in the Installation Real Property Planning Board (RPPB) to ensure that all new construction is properly sited according to explosive safety standards

2-7. Explosives Safety Council (ESC)

In order to provide proper integration of A&E responsibilities, a Local Explosives Safety Council is hereby established.

a. The SC is responsible for all A&E operations and the Installation ESMP. The Senior Commander (SC) will appoint the chairman of the Explosives Safety Council or delegate this authority to the Garrison Commander.

b. The Explosives Safety Council shall meet periodically, but at least semi-annually, to review the ESMP and conduct other A&E business as required.

c. Representatives from any organization with an A&E mission may participate in the council. At a minimum, representatives from the following organizations and offices shall be included in the council membership:

(1) ISO/3ID Division Safety Office.

(2) Army Field Support Battalion-Stewart (406th AFSBn-Stewart).

(3) Directorate of Public Works (DPW)

(4) Directorate of Emergency Services (DES)

(5) QASAS

(6) G-3 Ammunition Manager (AM)

(7) Unit and Organization Safety representatives

(8) G-4 representative

(9) EOD representative

(10) Unit Ammunition Warrant Officers

(11) ASP Accountable Officer

(12) Garrison Safety Office (GSO)

(13) Installation AM

(14) DPTMS representative, Range Branch.

Chapter 3
Ammunition and Explosives Operational Safety

This Chapter of the SOP identifies several action areas that are important for the execution of an effective ESMP. Guidance is provided on the processes that are required for daily operational safety. These processes serve to standardize and define organizational requirements.

3-1. Deviation Approval and Risk Acceptance Document (DARAD)

a. Waivers. The Army no longer uses waivers for explosives type operations, now a Secretarial certification or Deviation Approval and Risk Acceptance Document (DARAD). Current waivers will not be renewed, but replaced with DARADs if the condition for which the waiver was approved has not been corrected. Secretarial Certifications and DARADs shall be processed in accordance with DA PAM 385-30. The DARAD will be a vital component of the Munition Risk Decision (MRD), if USATCES determines this to be the preferred method of submission.

(1) Waivers. A written authority that permits a temporary deviation from standards for strategic or compelling operational requirements. Event waivers are a special subcategory for use when conditions or circumstances causing the waiver to arise unexpectedly and there is insufficient time to comply with formal waiver submissions and documentation procedures. Event waivers are for one-time emergency situations, not to exceed 5 Years.

(2) Exemptions. A written authority permitting long-term noncompliance with standards for strategic or compelling operations requirements. Exemptions are granted for periods greater than five years, to include permanent situations.

(3) Existing Waivers and exemptions are not to be renewed. As of 1 Oct 2011, they were replaced by the Certificate of Risk Acceptance (CoRA) and then the DARAD.

b. A DARAD is utilized when explosives safety requirements cannot be met, and the Commander has assessed the risk and is willing to accept a temporary increase in risk to accomplish the mission. See DA Pam 385-30, Risk Management.

(1) When a DARAD becomes necessary to accomplish a critical mission, the requiring organization will complete a DA Form 7632, DARAD IAW DA PAM 385-30. This form is required for documenting violations of explosives and chemical safety standards.

(2) The requiring unit or agency will also develop and submit a thorough DA Form 2977, along with the DARAD, signed at the appropriate level of command for the identified residual risk.

(3) All personnel who initiate and review explosives safety DARADs for AE-related operations, facilities or equipment must be qualified to provide the commander with the information needed to make an informed decision regarding the risk being accepted.

(4) The DARAD will be routed through the unit or organization safety office to the ISO for appropriate staffing and risk acceptance at the correct level of authority as specified in DA PAM 385-30, table 4-2.

(5) When a DARAD is approved, every effort shall be made to eliminate the safety deficiency. Qualified personnel must periodically review DARADs to ensure the risk assessments are current, each exposure and the associate risk and mitigating actions are identified, and the need for continuing the DARAD remains valid. Because commanders must maintain awareness of deviations from Army standards, upon a change of command, the incoming leadership must be informed of each existing DARAD and accept each risk that requires acceptance at the commander's level.

(6) Once the risk acceptance authority has accepted the risk, a copy of the DARAD will be maintained on file at the GSO and/or ISO along with the requiring agency. Additionally, all DARADs that exceed 60 calendar days will be forwarded to the USATCES.

(7) DARADs are intended as temporary measures until the non-conformance can be corrected. They are not a substitute for correcting the non-conformance.

c. Secretarial Certifications. A written authority authorizing construction or major modification of a facility or structure in violation of explosives safety standards.

(1) New construction or facility modification. When building a new potential explosion sites or exposed site or performing a major modification on a structure (greater than 15 percent of current value) that violates or will violate the provisions of AR 385-10, DA Pam 385-61, or DA Pam 385-64 the commander must certify such projects are essential due to operational necessity or other compelling reasons and obtain written authority (procedures for completing and submitting a Secretarial Certification are in DA Pam 385-30).

(2) Existing facilities. When an existing facility violates the provisions AR 385-10 or DA Pam 385-64, Certificate of Compelling Reason (CCR) will be executed and the risk will be accepted at the appropriate level of command.

(3) Violations. Where operations violate the provisions of AR 385-10, DA Pam 385-64, a DARAD or MRD will be completed according to DA Pam 385-30.

3-2. Explosive Safety Site Plans

a. New facilities and construction. Site plans are required for constructing new explosives facilities and for constructing any facility within the explosives arc of an existing explosives facility

b. Increased level of risk. Site plans are required when the use or remodeling of the facility increases the level of risk associated with the facility. Site plans are not required for remodeling or changes in use when associated with a similar or lower level of risk.

c. Site plan submission.

(1) Site plans and safety submissions will be prepared IAW AR 385-10, DA Pam 385-30, DA Pam 385-61, DA Pam 385-64 and DOD 6055.9-STD.

(2) The unit or organization responsible for operating the explosive site will request that the Garrison Safety Office initiate the site plan and will provide all necessary information to the Garrison Safety Office for the site plan development and coordination.

(3) The Garrison Safety Office will:

(a) Develop, coordinate, and submit explosive safety site plans according to DA Pam 385-61, DA Pam 385-64, and DA Pam 385-65.

(b) Develop and coordinate the site plan with installation master planning, facility engineers, Public Works, Security, affected operating units, logistics, quality assurance specialists-ammunition surveillance, fire departments, environmental and health agencies. Ensure the risk management procedures and Mishap prevention plans are included in the document packet.

(c) Forward site plans through IMCOM to USATCES.

(4) For off-installation locations, the organization with operational control-in coordination with the user if different than the operator-will develop, coordinate, and submit explosives safety site plans per DA Pam 385-61, DA Pam 385-64, and DA Pam 385-30.

(5) Units will develop and maintain a comprehensive listing of all existing explosives facilities. Each explosives facility will be identified by building number, facility type (earth-covered magazine, above ground magazine, operating building, and so forth) and user or owner activity, as applicable, and placed in one of the following categories.

(a) Facility has an approved explosives safety siting plan (ESSP) or an ESSP has been submitted for approval.

(b) Facility is grandfathered and the required documentation is on file.

(c) Facility has a properly executed risk assessment and DARAD/MRD.

(d) Facility does not have an ESSP (approved or submitted), is not grandfathered, and does not have a properly executed DARAD/MRD.

(e) ESSP is not required per DA Pamphlet 385–64.

(6) Explosives storage and operations facilities, as well as facilities exposed to them, are documented on the ESSP documentation. Facilities must meet construction requirements including fire suppression and electrical safety standards, lightning protection, electrical dissipation systems and consideration of glass breakage hazards.

3-3. Explosives Licenses

a. Explosives licenses are issued to all facilities storing ammunition or explosives and have no expiration date. Explosive license limits the Net Explosives Weight (NEW) allowed at a given site. It gives the specific storage location, be it a building, cell or ASP OR EXPLOSIVES STORAGE AREAS, the type of ammunition allowed to be stored by hazard class and division (HD), and the limiting factor which affects the storage.

b. All licenses are location specific and do not require renewal upon the change of a commander.

c. All licenses are reviewed annually to ensure that the conditions affecting the storage have not changed.

d. All licenses will be issued by the Garrison Safety Office and a copy supplied to the local fire department. This includes arms room licenses.

3-4. Facility Conformance

Explosives storage and operations facilities, as well as facilities exposed to them, are documented on the ESSP documentation. In addition, facilities must meet construction requirements including fire suppression and electrical safety standards, lightning protection, electrical dissipation systems and consideration of glass breakage hazards.

3-5. Facility Maintenance

The GC’s designated representative (Explosive Safety Specialist) will:

a. Coordinate with the owning Unit/Directorate/Section to ensure facility maintenance plans and schedules are in place for explosives related and supporting structures and relevant certification is provided to maintain explosives facilities.

b. Ensure action plans are in place for identifying, funding, and correcting A&E storage facility deficiencies (e.g., repair, replacement, modifications).

c. Provide guidance or coordinate for training opportunity to ensure all personnel involved in A&E activities and operations are properly trained.

d. Validate periodic inspection and trend analysis are conducted on lightning protection systems, and the required documents are on file as a part of the safety inspections/audits.

3-6. Operational Range Safety

a. Commands/Directorates with operational ranges shall establish a range safety program consistent with AR 385-63 and DA Pam 385-63.

b. All range control personnel exposed to A&E environment must be trained on explosives safety and the training must be documented and on file for review and verification.

c. DPTMS is the leading organization with operational control of the range operations and their Range Safety personnel have oversight responsibility on all range related safety procedures and issues.

3-7. Demilitarization/Destruction

a. Demilitarization or destruction of ammunition, explosives and propellants is not a USAG mission.

b. Condition Code H material is considered bad ammunition and will be turned into the ASP.

c. Demil operations will be conducted IAW AR 385-10, DA Pam 385-64 and appropriate TMs for the explosive items involved.

d. If Explosives Ordnance Disposal (EOD) support is required, contact 38th/756th EOD.

3-8. Emergency Action Plan

All organizations with an A&E mission will have an emergency action plan that complies with the requirements of the 29 CFR 1910.

3-9. Emergency Response

a. The installation fire department conducts fire prevention inspections in A&E facilities and has the authority to inspect any facility at any time.

b. All organizations with an A&E mission within Fort Stewart will maintain the proper fire and chemical hazard symbols of explosives present within the facility. The GSO, ISO, Fire Department, and DES will be notified immediately upon any changes.

c. In the event of an explosives Mishap/Events, the Fire Department and emergency services will be notified immediately by calling 911 (DSN: 912-767-7019). The Senior Fire Officer will be the Incident Commander in-charge of the emergency response until the scene is declared safe. The ISO is part of the Incident Commander’s Response Team.

d. When notified by DA Safety, the incident scene will be turned over to the Mishap Board

appointed investigation team. The appointed Mishap Investigation Board will control the site after completion of emergency response actions.

e. Any release of information will go through the Public Affairs Office (PAO).

3-10. Explosives Safety Inspections/Evaluations/Audits

a. Periodic (at least annual) inspections shall be conducted to evaluate the safety of explosives storage, packing, handling, surveillance, maintenance, demilitarization, and disposal activities. All 0017 and 0018 safety specialists, brigade ammunition officers and aviation safety officers who have A&E safety responsibilities will perform periodic (minimum annual) inspections of their arms rooms and ECMs.

b. ADSO/CDSO or QASAS must be available to escort the Inspector or Explosive Safety Specialist.

c. The inspection results will be conveyed to the ADSO/CDSO or QASAS during an informal out brief. A formal out brief will be conducted with the unit and a copy of the inspection will be provided to the Commander or designated representative.

d. Findings will be documented and followed up to ensure implementation and effectiveness of corrective measures. The unit has a maximum of 14 days after written notification of findings to complete corrective actions or initiate work order for repairs.

e. A copy of all inspections will be kept on file for a minimal of 3 years.

f. At a minimum, inspections shall address the following:

(1) Availability of approved explosives safety site plans, submissions and explosives licenses.

(2) Storage inventory, by facility, showing AE (by DODIC, national stock number (NSN), nomenclature, quantity, and total net explosive weight (NEW)) is in compliance with explosives safety standards.

(3) Comparison of actual storage versus that authorized by the approved explosives license or explosives safety site plan.

(4) Identification of storage compatibility violations.

(5) AE stacking derangement in magazines and adequacy of AE packaging comply with explosives safety standards and ammunition storage drawings.

(6) Operations conducted _ versus those permitted _ in and outside of magazines.

(7) Conditions under which AE are stored.

(8) Verification ESQD separation requirements stipulated in approved explosives licenses and explosives safety site plans.

(9) Evaluation of the safety of storage facilities, including adequacy of earth cover on magazines, adequacy of barricades, and condition of lightning protection systems and ventilators.

(10) Review of the latest lightning protection system inspection and test reports.

(11) Training of firefighters; adequacy of plans and procedures for responding to emergencies involving AE; conduct of fire drills; and availability and adequacy of firefighting equipment, fire symbols, and chemical hazard symbols.

(12) Identification and control of electrical hazards, including classification of hazardous locations and the availability and adequacy of approved equipment.

(13) Safety of material handling equipment.

(14) Safety of explosives renovation, modification, preservation, and packing activities.

(15) Adequacy and availability of explosives safety training of personnel involved in explosive storage, packing, handling, surveillance, maintenance, demilitarization, and disposal activities.

(16) Safe storage of waste military munition (WMM).

(17) Facilities construction including fire suppression, electrical safety standards, lightning protection, electrical dissipation systems and consideration of glass breakage hazards.

g.The Explosives Safety Representative will document final A&E facilities acceptance inspections following construction, renovation or modification of facilities prior to commencing any explosives operation.

h.The results of external inspections, evaluations, audits and surveillance efforts (HQ, IG, technical assistance, DDESB survey or program evaluation) will be incorporated into action plans, lessons learned and will be tracked to remediate inspection deficiencies.

i. Inspection records will be made available for review during all external program evaluations and audits.

j. Organizations shall conduct periodic surveys of A&E transportation activities to evaluate implementation of A&E transportation safety requirements. At a minimum, A&E transportation inspections shall address the elements required by DA PAM 385-64, para 1-10.

3-11. Explosives Safety Issuance

a. ESMP issuances consist of, but are not limited to, local policies, SOPs, ARs, pamphlets and other publications. All organizations with an A&E mission on FS/HAAF will have a safety policy and SOPs, which include A&E safety management.

b. All organizations with an A&E mission will Perform preliminary reviews of documents submitted, ensure coordination with, DES, DPW Master Planning, and Environmental, and recommend Garrison Commander concurrence/non-concurrence. Routing may be through the Mission Command structure, once Master Planning and explosives safety standards are met, depending on the risk owner. SOPs will be reviewed on an annual basis or at change of command whichever is sooner. The originating organization will obtain appropriate professional safety support for review and concurrence of hazard analysis and SOPs. All explosives safety policies will comply with Army and DOD requirements and will be reviewed by explosives safety personnel prior to approval.

c. All Organizations will provided to Garrison responses to findings from DoD Explosives

Safety Board (DDESB) surveys, Worldwide Ammunition Review, or Ammunition Review and Technical Assistance visits from the Defense Ammunition Center (DAG). Provide reports via the organization's chain of Command.

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

e. Organizations will properly coordinate routing of DARADs, ESPs, ESSPs with the GSO through the USAG staffing process, ISO Mission Organization requirements, then to the Senior Commander, IAW ACOM, ASCC, or DRU routing requirements. Routing for Garrison specific DARADs, ESPs and ESSPs will be from the Garrison, through the Senior Commander, through the ID, through HQ IMCOM Safety (IMSO) to USATCES and DDESB.

f. Commanders/Directors must take precautions with any Hazards of Electromagnetic Radiation to Ordnance (HERO), formally known as Electro-Magnetic Radiation (EMR), unsafe munitions on the installation. Ensure procedures are in place if HERO unsafe munitions (munitions that EMR could cause them to function) that are located on USAG FS/HAAF. HERO is normally associated with Electro Explosives Devices (EED), and special consideration must be given to properly shield/isolate EEDs from exposure to an environment of EMR in the air.

3-12. Records Management

a. The Safety Office of all organizations with an A&E mission will maintain records as required by ARs. Records will be made available for review during external program inspections, reviews and audits.

b. All organizations with an A&E mission will maintain A&E inventory records to control NEW, Hazard Division (HD) and compatibility requirements per site plans and licensing.

3-13. Explosive Safety Training

a. All personnel (supervisory and non-supervisory) who conduct AE-related activities shall complete explosives safety training appropriate for the activities that they perform. Such personnel shall receive periodic refresher training to help ensure the requisite level of knowledge of and competency in explosives safety. Organizations shall prepare a record that contains the identity of the employee, the date of training and the means used to verify that the employee understood the training.

b. In addition to any explosive's safety training specified for career programs in AR 690- 950 and related publications and training mandated by local, state or federal requirements, explosives safety training shall be accomplished at the appropriate unit level as indicated in figure 1- 1 .

c. Personnel responsible for the development and review of A&E risk assessments and deviation documentation must receive A&E related risk management training. In addition to local and command required training, AMMO 54 (Risk Management for and Preparation of SOPs for A&E Operations) is required. This Defense Ammunition Center training is available at http://www.dactces.org/index.php?option=com_content&view=article&id=123&Itemid=77 .

d. The ASC Safety Director must approve alternative courses that are tailored to organizations mission and function, provided the courses provides the same degree and level of training as those listed in figure 3-1.

e. Garrison, Installation and Unit Safety Managers shall, as appropriate, develop, and provide to training officers, the training programs required to ensure Garrison, Installation and Unit personnel are trained to conduct A&E operations in a safe manner.

f. All equipment ground guide personnel in A&E operations will be trained on ground guiding procedures.

g. Records of training will be available for inspection, maintained and filed IAW applicable regulations. Records maybe maintained in hard copies or a digital format.

Figure 3-1 Army explosives safety courses (applicable to military and civilian personnel)

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[6]	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

Figure 3-1 Army explosives safety courses (Cont.)

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.

Chapter 4
Ammunition and Explosives General Safety

This Chapter of the SOP provides addition guidance on A&E Safety more specific to unit operations and beyond the guidelines in Chapter 2 mandated by the SC for the ESMP.

4-1. Security

a. All personnel granted unaccompanied access will require a completed background check to be maintained in the S-2 shop with a copy given to the ASP OR EXPLOSIVES STORAGE AREAS Manager. A roster of these personnel will be maintained at the gate to the ASP OR EXPLOSIVES STORAGE AREAS and will be checked before access is granted.

b. Any person who is allowed access to the ASP OR EXPLOSIVES STORAGE AREAS on an accompanied access manner will have an escort who is on the unescorted access roster.

4-2. Instructions

a. All personnel working in the ASP OR EXPLOSIVES STORAGE AREAS on a regular basis will attend the ASP OR EXPLOSIVES STORAGE AREAS Manager's Class.

b. If a class is not scheduled within 30 days of a person being assigned to the ASP OR EXPLOSIVES STORAGE AREAS, then a local class with written exam will be given. A copy of

this class and exam will be approved by the Garrison Safety Office. A record of who has taken the class and a copy of the exam results will be maintained in the ASP OR EXPLOSIVES STORAGE AREAS Continuity Book.

c. At a minimum instruction for the gate guard will include:

(1) The meaning of the fire symbols.

(2) The appropriate actions to take when a fire is discovered.

(3) How to check and what to look for in granting personnel access to the ASP OR EXPLOSIVES STORAGE AREAS.

4-3. Fire Safety

a. Fire safety begins with maintaining the ASP OR EXPLOSIVES STORAGE AREAS in as clean and neat a state as possible. This includes:

(1) Keeping dunnage in neat and orderly piles which are protected from the weather. This is especially true of items like fiber containers.

(2) Keeping vegetation cut to 4 inches or less in the ASP OR EXPLOSIVES STORAGE AREAS.

(a) Fire extinguishers will be carried by each working crew in the ASP OR EXPLOSIVES STORAGE AREAS. Each crew will have immediate access to two portable 10- BC rated fire extinguishers which also have an A capability. Prior to the beginning of the detail entering the ASP OR EXPLOSIVES STORAGE AREAS, the person in charge will give a briefing on the use of the fire extinguisher.

(b) The maintenance of water and sand barrels and fire extinguisher within the ASP OR EXPLOSIVES STORAGE AREAS is based upon need.

(i) Water barrels must be kept liquid in winter and vector free in the summer. The use of potassium chloride pellets (NSN: 6819-00-422-2169) will help in this endeavor. These pellets need periodic stirring to prevent the water in the barrel from becoming a solid piece of ice. These pellets are not totally effective in extreme cold. In all cases, the use of antifreeze is forbidden. During the summer the placing of cooking oil sufficient to cover the top of the water in the barrel will keep it vector free. Equipment to disperse the water must be kept by each barrel.

(ii) Sand barrels must be kept covered to keep excessive moisture from getting into the sand and causing it to freeze solid during the winter. Also, equipment to disperse the sand must be available at each barrel.

(iii) Fire extinguishers, when kept in the ASP OR EXPLOSIVES STORAGE AREAS, must be checked periodically to ensure that they are sealed and charged. The fire extinguishers must be the type which will stand the weather changes where they are being stored. Fire extinguishers are not to be kept inside of magazines where they can’t be reached should a fire in the ASP OR EXPLOSIVES STORAGE AREAS.

b. A fire drill will be held with personnel normally expected to be in the ASP OR EXPLOSIVES STORAGE AREAS twice a year. This fire drill will include participation of the fire department. Prior to execution of the drill, coordination with the Fire Chief must be made. Personnel executing the drill must ensure all personnel in the area are aware that an exercise, and not a real fire is in progress. The drill will be recorded and maintained in the ASP OR EXPLOSIVES STORAGE AREAS continuity book for a period of one year.

c. All locations storing ammunition will be provided to the fire department by the unit. This includes every building which is storing ammunition, especially when fire symbols aren't posted.

4-4. Fighting Fires

a. Notify the fire department of the fire and location. Send one person to meet and brief the fire department on the situation.

b. Fires in the ASP OR EXPLOSIVES STORAGE AREAS will not be fought, when:

(1) The fire is too large to be safely fought with the equipment and personnel present. This is determined by the senior person present.

(2) The fire starts in a magazine or storage location.

(3) The fire engulfs or is getting too close to the ammunition.

c. Fires will be fought, when:

(1) They are outside the ASP OR EXPLOSIVES STORAGE AREAS.

(2) When they are not threatening any ammunition or personnel.

d. When the senior person present determines the fire will not be fought, evacuation will begin immediately.

e. Once the fire department arrives on the scene, all personnel will follow their orders. The fire department is in charge until they have determined the area is safe to return to unit control.

f. A pre-designated rendezvous location will be used for all ASP OR EXPLOSIVES STORAGE AREAS personnel and crews to gather initially. After a quick headcount to assure everyone is present or accounted for, the personnel will continue to move to at least inhabited building distance from the ASP OR EXPLOSIVES STORAGE AREAS OR EXPLOSIVES STORAGE AREAS. This distance can be determined by looking at the ASP OR EXPLOSIVES STORAGE AREAS license in the required distance column. The largest distance in this column will be the one used for determining the final evacuation point. All buildings within inhabited building distance need to be evacuated.

4-5. Fire symbols and Chemical Hazard Symbols

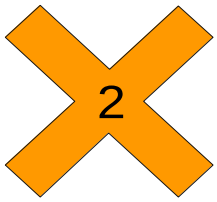
a. Fire symbols are designed to tell what the primary hazard of the ammunition being stored is. These allow the firefighters to determine how and when to fight a fire involving ammunition.

b. Chemical hazard symbols are designed to warn the firemen about special precautions needed when fighting ammunition fires.

c. There are four fire symbols. They are:

(1) Fire symbol 1: Denotes HD 1.1 is stored in this location. This tells the fireman not to fight this fire. The primary hazard is mass detonation. This means that if one item in a stack goes, all the items are expected to detonate.

(2) Fire symbol 2: Denotes HD 1.2 is stored in this location. This tells the fireman to withdraw to a specified distance should the fire engulf the ammunition. The primary hazard associated with this type of ammunition is fragments. This type of ammunition is only expected to detonate a few items at a time and will continue to detonate as long as there is an external stimulus such as fire or fragments.



(3) Fire symbol 3: Denotes HD 1.3 is stored in this location. This tells the fireman that the primary hazard involved with this type of ammunition is mass fire and the precautions he needs to take. This ammunition results in a fireball.

(4) Fire symbol 4. Denotes HD 1.4 is stored in this location. This tells the fireman that all affects from a detonation is expected to be contained within 50 feet of the storage location.

(5) There are two HDs which are not covered by separate fire symbols. The first is HD 1.5 which uses fire symbol 1. The second is HD 1.6 which is covered by the fire symbol of the HD it

is stored with except when it is stored with HD 1.4 or by itself in which case it uses fire symbol 3.

d. Chemical Hazard Symbols.

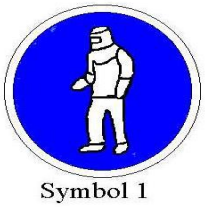
(1) There are five chemical hazard symbols. Three of them are included in symbol 1. Of these three symbols, the first symbol denotes war gas, such as nerve or blister agents. We will not be concerned about this symbol except to say that it resembles a red spaceman.

(2) Chemical hazard symbol one set 2. This chemical hazard symbol tells the fireman that there is an agent stored here which will affect the breathing and can irritate the skin and eyes, for example, tear gas. He then knows to wear a special set of clothing in fighting this fire. This symbol is sometimes referred to as the yellow spaceman. When working around this type of ammunition a protective mask is required to be readily available for use.

Symbol 1

"Wear Full Protective Clothing"

(3) Chemical hazard symbol one set 3. This chemical hazard symbol tells the fireman that there is an item stored here which will burn very hot and with little provocation, such as being exposed to air. This includes WP, red phosphorous which turns into WP as it burns. He then knows to wear special clothing to prevent burns. This is sometimes referred to as the white spaceman. When working around this type of ammunition a protective mask is required to be readily available for use.



Symbol 1

"Wear Full Protective Clothing"

(4) Chemical hazard symbol two. This chemical hazard symbol tells the fireman that a respirator is required to fight this type of fire. When working around this type of ammunition a protective mask is required to be readily available for use.

(5) Chemical hazard symbol 3. This symbol tells the fireman not to use water in fighting

this type of fire. This is because the application of water will result in a chemical reaction which will eventually result in an explosion from the release of hydrogen.

e. Fire symbols are posted according to the greatest hazard in the storage location. The way to determine the symbol is the lowest number is the greatest hazard and this is the fire symbol to be posted. Only one fire symbol per storage site will be posted.

f. Several chemical hazard symbols may be posted on one storage location. Chemical hazard symbol 2 will not be posted if any of chemical hazard symbol 1 signs are posted.

4-6. Lightning Protection System (LPS)

a. Visual inspections will be conducted on visible portions of the LPS every annually for facilities on FS/HAAF. These inspections will be recorded and kept in the continuity book for a period of one year. The inspection will look for:

(1) A flattening or bending of the tip of the air terminal.

(2) A bending of the air terminal.

(3) A splaying or breaking of wire down conductors.

(4) Indications of melting or discoloration due to high heat.

b. When any of the above-mentioned deficiencies are found, an electrical test of the offending system, building or location specific, will be conducted.

c. Electrical testing of an LPS will be conducted every 2 years for facilities on FS/HAAF. The results must meet the requirements of DA Pam 385-64. Failure to meet these requirements will result in a work order being placed to repair the system. All test results will be recorded and kept in the continuity book until completion of the next test. After the next test is completed, the old test results will be maintained on file IAW ARIMS requirements.

4-7. Material Handling Equipment (MHE)

a. The use of MHE wherever possible is encouraged as a means of preventing injuries to personnel caused by improper lifting techniques or attempting to lift too heavy a load.

b. All MHE which requires a driver will require a licensed driver for that MHE.

c. All MHE will be given a visual inspection daily prior to use in the ASP OR EXPLOSIVES STORAGE AREAS. The check as a minimum will include:

(1) Electrical connections.

(2) Leaking fluids other than water.

(3) Current load test (as applicable).

(4) Built in safety features.

d. Every 30 days or after the MHE has been idle for a period of more than 5 days, a full TI will be performed. The standards used will follow the inspection requirements of DD Form 626 wherein they are applicable. The requirement for fire extinguishers will be for one 5-BC fire extinguisher on forklifts. Failure to pass any applicable part of the DD Form 626 will result in the MHE being removed from the ASP OR EXPLOSIVES STORAGE AREAS until the deficiency is corrected or repaired.

e. Electrical forklifts are the preferred style of forklifts for working in an ammunition structure. Electrical forklifts must meet the standards of NFPA 505. Type E, EE, ES and EX meet the requirement of this standard and are approved for usage in handling all types of ammunition. These forklifts must be supplied with a dead man switch and a main service switch which can be activated from the driving position.

f. Gasoline forklifts are not permitted for use within ammunition structures. They may be used to handle ammunition in its DOT approved containers only and only outside structures. Any gasoline powered forklift will have a backfire deflector securely attached.

g. LP Gas powered forklifts may be used only to handle ammunition in its DOT approved container and not in earth covered magazines. All LP Gas forklifts will be checked prior to each day's operations to ensure that all fuel lines, fittings and containers are secure and that sufficient fuel is on board to preclude the need to refuel during the day's operation.

h. Clean burning diesel forklifts may be used in storage structures and in the ASP OR EXPLOSIVES STORAGE for handling ammunition. When this type of forklift is used inside an ammunition structure, means of testing the noise levels and air quality must be kept available for periodic testing for pollutants exceeding OSHA and the Surgeon General's standards.

4-8. Load out operations

a. Load-out operations require risk assessment to be done prior to the commencing of the operation.

b. Load-out operations carry inherent risk due to the movement of ammunition in a fashion designed to promote speed. Safety must not be sacrificed in the name of beating the clock.

c. Initial planning.

(1) Initial planning for a load out must include the preparation of a load plan.

(2) The load plan will be drawn up after all items have been placed in the vehicle in the location they will be transported in. The empty spots will be filled with premade blocking and bracing. This will be prepared ahead of time and kept in a suitable location to be dropped into position after or during the loading of the ammunition. The purpose of the blocking and bracing is

to prevent shifting of the load during transport. If the load is secured in another manner, for example, tied down by straps, blocking and bracing is not required.

d. Inspection. All vehicles used in executing a load out will be inspected prior to entering the ASP OR EXPLOSIVES STORAGE AREAS. The inspection will use DD Form 626 as a guide for the inspection. Only inspection points from the DD Form 626 which apply will be used. All applicable parts of the inspection must be passed for the vehicle to be uploaded with ammunition.

e. Smoking. No flame producing or spark producing devices will be taken into the ASP OR EXPLOSIVES STORAGE AREAS. Smoking is prohibited within the ASP OR EXPLOSIVES STORAGE AREAS. Smoking areas are marked outside the ASP OR EXPLOSIVES STORAGE AREAS or are at least 50 feet from the ASP OR EXPLOSIVES STORAGE AREAS. All smoking areas require a fire extinguisher and a butt can.

f. Radios. Only vehicle mounted radios will be allowed in the ASP OR EXPLOSIVES STORAGE AREAS. This is to prevent the possible initiation of electrically primed ammunition by a buildup of electromagnetic Radiation from the transmissions**.** Cell phones should not be present within ten feet of unpackaged, electrically primed ammunition. Additional guidance/restrictions can be established at the discretion of the 406th or Garrison Commander.

g. Ammunition handling.

(1) Ammunition packages will not be thrown, tumbled, rolled or dropped. Only packaging which was designed to be dragged will be dragged.

(2) Ammunition packages over 45 lbs in weight require at least two persons to lift or the use of material handling equipment.

(3) Ammunition boxes will not be opened for the purpose of checking contents or to simulate loading of the ammunition. Every box which is opened will require a QASAS to reseal. Soldiers will be provided to help with the inspection and counting of opened ammunition boxes. Remember that until an opened box of ammunition can be verified and resealed by a QASAS, inventory requires a complete counting of every piece of ammunition in the box to ensure a proper count.

h. Loaded weapons will not be allowed in the ASP or Explosives storage areas during load out exercises.

i. Loading vehicles.

(1) All vehicles will be chocked and have the emergency brake set during loading.

(2) Only vehicles being loaded will be allowed at the loading site.

(3) The area will be kept clear of personnel not involved in the loading operation.

(4) Weight will be properly distributed in the vehicle during the loading operation. This should only be a matter of following the load plan.

(5) Two fire extinguishers will be readily available at each loading point.

(6) Prior to movement all vehicles will be checked for stability of the load. Palletized loads will not extend more than one-third of their height above load bearing side boards. Unpalletized loads will not be above the side boards.

j. Once a vehicle has been loaded, it will move out to a rally/holding point to await further orders. It will not stay in the ASP or Explosives Storage Areas.

k. As soon as possible after the completion of the exercise, vehicles will be returned to the ASP or Explosive Storage Areas in an orderly fashion to have the ammunition removed and placed back in storage. All restrictions which applied for the uploading will apply for the unloading of ammunition.

4-9. Transportation of Ammunition and Explosives

a. Ammunition and explosives will be transported IAW AR 385-10, DA PAM 385-64, 3ID and *406th AFSBn external SOP*.

b. Anytime ammunition or explosives are removed from authorized storage locations, to include exercises, these requirements must be met:

(1) On-post transportation routes should avoid areas of heavy population/congestion. Vehicles with Hazard Class/Division (HCD) 1.1 or 1.2 ammunition and explosives will not enter any motor pool, cantonment area, or populated area at any time. Only explosive laden vehicles that are delivering Safety Division approved HCD 1.3 or 1.4 ammunition directly to an approved arms room may enter the cantonment area. The vehicle must proceed to the arms-room in the most direct route and offload ammunition immediately upon arrival. Vehicles transporting ammunition or explosives are required to utilize Fort Stewart roads (tank trails) as much as possible. Vehicles transporting ammunition will comply with all parking instructions of Title 49, Code of Federal Regulations (CFR), Part 397. Vehicles transporting ammunition/ explosives shall avoid areas such as Post Exchanges, Snack Bars, Commissaries, etc. where the general public would be exposed.

(2) All personnel involved in the transportation of ammunition/explosives must have training. This includes not only those who drive the vehicle, but also those who certify the shipment, load the vehicle, pack the ammunition in boxes, mark and label ammunition boxes, or any other duty that could affect the transportation of ammunition/explosives.

(a) Drivers: Drivers of the vehicles must have training specified in AR 600-55, paragraph 4-9b. This training should be annotated on the drivers SF 348 and OF 346.

(b) Certification Training: This training is required for those who sign the certification statement on shipping papers prior to offering hazardous materials as cargo to the transportation system. This certification is also required of individuals certifying hazardous cargo for air transportation on DD Form 1387-2. This requirement applies to the transportation of ammunition and explosives where public highways are used. It does not apply when transportation is conducted on roads restricted to the public.

(c) Preparation and Handlers Training: This training is required for all those who prepare or handle ammunition for shipment. This training may be obtained from commercial vendors or the commander may appoint someone to give the training. If the commander

appoints someone to give the training, it must be done by personnel that have attended certification training. Governmental video/computer assisted training kits may be obtained from the supporting Safety Office.

(3) Drivers will be given special instructions such as requirements for marking/placarding, mechanical condition, route of travel, and refueling. DD Form 836 (Special Instructions for Motor Vehicle Drivers) is required for all shipments of ammunition and explosives. All vehicles transporting Hazard Class/Division 1.1, 1.2, or 1.3 Explosives must first be inspected using DD Form 626 (Motor Vehicle Inspection) prior to loading. Vehicles that fail inspection will not be loaded until deficiencies have been corrected and the vehicle passes re- inspection. Transportation of Hazard Class/Division 1.4 or inert ammunition does not require the DD Form 626.

4-10. Ammunition and Explosives Transport Requirements

a. Vehicles must either be a completely enclosed van type or be equipped with side stakes with the cargo protected by a tarpaulin or canvas top that completely covers the load.

b. Vehicles will be free of any mechanical or electrical defects as stated IAW DD Form 626, Ammunition Transportation Vehicle Inspection Checklist.

c. Cargo must be secured against movement in any direction. Any projecting munitions (e.g., HEAT, missiles, rockets, etc.) will have its warhead pointed away from the driver section.

d. No passengers will ride in the cargo area.

e. Army vehicles transporting ammunition or explosives will be equipped with at least two class 2_A 10 BC or equivalent fire extinguishers.

f. Vehicle will be placarded on all four sides.

g. Vehicle engine will be turned off, brakes will be set, and at least one wheel chocked during all loading, unloading, and tie-down operations.

4-11. Ammunition and Explosive Transportation Surveys

Periodic surveys of sample AE transportation activities shall be conducted to evaluate implementation of AE transportation safety requirements. Such surveys should use a team approach. At the minimum, surveys shall address the following:

a. Compatibility of AE in transport.

b. Training and certification of personnel involved in AE handling and transport.

c. Inspection of motor vehicles, MILVANS, and trailers.

d. Blocking and bracing.

e. Placarding and labeling.

f. Training of firefighters; adequacy of plans and procedures for responding to emergencies

involving AE; the conduct of fire drills; and the availability and adequacy of firefighting, equipment, fire symbols, and chemical hazard symbols.

g. Safety of material handling equipment.

Chapter 5
Amnesty Program

5-1. Purpose

The A&E Amnesty Program is intended to ensure maximum recovery of military A&E outside the supply system. It is not intended to circumvent normal turn-in procedures. The Installation Amnesty Program shall be conducted on a “no-questions-asked” basis to provide an opportunity for individuals to return items without fear of reprisal, or prosecution.

5-2. Responsibilities

a. The 406th AFSBn-Stewart Commander has the responsibility to establish, implement, and monitor the Installation Amnesty Program in coordination with other installation A&E and safety units and activities.

b. Public Affairs Office (PAO) will coordinate and develop, in coordination with 406th AFSBn-Stewart, Installation A&E Amnesty Program publicity campaigns. The use of periodic articles and other media will be utilized to keep uniformed personnel, Family members, and any other individuals that have access to Fort Stewart, GA, informed of the program. This information should be shared with local communities and the media.

c. 406th AFSBn-Stewart serves as the coordinating office for updating and publishing the installation A&E Amnesty Program.

d. DES, Provost Marshal Office provides direction to anyone who wants to turn in military A&E under the amnesty program. Personnel may contact the Military Police at (912) 767-9629.

e. Commander, of the 38th or 756th Ordnance Company (EOD) “on duty”’ provides assistance in the determination and destruction of unsafe or unstable ammunition.

f. Explosive Safety Officer (ESO) / Senior QASAS.

(1) Ensure installation amnesty program is in compliance with this SOP and DA PAM 385-64.

(2) EOD will provide support concerning destruction of munitions.

(3) Maintain installation mandated amnesty collection point. An explosive safety site plan is not required, however, a risk assessment IAW DA Pam 385-30 is required for the installation mandated amnesty collection point identified in para 5-3 below. The installation fire department will be informed of the location of the amnesty collection point.

g. Installation Safety Office and other unit organizational safety offices on Fort Stewart will:

(1) Ensure all unit amnesty programs are in compliance with this SOP, DA PAM 385-64.

(2) Serve as a primary POC for unit amnesty programs within your supported unit. EOD will also provide support concerning destruction of munitions

(3) Maintain listing of all temporary unit amnesty collection points and/or boxes. An explosive safety site plan is not required, however, a risk assessment IAW DA Pam 385-30, is required for all unit or organization amnesty collection points and/or boxes. The installation fire department and ISO will be informed of the location of all amnesty collection points or boxes.

h. QASAS will:

(1) Serve as the 406th AFSBn-Stewart's representative for all details concerning Installation A&E Amnesty Program.

(2) In conjunction with the ASP, accept A&E recovered from amnesty turn-ins and amnesty collection points.

(3) Empty the single permanent installation amnesty box, at regular intervals, but at least once a month.

i. Unit Commanders will:

(1) Brief all personnel on the details of their unit and Installation Amnesty Program, at a minimum, semi- annually and prior to each training event that requires the use of A&E.

(2) Establish an atmosphere that does not intimidate the Soldier or prevent the Solder from feeling free to turn in ammunition or explosives.

(3) Review range and training area procedures to ensure all ammunition and explosives are properly accounted for before unit leaves the range or training area.

j. Emergency Operations Center (EOC) will:

(1) Accept ammunition amnesty reports for A&E items larger than .50 caliber; and obtain the location and type of A&E.

(2) Direct the caller not to handle or disturb the item(s) and attempt to mark the location, if possible.

(3) If there is an immediate danger, call 911; otherwise contact the PMO desk to assess the situation and take the necessary action.

5-3. FS/HAAF Amnesty Point

a. A permanent Amnesty box is located in the parking lot in front of the Fort Stewart ASP field office, building number 17003. An SOP must be established for the amnesty point that includes responsibilities and procedures for the management, control, and operation of the Amnesty Box; and must be inspected for compliance by the QASAS, ESO, and/or unit or organizational safety office. It is the commander’s responsibility to schedule required inspections.

b. All amnesty collection boxes and/or containers must meet the following requirements to be authorized for use.

(1) Must be placed in accessible low risks areas.

(2) In densely populated areas only amnesty containers for small arms ammunition (SAA) (.50 caliber and below) are authorized for use.

(3) Although amnesty containers are not designed nor expected to contain an explosive, they should, to the extent possible:

(a) Prevent unauthorized removal of A&E.

(b) Prevent unauthorized removal of amnesty container.

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

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

(4) Amnesty containers and boxes must be marked with a contact phone number that is available 24 hours a day, seven days a week and with this statement "Only Small Army Ammunition .50 caliber and below. Ammunition items over .50 caliber are hazardous and should only be handled by qualified individuals. Amnesty turn-ins are always no-questions-asked.

(5) Amnesty containers in the Ammunition Peculiar Equipment (APE) catalog are available at the Joint Munitions Command (JMC) APE website at: https://prod.jmc.army.mil/apems3_catalog/index.aspx?area=resources.

5-4. Amnesty Day

a. 406th AFSBn-Stewart, in coordination with the ISO and GSO will schedule and publicize an A&E amnesty day annually for the collection of abandoned or unauthorized A&E.

b. Unit commanders may schedule their own amnesty day as long as all requirements and all references in this publication are met.

c. EOD personnel, QASAS, ESO and unit and organizational safety personnel must be available on A&E amnesty days to supervise the collection process.

d. Medical personnel must be on site, or on call, for emergencies.

e. The installation fire department must be notified of Amnesty Day turn-in location at least 30 days prior to the event and be on call in case of an emergency.

f. PAO must be notified at least 60 days prior to event and be tasked with creating a publicity campaign in support of amnesty day.

5-5. Ammunition Supply Point (ASP)

Anyone may turn in ammunition or explosives to the ASP, under the "NO QUESTIONS ASKED"

Amnesty Policy, Monday-Friday, 0730-1500hrs. The “NO QUESTIONS ASKED” procedure will ***not*** be used by units to circumvent the normal turn-in procedures. POC is the QASAS (Ammunition Surveillance). Applicable references include DA PAM 385-64, and AR 190-11.

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

6-2. Procedures

a. Protection of EID include:

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

(2) Keep protective covers, wires, sleeves, etc. on the 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 AHAs outside of their original packaging materials.

(4) Immediately re-install safety devices to un-fired EIDs and prior to offloading EIDs.

(5) Place damaged munitions into their original packaging material, if safe to do so. Contact QASAS if unsure of status of munitions.

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

b. Mitigation of Electromagnetic Sources includes:

(1) Identify organizational equipment that produces an EME.

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

(3) 406th AFSBn-Stewart QASAS, supported by the ISO and GSO 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) When mission dependent, restrict use of EID outside of its original packaging whenever lightning is within five miles of the physical location. In a training environment, suspend operations until the threat of lightning is gone.

(6) Do not store or use EID in close proximity to high-voltage producing sources (radio frequency, electromagnetic devices, electronic warfare devices, high-voltage electrical transmission lines, radars, and personal electronic devices).

Appendix A

References

Required Publications

Section I

AR 385-10
The Army Safety Program

AR 385-63
Range Safety

DA PAM 385-10
Army Safety Program

DA PAM 385-26
The Army Electrical Safety Program

DA PAM 385-30
Risk Management

DA PAM 385-40
Army Accident Investigation and Reporting

DA PAM 385-64
Ammunition and Explosives Safety Standards

DA PAM 385-65
Explosive and Chemical Site Plan Development and Submission

DA PAM 385-1
Small Unit Safety Officer/NCO Guide

DA PAM 385-63
Range Safety

DESR 6055.09
Defense Explosives Safety Regulation

29 CFR 1910.39
Fire Prevention Plans

29 CFR 1910.120
Hazardous waste operations and emergency response

29 CFR 1910.165
Employee alarm systems

29 CFR 1910, Subpart E
Exit Routes, Emergency Action Plans, and Fire Prevention Plans

29 CFR 1910, Subpart H
Hazardous Materials

29 CFR 1910, Subpart I
Personal Protective Equipment

29 CFR 1910, Subpart L
Fire Protection

49 CFR
Transportation

DOD 4145.26-M
DoD Contractors' Safety Manual for Ammunition and Explosives

DOD 4500.36-R
Management, Acquisition and Use of Motor Vehicles

DOD 4500.9.R Part II
Defense Transportation Regulation - Cargo Movement

DOD 6055.9
DOD Ammunition and Explosives Safety Standards

DODD 6055.9E
Explosives Safety Management and the DOD Explosives Safety Board

DODI 6055.1
DOD Safety & Occupational Health (SOH) Program

DODI 6055.4
DOD Traffic Safety Program

DODI 6055.7
Mishap Notification, Investigation, Reporting, and Record Keeping

DODI 6055.11
Protecting Personnel from Electromagnetic Fields

DODI 6055.15
DOD Laser Protection Program

FAR (Federal Acquisition Regulation) 52.236-13
Accident Prevention (Available from http://www.arnet.gov/far/)

ATP 5-19
Risk Management

MIL HNBK-828A
Laser Safety on Ranges and in Other Outdoor Areas

MIL STD 1180B (1) (Chg Notice 1)
Safety Standards for Military Ground Vehicles

NFPA 101
Life Safety Code (National Fire Protection Code)

NIOSH (National Institute for Occupational Safety and Health)
(Available at http://www.cdc.gov/niosh/homepage.html)

OSHAct (Occupational Safety and Health Act of 1970) Web site
(Available at http://www.osha.gov/)

TB 9-639
Passenger Carrying Capacity of Tactical and Administrative Vehicles Commonly Used to Transport Personnel

TB 43-0108
Handling, Storage and Disposal of Army Aircraft Components Containing Radioactive Materials

TB 700-2
Department of Defense Ammunition and Explosives Hazard Classification Procedures

TB Med 524
Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation

TC 21-306
Tracked Combat Vehicle Driver Training

The Life Safety Code 1910.35
NFPA 101 2000, Title: Occupational Safety and Health Standards

Section II

Forms

DA Form 2696
Operational Hazard Report (Cited in para 15-6.)

DA Form 7306
Worksheet for Telephonic Notification of Ground Accident (Cited in para 3-8*a* (2) (a))

DA Form 2028
Recommended Changes to Publications & Blank Forms

DA Form 3946
Military Police Traffic Accident Report

DA Form 4753
Notice of Unsafe or Unhealthful Working Condition

DA Form 4754
Violation Inventory Log

DA Form 4755
Employee Report of Alleged Unsafe or Unhealthful Working Conditions

DD Form 2977
Deliberate Risk Assessment Worksheet

OSHA Form 300
Log of Work - Related Injuries and Illnesses

OSHA Form 300A
Summary of Work - Related Injuries and Illnesses

Appendix B

Glossary

Abbreviations

AE
Ammunition and Explosives

A&E
Ammunition and Explosives

AGM
Above Ground Magazine

AGS
Above Ground Site

AHA
Ammunition Holding Area

AR
Army Regulation

ASP
Ammunition Supply Point

ATHP
Ammunition Transfer Holding Point

ATP
Ammunition Transfer Point

CIP
Command Inspection Program

CLS
Common Levels of Support

CORA
Certificate of Risk Assessment

DA
Department of Army

DA Pam
Department of Army Pamphlet

DARAD
Deviation Approval and Risk Acceptance Document

DESR
Defense Explosives Safety Regulation

DFARS
Defense Federal Acquisition Regulation Supplement

DDESB
Department of Defense Explosives Safety Board

DRMO
Defense Reutilization and Marketing Office

DOD
Department of Defense

DODD
Department of Defense Directive

DODIC
Department of Defense Identification Code

DOT
Department of Transportation

DRU
Direct Reporting Units

ECM
Earth-Covered Magazine

EED
Electro-Explosive Device

EMR
Electromagnetic Radiation

EOD
Explosives Ordnance Disposal

EPA
Environmental Protection Agency

ERG
Emergency Response Guidebook

ES
Exposed Site

ESMP
Explosive Safety Management Program

ESQD
Explosive Safety Quantity Distance

ESS
Explosives Safety Submission

HERO
Hazards of Electromagnetic Radiation to Ordnance

HD
Hazard Division

HE
High Explosive

IBD
Inhabited Building Distance

IL (B)
Intraline, Barricaded

ILD
Intraline Distance

IL (U)
Intraline, Unbarricaded

IMD
Intermagazine Distance

LPS
Lightning Protection System

MAG
Magazine

MEC

Munitions and Explosives of Concern

MMRP
Military Munitions Response Program

MOA
Memorandum of Understanding

MR
Munitions Rule

MRA
Munitions Risk Assessment

MRS
Munitions Response Site

NATO
North Atlantic Treaty Organization

NEC
National Electrical Code

NEQ
Net Explosive Quantity

NEW
Net Explosive Weight

NEWQD
Net Explosive Weight for Quantity-Distance

ODASAF
Office of the Director of Army Safety

OSHA
Occupational Safety and Health Administration

PES
Potential Explosion Site

PPE
Personal Protective Equipment

PTR
Public Traffic Route

PTRD
Public Traffic Route Distance

QA
Quality Assurance

QASAS
Quality Assurance Specialist (Ammunition Surveillance)

QC
Quality Control

QD
Quantity-Distance

RAC
Risk Assessment Code

RF
Radio Frequency

SAA
Small Arms Ammunition

SIR
Serious Incident Report

SOP
Standing Operating Procedure

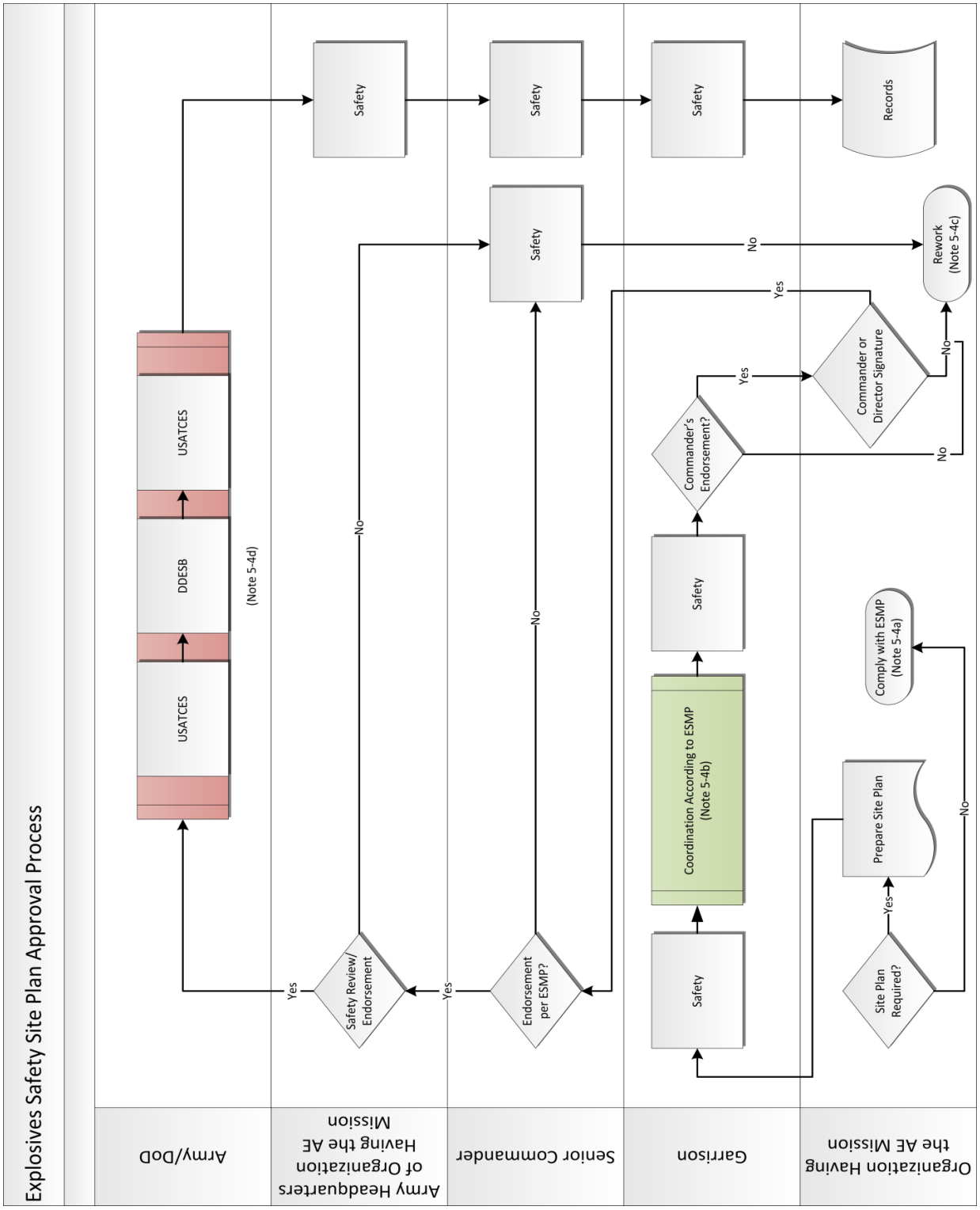
SRO
Senior Responsible Officer

TO
Transportation Officer

USATCES
United States Army Technical Center for Explosives Safety

Appendix C

Explosives Safety Site Plan Approval Process (Flow Chart).



Appendix D

License Compliance Checklist

Unit Arms Rooms Licensing Requirements **Ammunition storage in unit arms rooms requires an approved explosive storage license** **The Garrison Explosives Safety Manager is the approving authority**				
NOTE: A copy of all the documents listed below will be given to the Safety Manager at the time of the Safety inspection.				*Remarks*
1	Has the unit commander prepared a memorandum requesting authorization for storage of authorized ammunition items in an arms room?	YES	NO	
2	Has the unit prepared a risk assessment for the arms room approved by the unit commander? DD Form 2977	YES	NO	
3	Has a current QASAS inspection been conducted and documented for the operational load?	YES	NO	
4	Has a current Security Construction Statement (DA Form 4604-R) been obtained and posted? This document is valid for five years from the date of issue.	YES	NO	
5	Has a current Installation Physical Security AA&E record inspection been conducted and documented by the Office of the Provost Marshal?	YES	NO	
6	Has a current Fire Department inspection been conducted and documented?	YES	NO	
7	Does arms room have two fire extinguishers, rated at least 10 BC.	YES	NO	
8	Does unit have fire symbols displayed? If no ammunition is stored are signs covered or removed?	YES	NO	
9	Have all Ammunition Handlers been appointed on orders by their commander and meet all training requirements?	YES	NO	
10	Does the arms room have a current arms room (AA&E) SOP?	YES	NO	
11	Has all the above mentioned documentation been posted with the license in the arms room?	YES	NO	
NOTE: If any "NO's" are recorded above, ammunition license will not be issued				
GSO Form 385-64LCC				

Inspection Date: _____

Inspector Name and Signature: _____

Appendix E
A&E Event Lessons Learned (Sample)

UNCLASSIFIED//FOUO

Garrison Safety Gram
Community of Excellence

23-01
Ammunition & Explosives Safety

Recent events point to the dangers of improperly handling Ammunition and Explosives Items. Across the Army, other armed services and the general public can be exposed these items with deadly or disabling results. Increased awareness is a must, this will allow every individual to apply personal Risk Management (RM) to their own unique experiences…

Soldier experienced difficulty inserting the locking pin on the mod 93 machine gun mount. The soldier then attempted to force the locking pin into place with a rock. After that failed, he then secured a loose .50 cal round, using it to hammer at the locking pin, attempting to force the locking pin into place…

Magnet fishers pulled up a cache of rockets from a river on Fort Stewart…in this case they cleared 86 rockets, a tank tracer round, and .50 caliber ammo belts. They were detained by authorities, but that should have been the least of their worries…

A Company Commander and First Sergeant of a Ordnance Company decided to decorate their offices with the tools of their trade, 105mm tank rounds. Once they PCS'd, their replacement inherited their decorations. As the incoming Commander shifted the rounds in his office, the primer struck a object on the floor and exploded…

LESSONS LEARNED:

- Establish a command climate that does not allow for ammunition handling complacency.
- Blank ammunition contains enough gun powder to create substantial blast.
- Use ammunition only as it is intended to be used.
- UXOs are not souvenirs.
- Display items must be Demilled and clearly marked.

Finding your way could be hard at times, but it shouldn't be deadly… remember the Garrison Safety Office (GSO) is here to help. If assistance or guidance is needed contact the Garrison Safety Office at DSN: 435-9598/1208 or 767- 8132.

"THE ARMY'S HOME"

USAG FS/HAAF

DATE: 30 DECEMBER 2022
TIME:
PAGES SET:

DATA FILE:
DOCUMENT: USAG FS/HAAF 385-64

SECURITY: UNCLASSIFIED
DOC STATUS: INITIAL