Department of the Army
Pamphlet 700–16

Logistics

The Army Ammunition Management System

Headquarters
Department of the Army
Washington, DC
26 June 2017

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SUMMARY of CHANGE

DA PAM 700–16
The Army Ammunition Management System

This major revision, dated 26 June 2017—

- Updates the purpose paragraph (para 1–1).
- Updates the entire chapter on organizational roles and responsibilities (chap 2).
- Updates the entire chapter on the ammunition-requirements process (chap 3).
- Updates the entire chapter on providing ammunition to support training and testing (chap 4).
- Updates the entire chapter on improving missile and ammunition management (chap 5).
- Adds chapters on ammunition-management processes (chap 6 through chap 15).
- Adds 9 appendixes (app C through app K).
- Updates terminology (throughout).

Headquarters
Department of the Army
Washington, DC
26 June 2017

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Logistics

The Army Ammunition Management System

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:

GERALD B. O'KEEFE
Administrative Assistant to the
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History. This publication is a major revision.

Summary. This pamphlet provides an overview of the U.S. Army ammunition management program and key procedures and references. It is designed to provide a system description as well as basic procedural guidance for full life cycle ammunition management. It is to be used in conjunction with applicable references for ammunition management.

Applicability. This pamphlet applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated. Also, it applies to the Reserve Officer's Training Corps and Corps of Cadets.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff, G–4. The proponent has the authority to approve exceptions or waivers to this pamphlet that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency of the proponent agency in the grade of Colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Suggested improvements. Users of this regulation are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G–4 (DALO–SPM), 500 Army Pentagon, Washington, DC 20310–0500.

Distribution. This publication is available in electronic media only and is intended for command levels A, B, C, D, and E for the Regular Army, the Army National Guard/Army National Guard of the United States, the U.S. Army Reserve, the Reserve Officer's Training Corps and Corps of Cadets.

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Glossary

Chapter 1
Introduction

1–1. Purpose

This Department of the Army pamphlet provides an overview of the Army Ammunition Management Program, key procedures, and references. It is designed to describe the system and basic procedural guidance for full life cycle ammunition management and is to be used in conjunction with applicable references for ammunition management. This includes ammunition research, development, and acquisition; distribution, storage, and maintenance; and production base readiness, management, and stock control procedures.

1–2. References

See appendix A.

1–3. Explanation of abbreviations and terms

See the glossary.

1–4. Roles

a. Headquarters, Department of the Army, Office of the Deputy Chief of Staff, G–4. The ODCS, G–4 (DALO–SPM)—

(1) Provides Army Staff (ARSTAF) responsibility and oversight for policy, plans, and resources for conventional ammunition, missiles, and toxic chemical storage; surveillance; demilitarization; stockpile management; explosive safety; and environmental compliance.

(2) Manages and allocates the Army's ammunition stockpile.

(3) Provides oversight of emerging missile, ammunition, and ammunition information management systems.

(4) Prepares the program objective memorandum (POM) requirements that fund the Army's Ammunition Management Program, which encompasses research, development, acquisition, distribution, storage, maintenance, and demilitarization.

b. Headquarters, Department of the Army, Office of the Deputy Chief of Staff, G–3/5/7. The DCS, G–3/5/7 (DAMO–TRA)—

(1) Determines and validates ammunition requirements, sets priorities, and synchronizes policy.

(2) Assesses worldwide readiness, supports funding strategy development, operationalizes ammunition risk, and integrates Army ammunition management.

(3) Coordinates ammunition issues with staff, combatant commands (COCOMs), Army service component commands (ASCCs), and Army Centers of Excellence (COEs).

(4) Serves as the ARSTAF focal point for integrating ammunition management across the Army.

c. Headquarters, Department of the Army, Office of the Deputy Chief of Staff, G–8. The ODCS, G–8—

(1) Serves as the principal military adviser to the Assistant Secretary of the Army, Financial Management and Comptroller (ASA (FM&C)), for program development and justification.

(2) Coordinates with the Assistant Secretary of the Army, Acquisition, Logistics, and Technology (ASA (ALT)) on proposed ammunition programming recommendations related to ongoing acquisition programs and science and technology (S&T) initiatives.

(3) Serves as the principal ARSTAF adviser to the Chief of Staff, Army, on all materiel requirements, integration, and programming of Army and Joint materiel capabilities.

d. Office of the U.S. Assistant Secretary of the Army for Acquisition, Logistics, and Technology. The ASA (ALT)—

(1) Provides staff responsibility and oversight for matters and policy related to ammunition security assistance, armaments cooperation, and ammunition export control programs.

(2) Serves as the principal official responsible for Army matters and policies related to ammunition acquisition, logistics, technology, procurement, the industrial base (IB), security assistance, and armaments cooperation as delegated by the Secretary of the Army and outlined in AR 70–41.

e. Office of the Deputy Assistant Secretary of the Army for Defense Exports and Cooperation. This office—

(1) Executes the Army's management control plan, security assistance, and armaments cooperation programs at the direction of ASA (ALT).

(2) Provides overall guidance for the Army's security assistance foreign military sales (FMS), export policies, and implementation, including ammunition.

f. Headquarters, Army Materiel Command. This office develops and delivers global readiness logistics solutions to sustain unified land operations, anytime, anywhere.

g. Army Materiel Command Deputy Commanding General. This leader—

(1) Provides senior-level oversight of the Army Materiel Command (AMC), Army field support brigades, and the strategic IB, including ammunition depots, ammunition centers, arsenals, and Army ammunition plants (AAPs).

(2) Serves as the Department of Defense (DOD) Executive Director for Conventional Ammunition, for Explosive Safety, and for the logistics readiness center (LRC).

h. Army Sustainment Command. This command—

(1) Supports acquisition, logistics, and technology synchronization for sustainment and operational units at the retail level as the AMC lead agent for management of continental United States (CONUS) assigned ammunition supply points (ASPs), including Hawaii and Alaska.

(2) Manages the Army pre-positioned stocks (APSs) and logistics assistance programs and oversees the Army war reserve stocks for allies (WRSA) and the field stocks for allied programs.

(3) Operates installation-level LRCs for ammunition, supply and maintenance functions, transportation, food services, central issue facilities, and the Individual Chemical Equipment Management Program.

(4) Supports ammunition, supply, and maintenance for units at the installation level through LRC ASP.

(5) Manages and oversees the ammunition surveillance program of AR 702–12's area support requirements' quality assurance specialist, ammunition surveillance (QASAS).

(6) Reviews class V internal and external standard operating procedures (SOPs), support agreements, memorandums of understanding or of agreement, and installation Services support agreements for all Army-sustainment-command-managed ASPs.

i. Joint Munitions Command. This command—

(1) Is the single manager for conventional ammunition (SMCA) field operating activity. As such, the Joint Munitions Command (JMC) executes ammunition logistics (storage, distribution, and demilitarization), sustainment, readiness, and acquisition support, and it functions as the life cycle management command (LCMC) for conventional ammunition at wholesale and retail levels.

(2) Manages and executes the SMCA field operating activity mission for the production, supply, distribution, retrograde, storage, maintenance, and demilitarization of conventional ammunition.

(3) Supports acquisition for the program executive officer (PEO), ammunition product managers (PMs), other services, commercial producers, and product line managers.

j. Army Aviation and Missile Command Life Cycle Management Command. This command—

(1) Conducts, performs, and manages acquisition for all assigned missile and aviation weapons systems and subsystems, and associated equipment of guided missiles and large rockets (GMLRs) for the Army.

(2) Integrates logistics materiel readiness management and supports advanced development and maintenance for all assigned missile and aviation weapons systems and subsystems and associated equipment.

(3) Provides disposition instructions for assigned missile system components.

k. Program Executive Office, Ammunition. This office—

(1) Develops, equips, and sustains lethal armament and protective systems.

(2) Achieves effective and efficient operations—at the direction of the Secretary of Defense and through Headquarters, Department of the Army (HQDA)—required to acquire conventional ammunition in DOD and integrates logistics functions for U.S. forces, as specified in DODI 5160.68.

(3) Oversees the product managers (PMs) for combat ammunition systems, close combat systems, maneuver ammunition systems, towed artillery systems, and the project directors of joint services and joint products.

(4) Is the SMCA executor.

l. Program Executive Office, Missiles and Space. This office—

(1) Executes duties as the Army's centralized manager for assigned missile programs.

(2) Serves as responsible management official for the Missiles and Space Operating Agency, a field-operating agency of ASA (ALT).

(3) Provides overall direction and guidance for the development, acquisition, testing, product improvements, fielding, sustainment, and demilitarization of assigned missile systems and programs.

(4) Directly controls projects and PMs within the assigned mission areas and acts with full-line authority of the Army acquisition executive (AAE) to execute the duties of centralized missile management.

(5) Serves as the executing agent for the Missile Defense Agency Operating Agency.

m. Army Armament Research Development and Engineering Center. This center—

(1) Executes the technical and programmatic life-cycle engineering activities (research, development, manufacturing, science and production, field support, and demilitarization) for integrated lethal and nonlethal ammunition and armament

systems, subsystems, components, ancillary equipment, and enabling technologies designed to increase threat awareness and to reduce or fully neutralize threat capabilities.

(2) Integrates air, ground, surface, space, soldier platforms, and armament systems. Threats include, but are not limited to, personnel and materiel, buildings, bunkers, tunnels, obstacles, ground/air/watercraft platforms, mines, improvised explosive devices, electronic equipment, aerial ammunition, rockets, missiles, explosive hazards, and weapons of mass destruction.

(3) Provides engineering and technical support to logistics and products, as well as lethal and nonlethal subsystems and components for other-than-armament systems (for example, missiles, antitamper, reactive armor).

n. U.S. Army Aviation and Missile Research Development and Engineering Center. This center—

(1) Serves as the Army's focal point for providing research, development, engineering technology, and services for aviation and missile platforms across the life cycle.

(2) Provides technical capabilities for responsive and cost-effective research, product development, and life cycle systems engineering solutions. Aviation and Missile Research Development, Engineering Center's (AMRDEC's) core missile and rocket technical competencies include: structures (propulsion, energetics, lethal mechanisms, and flight control), guidance and navigation (embedded electronics and computers, infrared sensors and seekers), missile weapons and platform integration, system reliability availability maintainability, missile radio frequency (RF) technology, missile fire control radar technology, and missile image processing.

o. Army Training and Doctrine Command. This command—

(1) Develops, educates, and trains Soldiers, DA Civilians, and leaders.

(2) Supports unit training and designs, builds, and integrates a versatile mix of capabilities, formations, and equipment to strengthen the Army.

(3) Authorizes and manages training ammunition for Training and Doctrine Command (TRADOC), noncommissioned officer academies, West Point, Reserve Component institutions (U.S. Army Reserve (USAR) and Army National Guard (ARNG)), and other organizations.

(4) Manages ammunition resources necessary to support the TRADOC training footprint and mission of initial entry training, functional training, and professional military training for Soldiers, military leaders, and DA Civilians.

p. Combined Arms Support Command. This command—

(1) Leads development and maintenance of training standards for sustainment unit gunnery and the Standards in Training Commission (STRAC) training ammunition requirements.

(2) Develops sustainment organizational and force structure requirements for ammunition, explosive ordnance disposal (EOD), distribution, and other sustainment functions.

(3) Leads the development of military ammunition force structure designs and force structure requirements.

(4) Serves as the Army lead for ammunition sustainment planning data and provides staff management for the collection, validation, maintenance, and dissemination of Army sustainment planning factors, consumption rates, and completed workload data analysis.

(5) Ensures automated, ammunition-sustainment solution, capability gaps are identified, documented, programmed by the proponent, and properly fielded.

(6) Identifies and documents requirements for materiel approaches that resolve or mitigate gaps in sustainment capabilities for the Army from a program's start through fielding.

(7) Acts as the capabilities developer and user representative for automatic test equipment; calibration and repair; embedded diagnostics; prognostics; test, measurement, and diagnostic equipment (TMDE); tools, sets, kits, and outfits for ammunition; and container and material handling equipment.

(8) Develops and documents materiel solutions for ground and surface mobility based on approved capability-based assessment (CBA) sustainment capability gaps.

(9) Leads in the planning, development, integration, assessment, and support of Enterprise Integrated Logistics Strategy capability to all Army and Joint interest materiel system development programs.

(10) Manages resident training for Soldiers to be technically and tactically proficient in ammunition.

q. Army Forces Command. This command—

(1) Trains, mobilizes, deploys, and sustains Soldiers, DA Civilians, and leaders.

(2) Reviews and evaluates unit training requirements.

(3) Monitors conventional and missile ammunition requirements to support force modernization.

(4) Develops and distributes annual training ammunition to each installation to support total Army training.

r. Army service component command. This command—

(1) Develops plans and policies for the call-forward process and retrograde of ammunition within the area of responsibility

(2) Reviews and validates the ammunition stockage objective within the area of operation for ammunition supply activities ensuring adequate stocks are available.

(3) Reviews and validates the requirement from stocks for the acquisition and cross-servicing agreements (ACSAs) and for FMS support for ammunition.

(4) Establishes and manages controlled supply rate requirements.

s. Defense Ammunition Center. This center—

(1) Provides direct support to the DOD, HQDA, and other Government agencies, activities, industries, academia, and international military students.

(2) Conducts on-site reviews and provides technical assistance to commands, activities, installations, and other organizations with an ammunition or explosives safety mission as outlined in AR 700–13.

(3) Executes technical aspects of the Army Explosives Safety Management Program.

(4) Receives technical direction and tasking from the Director of Army, Safety, and the Office of the Deputy ASA for Environment, Safety, and Occupational Health (DASA–ESOH).

(5) Designs, develops, and disseminates procedures for transportation and storage of class V items and guided missile ground support equipment.

(6) Conducts explosive safety certification and hazardous materials training for military personnel, civilians, and contractors.

(7) Serves as the single source of military packaging and preservation training for DOD.

t. Ammunition industrial base task force. This task force—

(1) Ensures adequate funding and policies are implemented to sustain a responsive, capable, U.S. ammunition IB to develop, produce, and support superior ammunition for the United States and its allies.

(2) Educates key individuals and groups within the Government on the state of the U.S. ammunition industry and, when necessary, recommends actions to preserve key capabilities for U.S. national security.

(3) Represents most of the major ammunition prime contractors, as well as a cross section of subcontractors and suppliers. These companies manage Government owned and contractor operated (GOCO) facilities, as well as those owned solely by the private sector (contractor owned, contractor operated (COCO)). The task force does not advocate specific programs on behalf of any of its members.

u. Center for Army Analysis. This center—

(1) Maintains special expertise in the analysis of ammunition issues pertaining to theater-level operations and Army-wide processes, especially those that involve ammunition resource allocation.

(2) Provides the vision, strategy, oversight, and management of modeling and simulation (M&S) across all M&S communities.

v. Army Test and Evaluation Command. This command—

(1) Plans, integrates, and conducts experiments, developmental tests (DTs), live-fire tests and evaluations (T&Es), independent operational tests (OTs), and independent evaluations and assessments to provide essential information to fielding, acquisition, and equipping decision makers and commanders.

(2) Manages the comprehensive, mission wide Safety and Occupational Health Program that includes ammunition and explosives (AE) safety, industrial safety, motor vehicle safety, aviation safety, chemical agent safety, biological defense safety, and radiation protection.

Chapter 2
Requirements Determination

Section I

Ammunition Requirements Process

2–1. Overview

At the center of the Army's ammunition program are valid ammunition requirements. All other ammunition functions are driven by operationally validated requirements. The DCS, G–3/5/7 Ammunition Division is responsible for the ammunition requirements determination, validation, and approval process. Ammunition requirements must be accurate, auditable, transparent, and defendable and must comply with AR 5–13.

2–2. Inception and requirements documentation

a. The initial concept to develop a new round of ammunition or a generic group of ammunition may originate either within the research and development community or within the user community. The Joint Capabilities Integration and

Development System (JCIDS) plays a key role in identifying the capabilities required by the warfighters to support the national defense strategy, national military strategy, and national strategy for homeland defense.

b. The JCIDS process was created to support the statutory responsibility of the Joint Requirements Oversight Council (JROC) to validate joint warfighting requirements. The JCIDS process supports the acquisition process by identifying and assessing capability needs and associated performance criteria to be used as the basis for the development and production of items to fill those needs. The validated capability requirements from the JCIDS process are the driver for a large portion of the POM, including both development of new capability solutions and sustainment of fielded capability solutions. The JCIDS process is initiated through the execution of a CBA. The objective of the CBA is to validate both materiel and non-materiel capability gaps identified by the user.

2–3. Requirements generators and development

a. DODI 3000.04 is the overarching DOD process and policy guidance for estimating each Service's ammunition requirements annually. The Office of the Secretary of Defense (OSD) oversees the munitions requirements process (MRP). The Army's process for estimating ammunition requirements, including wartime, testing, and training needs, is the total Army ammunition requirements (TAMR). The DCS, G–3/5/7 Ammunition Division is responsible for the TAMR.

b. The Army's methodology for estimating wartime ammunition requirements is the qualitative war reserve requirements for ammunition (QWARRM) study conducted by the Center for Army Analysis (CAA). The QWARRM study provides the Army's wartime, scenario-based, ammunition requirements to execute the MRP. Through the QWARRM study, CAA coordinates with the combatant commander (CCDR) and ASCC planners to ensure CAA modeling accurately replicates the CCDR operations plan (OPLAN) and addresses issues unique to the CCDR and ASCC.

c. The QWARRM study is combined with training and test requirements to produce the TAMR.

(1) TRADOC incorporates training strategies, project consumption other than shot factors (like registration), and zeroing—among other factors—as well as combat loads (CLs).

(2) The Army Test and Evaluation Command (ATEC) and AMC submit test requirements for many types of ammunition testing, including operational, developmental, stockpile reliability, and armament rebuilding.

d. Only JCIDS-approved capabilities are built into the TAMR for long-range resourcing. Once a capability has been built into the TAMR, resourcing requirements are developed for it. The sum of these requirements are built into the TAMR for resourcing across the POM.

e. For urgent operational needs, particularly for items not in the Army inventory, Army commands (ACOMs) submit operational needs statements or urgent needs statements through the Army Requirements and Resourcing Board for approval and resourcing.

2–4. Annual stockage objective development and approval

The Office of the Deputy Chief of Staff (DCS), G–3/5/7 (DAMO–TRA), publishes annual guidance for developing ammunition requirements and stockage objectives. The guidance outlined in AR 5–13 applies to all ASCCs, ACOMs, and direct reporting units (DRUs). All commands submit proposed stockage objectives and requirements, including for operational projects (OPROJs), operational loads (OPLs), CLs, and sustainment loads (SLs) outside the continental United States (OCONUS) training requirements. All requirements are developed and submitted using the requirements module in the Total Ammunition Management Information System (TAMIS). Validation of all ammunition requirements for war reserve (WR), operational, training, and testing is executed by the DCS, G–3/5/7, Munitions Management Division (Department of the Army G–37/Training) (G–37/TRA).

2–5. War reserve requirements

a. WR ammunition requirement development is a deliberate planning process that provides comprehensive, annual updates of Army quantitative ammunition requirements to fulfill Army responsibilities in Title 10 of United States Code (USC).

b. The process generates Army requirements for combat, current operations, forward presence, and strategic readiness. It replicates OSD-approved COCOM OPLANs and multi-Service force deployment planning constructs in theater-level campaign models, and it accounts for Joint- and coalition-force capabilities and for Army doctrine and tactics.

c. The MRP is a constrained, risk-informed process that is integrated with Army programming and budgeting management. It provides requirements for programs of record with milestone-B approval only; it does not identify capability gaps or required capabilities.

2–6. Combat and sustainment load requirements

The CL and SL requirements are quantities of ammunition developed by the TRADOC proponent and built into TAMIS.

a. CL requirements are standard quantities of ammunition for each individual, crew-served, and weapons platform, as well as the ammunition carriers, whereas the bulk ammunition CLs are assigned by security risk code (SRC). CL requirements support the initiation of contingency and combat operations.

b. SL requirements are ammunition needed to replenish a unit's CL and to sustain a force until resupply can be provided.

2–7. Operational load requirements

Army standard resourcing strategies are in DA Pam 350–38. These strategies support commanders' day-to-day missions and include ammunition needed to support guard forces, installation- and unit-level funeral details, installation EOD missions, and other missions. These requirements are developed at the unit level, validated by G–37/TRA, and included in the TAMR.

2–8. Training requirements

a. The training MRP is a comprehensive process that encompasses development, validation, and approval. TRADOC proponents develop all training strategies, and the Army Ammunition Requirements Council of Colonels validates the ammunition required to support these strategies.

b. Based upon capability gap analysis, TRADOC combat developers write JCIDS capabilities documents for approval through the Department of the Army (DA) G–37/Capabilities Integration Office.

(1) Once a capability is approved, TRADOC training developers propose programs of instruction (POIs) for institutional weapons training and STRAC strategies for home station and combat training center (CTC) weapons training.

(2) Approved strategies are built into DA Pam 350–38, STRAC, and TRADOC POIs for units, schools, and COEs to use when planning resources needed to conduct training.

(3) Ammunition resources for approved weapons training strategies also are included in the TAMR. Requirements in the TAMR are then submitted for resourcing in the POM.

2–9. Testing requirements

Testing requirements are managed by command-level managers for Army tests involving standard Army ammunition. Testing is fluid and not conducive to standard calculations, making requirements hard to predict. The Department of the Army Management Office-Training Ammunition (DAMO–TRA) generates test requirements for programming by the use of historical expenditure rates. For increased accuracy, test customers generate near-year requirements which are used for near-year programming unless the DA-generated, predicted average is higher. Requirements are developed and staffed with ATEC and/or AMC to ensure accuracy.

2–10. Nonstandard requirements

Nonstandard requirements are requirements for ammunition that have not met safety type classification or achieved full materiel release (FMR) for Army common use. Examples of nonstandard ammunition include commercial off-the-shelf items, such as improvised explosive device simulators and ammunition used by Army marksmanship teams. Army common units with a valid need for nonstandard ammunition will submit requests through command operational channels to DA G–37/TRA for approval in accordance with AR 5–13.

Section II

Determining Priorities

2–11. Prioritization of requirements

a. Prioritization of requirements and funding occur through multiple methods and forums, including publication of funding priorities in the TAMR, the semiannual MPR and strategic portfolio analysis review (SPAR), and ASA (ALT)-led weapon system reviews (WSRs). The QWARRM, plus training and test requirements, are combined to produce the TAMR. Only JCIDS-approved capabilities are built into the TAMR for long-range resourcing. Once a capability is built into the TAMR, resourcing requirements are developed for it. The sum of these requirements is built into the TAMR for resourcing across the POM.

b. Prioritization of inventory occurs through validation of global ammunition stockage objectives, annual authorization, and allocation working groups, such as Total Army Authorization and Allocations Conference (TA4C) Stockage Objective Working Group and authorizations in the TAMIS.

c. Prioritization of funding for all programs, including ammunition, is conducted by the DCS, G–3's Capabilities Integration, Prioritization and Analysis Directorate. This funding-prioritization process is conducted in coordination with other G–3/5/7 directorates as well as the DCS, G–4; the DCS, G–8, and the ASA (ALT).

2–12. Operational risk

Under DCS, G–3/5/7, the Munitions Management Division (Department of the Army G–37/Training (DA G–37/TRA)) integrates ammunition management across the Army. It will analyze operational risks to determine resourcing solutions for requirements that decrease the Army ammunition stockpile. This includes external requirements, such as FMS and loans to other DOD and non-DOD agencies. The DCS, G–4 will provide logistics information to support DCS, G–3/5/7 (DA G–3/4/7) risk assessments.

2–13. Operational needs statement

a. Commanders may require ammunition not documented in the Army requirements nor in current DA inventory. In such cases, an operational needs statement should meet a current capability gap in the Army ammunition inventory. Submit it through command channels via the equipment common operating picture to DCS, G–3/5/7 and DCS, G–4 for review and analysis.

b. Outlined in AR 71–9 are operational needs statements. Following mission analysis, unit task organization and cross leveling—or lessons learned—operational commanders use operational needs statements to document the urgent need for a nonstandard or unprogrammed capability (including ammunition) to correct a deficiency or improve a capability that enhances the likelihood of mission accomplishment.

c. The operational needs statement is particularly useful to support units assigned nonstandard requirements code missions they are not equipped to accomplish. Additionally, the operational needs statement provides an opportunity for the operational commander—outside the acquisition, combat development, and training development communities—to initiate the capability-determination process. The operational needs statement is not a JCIDS capability document but a request for need validation and sourcing of a perceived, near-term requirement.

Chapter 3
Resourcing

Section I

Strategy

3–1. Resourcing strategy

a. The resourcing strategy is designed to provide sufficient ammunition to support training and testing. Training expenditures are closely monitored to ensure availability for required training and to ensure replenishment of expenditures only. Stock modernization is taken into consideration during replenishment, using old and buying new or improved ammunition to fill shortages.

b. Routine investment in our ammunition industrial facilities is critical to keep these capabilities safe, efficient, effective, and reliable. When determining resourcing strategies, the impact to organic (that is, making an important part of the whole) and commercial producers is taken into consideration.

c. The top priority of the Army resourcing ammunition is to support deployed forces and plan for future combat operations. DCS, G–8 traditionally focuses on POM resourcing. ASA (ALT), along with the Army Budget Office, focuses on the budget year and year of execution. DCS, G–8 and ASA (ALT) collaborate as program evaluation group (PEG) co-chairs for the equipping PEG.

3–2. Ammunition resourcing strategy

The intent of the Army ammunition resourcing strategy is to have a reasonable and serviceable inventory within a range that will protect the IB from production fluctuations and not get into an overbought or underbought situation. Procurements are adjusted annually to maintain WR and pipeline requirements and to replace expenditures.

a. The WR procurement level is based on the serviceable inventory against the TAMR. The WR inventory includes only serviceable assets that can be used in wartime.

b. The Army funding strategy procures training ammunition at a rate which allows the TA4C to authorize 100 percent of the TAMR training requirements, which will also replenish what has been expended during training. The procurement levels for training-standard and training-unique items fall within a resourcing band.

(1) The upper limit of the resourcing band includes WR, including mobilization training plus 100 percent of the TAMR training requirement.

(2) The lower limit of the resourcing band includes WR and/or mobilization training plus 150 days of the annual training and test requirements.

Section II

Ammunition Funding

3–3. Procurement of Ammunition, Army

There are two budget activity groups (BAGs) within Procurement Ammunition, Army (PAA), appropriations.

a. BAG 1—funds conventional ammunition, including training and test quantities, WR fill, and WR modernization. BAG 1 may also include overseas contingency operations (OCO) or supplemental funding.

b. BAG 2—Production Base Support, funds GOCO AAP industrial facilities, the Armament Retooling and Manufacturing Support (ARMS) Program, and conventional ammunition demilitarization.

3–4. Specific criteria for the use of Procurement of Ammunition, Army, funding

a. Use PAA appropriations specifically for the procurement, production, modification, and demilitarization of conventional ammunition, including components, engineering, and acceptance testing during production periods of major ammunition end items required for operational use, general service use, addition to inventory upon delivery to the Army, and when not an appropriate research, development, test, and evaluation (RDT&E) cost.

b. Use PAA appropriations to procure EOD tools and equipment when inclusion in other appropriations is inappropriate.

c. PAA appropriations are used to support the ARMS Initiative Program.

d. PAA appropriations are the proper and only funding source for the purchase of any ammunition (class V items) regardless of cost. This includes the purchase of nonstandard, noncentrally managed ammunition.

e. PAA appropriations are available for obligation for 3 years and must meet OSD goals of 80 percent obligated and 55 percent disbursed for RDT&E in the first year.

f. WR and operational ammunition are normally procured over the 5-year POM period while training ammunition is procured annually.

3–5. General criteria for use of Procurement of Ammunition, Army, funding

a. The following rules are common to procurement appropriations. These appropriations provide for:

(1) Procurement modification kits for items procured under this appropriation or a predecessor procurement appropriation, including installation. Installation of modification kits is annualized.

(2) Cutaway models, primary trainers, and related items that are required in conjunction with training for new equipment or for major modification of existing equipment procured under this appropriation.

(3) Update during production of manuals, illustrations, and other equipment publications (see AR 25–30 for publication policy) to match engineering changes. They include initial preparation for commercial items for which no RDT&E effort was undertaken and for nondevelopmental items with minor RDT&E funding.

(4) Jigs, dies, tooling, fixtures, gauges, inspection equipment, and TMDE peculiar to current production of an end item or component procured under these appropriations.

(5) Production engineering in support of current production of equipment procured under these appropriations from commercial source or at an Army installation. It includes nondevelopmental engineering in support of production needed both in advance of and in conjunction with quantity procurement to aid manufacture of type classified or adopted end items and their components and parts. Such engineering may be performed before obligating funds on the actual manufacturing contract.

(6) Materiel used in current production of an end item procured under this appropriation when produced in Government-owned facilities.

(7) Engineered, furnished, and installed equipment as a complete contractual effort.

(8) Establishment, augmentation, improvement, and layaway of production capability for items procured under these appropriations. To determine which procurement appropriation Army management structure (AMS) codes apply, the following guidance applies:

(a) Establishment, rehabilitation, replacement (excluding normal maintenance), modernization, conversion, and expansion of Government-owned industrial facilities in Government-owned (or in some exceptional instances, privately owned) plants to support current production and production testing can be funded with production base support AMS

codes from the appropriation which includes the end item supported. In critical areas, it expands the rehabilitation, transportation, site preparation, and installation of equipment. At GOCO facilities, it includes modifying existing facilities, constructing new facilities, and acquiring land, buildings, and utility systems.

(b) It excludes functions that solely support research and development or production of items for testing.

(c) Initial production facilities, special tooling, or special test equipment required to establish production capability for single end items will be funded from the end item AMS code.

(d) Facilities which operated under revolving funds, such as the Defense Business Operations Fund, will be funded with capital investment accounts included in the fund.

(e) Necessary rehabilitation and layaway of industrial facilities upon release from current production will be funded through production base support AMS codes when those facilities are required for mobilization or future production. Costs include preservation of plants and equipment for long-term idleness, rehabilitation when required for future production, disposal of integral equipment not required to support the production base, and transportation of equipment to a storage site.

(f) Charge costs associated with plant clearance or equipment disposal when no mobilization or future production requirement has been documented to the end item AMS code of the active or most recent production program. This includes funds for disposal, plant clearance, and restoration as required.

(g) It excludes layaway of facilities for future RDT&E use.

(9) Engineering for product improvement to investment end items or major components of investment end items which are in production, if this does not increase the then-current-performance envelope.

(10) Transportation charges when such charges are an integral part of the contract costs of end items of equipment procured by these appropriations.

(11) Value engineering for the purpose of reducing procurement costs or life cycle costs of major items, equipment, spares and repair parts, support equipment and facilities, major components, subassemblies, or piece parts being procured or scheduled for procurement by analyzing their function and for identifying changes that will achieve the essential functions at lowest life cycle costs consistent with the required (present) performance, reliability, maintainability, interchangeability, product quality, and safety.

(12) New equipment training, including initial transfer of knowledge from the materiel developer (MATDEV) to trainers, users, and support personnel during production phase of new and improved equipment.

b. First destination transportation (FDT) relates to the cost of moving materiel from the manufacturer to the first point of acceptance receipt or storage point (SP) by the Government. This represents a portion of a total system cost. FDT includes transportation costs for shipments which may be interrupted for test or modification before acceptance. When materiel is temporarily stored in a depot or other location pending completion of acceptance testing, the application of modifications, assembly, and so forth, for user readiness and receipt, it represents an interruption in the FDT movement and not an acceptance into the Army supply system. Subsequent transportation from the depot to the first acceptance point is integral to the major end item acquisition cost and is financed by the procurement appropriation which financed acquisition of the item.

c. Total package fielding is the process used for total system fielding of new and modified equipment. It provides for the concurrent fielding of a materiel system and its required support. The process aims to minimize the logistics burden of fielding on the gaining command.

d. Interim contractor support is a method of support used in compressed or accelerated acquisition programs or when design is not sufficiently stabilized. It provides all or part of a materiel system support by contract for a specified interim period after initial deployment, to allow organic support capability to be phased in. This is a support acquisition technique rather than a support concept.

e. The contractor field services representative relates to initial materiel fielding of new equipment; it is limited to a period not to exceed 12 months after initial fielding.

f. Apply program and project managers' (belonging to PEOs or to AMC) salaries, benefits, and temporary duty (TDY) and their office automation, administration, and supplies during production phase to the primary hardware procurement budget line item number (BLIN) or, if there is no such BLIN, to the modification BLIN by reimbursing Operation and Maintenance, Army (OMA), or RDT&E reimbursable or carrier accounts as appropriate. Procurement accounts do not have authorized manpower spaces, which precludes direct charging of salaries and benefits to procurement lines. This does not apply to advance procurement, spares, or training devices (procured in the system's BLIN rather than as a training system or simulator BLIN in Other Procurement, Army), and it includes a reasonable amount of collocated (where feasible), dedicated, functional support from a materiel command.

3–6. Exclusions for use of Procurement of Ammunition, Army, funding

The following costs will not be funded with PAA appropriations:

a. Second-destination transportation as defined in DOD 7000.14–R.

b. Product improvement costs financed by other appropriations, such as ammunition component improvement through RDT&E, effort on items not in production (OMA), redesign costs through RDT&E, or efforts that increase performance parameters through RDT&E.

c. Rebuilding.

d. Manufacturing technology funded by RDT&E.

e. PEO salaries, benefits, and TDY and office automation, administration, and supplies. These are normally OMA funded and subject to Army management headquarters activities limitations.

f. RDT&E activities such as---

(1) Procurement of materiel required to support research and development projects and tasks for testing to prove performance of military characteristics. The exception is that major weapons systems used in a test which will be returned to the inventory after the test may be procured with procurement appropriation funds.

(2) For evaluation to establish or determine suitability.

(3) For any engineering effort, fabrication, or testing required to eliminate or verify the elimination of major deficiencies determined prior to type classification as adopted type.

(4) Program and project managers' (belonging to PEOs or AMC) salaries, benefits, and TDY and office automation, administration, and supplies during the development phase. These are normally RDT&E funded.

g. AMC program or project managers' salaries, benefits, and TDY and office automation, administration, and supplies during the sustainment phase. These are normally OMA funded.

3–7. Ammunition portfolio

a. The ammunition portfolio includes three management decision packages (MDEPs): WR/Operational Ammunition (RE06), Training Ammunition (RE01), and Ammunition Production Base (RE04).

(1) The WR/Operational Ammunition MDEP funds ammunition for WR sustainment and developmental WR and training standard ammunition items.

(2) The Training Ammunition MDEP procures ammunition required for annual training and supports small research and development efforts related to general ammunition production and training-unique ammunition items

(3) The Ammunition Production Base MDEP supports GOCO industrial ammunition production facilities. This includes production base facilitation, modernization, prove-out, maintenance and layaway of facilities, production equipment, and correction of environmental deficiencies.

b. The WR/Operational Ammunition MDEP or the Training Ammunition MDEP may contain tank, artillery, mortar, small and medium caliber ammunition, grenades, demolition, mines, nonlethal ammunition, shoulder-launched ammunition, signals, pyro classes, and simulators, depending on how it is categorized in the TAMR.

c. New ammunition items, often resulting from the introduction of a new weapon system, upgrades to fire control systems, or changes to requirements that are unique to a particular platform, will be funded by the appropriate hardware portfolio. This ensures proper integration with weapon systems platforms; provides G–8 Hardware Division support, buy-in, and prioritization; provides integration with appropriate program managers; and highlights how the ammunition will impact operational capability.

d. The Hardware Division also funds platform-specific testing (such as airworthiness certification and compatibility testing) and will review and program new developmental efforts for new items if a priority and affordable within their portfolio, or it will present a cross portfolio issue. After research, development, and the first 2 years of full-rate production (FRP), most ammunition transfers to the DCS, G–8 ammunition portfolio with a complete funding stream for sustainment, except where there are planned, incremental, modernization requirements or where tight integration is required due to the ammunition' uniqueness to a platform's performance.

e. Most ammunition items developed in other Equipping PEG portfolios (fires; aviation; maneuvers; Soldiers; nuclear, biological, and chemical (protection); and mobility), often in conjunction with new or modernized weapons systems for which the ammunition should be developed along with the weapons system then transitioned to the DCS, G–8 ammunition portfolio for sustainment of annual training and WR procurement.

f. For ammunition items that either transitioned or are already in the ammunition portfolio, the requirement to improve the ammunition through an engineering change proposal, a product improvement, a recapitulation and selected upgrade, or by replacement of a legacy round through modernization, the research and development is funded within the ammunition portfolio.

Chapter 4
Research and Development

4–1. Overview

a. To support modernization goals to improve missile and ammunition management, the Army invests in a partnership between Army S&T and Acquisition RDT&E to transition new capabilities to the Soldier through enabling concepts, programs of record, or insertion into the Total Force. Army S&T focuses on high-potential solutions early in concept development and on reducing technological risk. Acquisition RDT&E further matures technology enhancements and new capabilities for demonstration in relevant environments and operational scenarios.

b. Projects are planned and executed collaboratively with the Army's 22 laboratories and research, development, and engineering centers (RDECs) and with Soldiers and leaders who employ warfighting capabilities represented by TRADOC.

c. The major objectives for S&T and Acquisition RDT&E related to ammunition management are improvements in effectiveness, reliability, productivity, environmental friendliness, and insensitivity of ammunition or their components. New capabilities and other enhancements also reduce or optimize life cycle costs and improve preservation, packaging, handling, movement, and demilitarization. Efforts conducted as acquisition RDT&E follow the guidance of DOD 5000 series directives and instructions and of AR 70–1.

d. Both Army S&T and Acquisition RDT&E activities may involve improvement beyond just ammunition management, such as making components or systems safer, more reliable, more lethal, more accurate, lighter, and easier to use. They may also increase robustness, extend life, add functional capabilities, and improve functionality. The Research and Development Engineering Command (RDECOM) S&T enterprise also contributes related recommendations, from basic and applied research on the feasibility or potential of new and emerging technologies to reduced or optimized life cycle costs of ammunition or their components.

e. TRADOC CBAs identify current and future gaps in combat effectiveness, manufacturing, and logistics effectiveness or efficiency, and they ensure that a Soldier's requirements are defined, integrated, and understood. Progress is defined in terms of a technology's maturity by using the technology readiness level (TRL) metric—which is a standard applied across industry, academia, and Government (see table 4–1 for definitions)—and by assessing military utility based on anticipated benefits. Some technologies are explored and abandoned as insufficiently effective, costly, or without customer.

f. For new, high-value capabilities promising utility and acceptable maturity (usually TRL 6–7, but exceptions occur), the research community works with the TRADOC COEs to ensure that capabilities from emerging technologies are transitioned to the Soldier through a life cycle manager PM under a PEO, in coordination with ASA (ALT), as a program of record.

g. If the technology is applied to subcomponents of an end item or is a manufacturing process improvement for an end item, the technology can be incorporated through engineering change proposals or built into the design of new ammunition. If the technology application results in an end item needing type classification, it will require a capabilities document as explained in chapter 2.

h. Acquisition RDT&E funding must be obtained from the DCS, G–8. The technology will be developed in accordance with DOD 5000 series directives, AR 70–1, and other supporting acquisition regulations.

i. Technology and products derived will be developed using the formal systems engineering process as described in the Defense Acquisition Guidebook. The systems engineering process can be tailored and, when properly applied and integrated with a good program and program support management, will identify, design, and test the correct requirements, so the right product is manufactured and eventually fielded.

j. Other key organizations supporting ammunition research and development and evaluation are the Army Fuze Safety Review Board, the Energetics Materials Qualifications Board, Ignition Systems Safety Review Board, Insensitive Ammunition Board, and DOD Explosives Safety Board.

k. A subset of research and development is Ammunition Logistics Research and Development (ALR&D) which is conducted in accordance with the ALR&D strategic plan. It coordinates development efforts between the Joint Services and within Army organizations to improve and accelerate ammunition delivery to the warfighter. The strategic plan establishes a framework and processes to efficiently synchronize and prioritize current and future Army ALR&D efforts. A secondary goal is to better leverage efforts with all Services and DOD agencies and to potentially develop joint, collaborative programs.

l. The ALR&D strategic plan is issued under the authority of the Program Executive Office, Ammunition. The plan is executed by the Program Executive Office, Ammunition, the project director for Joint Services (PDJS), and AMMO LOG. An annual call for projects from the ammunition community is conducted under the authority of the ALR&D strategic plan. These projects demonstrate enablers that improve one or more logistics functional areas across the ammuni-

tion life cycle as shown in the ammunition logistics chain. The projects include such areas as explosive safety, packaging, surveillance, storage, asset visibility, and distribution.

Table 4–1
Technology readiness levels definitions

Technology readiness level	Description
1. Basic principles observed and reported	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples include paper studies of a technology's basic properties
2. Technology concept and/or application formulated	Invention begins. Once basic principles are observed, practical applications can be invented. The application is speculative, and there is no proof or detailed analysis to support the assumption. Examples are still paper studies
3. Analytical and experimental critical function and/or characteristic proof of concept	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative and analytical and experimental critical functions and/or characteristic proofs of concept.
4. Component and/or breadboard validation in laboratory environment	Basic technology components are integrated to establish that the pieces will work together. This is relatively low fidelity compared to the eventual system. Examples include integrating ad hoc hardware in a laboratory.
5. Component and/or breadboard validation in relevant environment.	Fidelity of the breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so that the technology can be tested in a simulated environment. Examples include high-fidelity laboratory integration of components.
6. System or subsystem model or prototype demonstration in a relevant environment (ground or space)	Representative model or prototype system or actual system that is well beyond the breadboard tested for TRL 5 is tested in a relevant environment. Represents a major step forward in a technology's demonstrated readiness. Examples include testing a prototype in a high fidelity laboratory environment or in a simulated operational environment.
7. System prototype demonstration in an operational environment	Prototype should be near or at the scale of the planned operational system. Represents a major step forward from TRL 6 and requires demonstration of an actual system prototype in an operational environment, such as an aircraft (ACFT), vehicle, or space. Examples include testing a prototype in a test bed ACFT.
8. Actual system completed and flight qualified through test and demonstration	Technology has been proven to work in its final form and under mission conditions. In all cases, this TRL represents the end of true system development. Examples include developmental T&E of the system in its intended weapon system to determine if it meets design specifications.
9. Actual system flight proven through successful mission operations	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational T&E. In almost all cases, this is the end of bug fixing of true system development. Examples include using the system under operational mission conditions.

m. Some RDECs and LCMCs have interdisciplinary materiel release review boards that review the safety, suitability, and supportability of systems before they are fielded. Depending on the type classification and the maturity of the ammunition system, the systems may be recommended for urgent, training, conditional, or FMRs to materiel release authorities, normally the JMC or Army Aviation and Missile Command (AMCOM) life cycle management commanders. Materiel release is governed by AR 700–142 and DA Pam 700–142.

4–2. Cooperative research and development agreements

a. A cooperative research and development agreement (CRDA) is a legal agreement that implements the authority specified in 15 USC 3701 et seq (The Stevenson-Wydler Technology Innovation Act of 1980, as amended). CRDAs include agreements between one or more Federal laboratories and one or more non-Federal parties under which the laboratory provides personnel, services, facilities, equipment, or other resources (not including funds) with or without reimbursement. And the non-Federal parties provide funds, personnel, services, facilities, equipment, or other resources to conduct specified research or development efforts that are consistent with the mission of the Army research and development activity.

b. CRDAs do not include procurements, grants, or other types of cooperative agreements made under the authority of other legislation. It is DA policy to use domestic technology transfer as an integral part of the research and development effort through a variety of technology transfer mechanisms and to encourage technology transfer from all appropriate research and development activities, consistent with the military mission.

c. The commanders or directors of specified Army laboratories and centers have the responsibility and the authority to license, assign, or waive rights to intellectual property developed by their activity and to support active marketing and assistance by their laboratories or centers, including participation in economic development organizations, contracting with partnership intermediaries, and providing technical assistance to State and local governments and local educational systems.

d. CRDAs are a broad and flexible authority that can be used to: spin off the results of Army research and development investment to enhance the national technology and industrial base's (NTIB's) ability to supply products and systems meeting military needs; leverage private sector innovation to aid military research and development; and lower the cost of acquiring military technology that has dual-use civilian application, by leveraged cost-sharing of research and development and economies of scale. CRDAs are widely used by Army research laboratories and RDECs to support ammunition RDT&E activities in cooperation with industry, academia, and nonprofit research centers.

e. Commanders and directors of military organizations tasked with initiating and implementing CRDAs should consult with their organization's Office of Research and Technology applications on procedures specified in AR 70–57.

4–3. International agreements and obligations

a. The United States has numerous agreements with our allies for interoperability of armament systems, ranging from large ACFT to small caliber ammunition. These agreements define technical and logistic attributes as well as testing methods for armament systems. The most frequent, and notable, of such agreements are with North Atlantic Treaty Organization (NATO) nations, but they can also be with the American-British-Canadian-Australian program and bilateral relationships, such as FMS.

b. During the concept phase, programs must account for such agreements, starting with defining the requirements for interoperability within the capability framework. Technical requirements are generally form-, fit-, function-, and safety-related specifications. Logistics requirements generally involve resupply of spares and field TMDE, and they extend to transportation and storage considerations. The NATO Standardization Office can provide access to existing agreements, and ATEC offers an index of international test operations procedures at http://www.atec.army.mil/.

c. The Systems Engineering Plan (SEP), in particular in the Stakeholder Requirements Definition section and the Requirements Analysis Processes section, needs to consider how the system will or might have to be realized to conform to the international agreements to meet U.S. obligations. When a new technology is not yet subject to international agreements but is fully expected to lead to an item with interoperability implications, the DOD must initiate a negotiations process with the appropriate allies. Examples of such recent technologies which required new agreements are:

(1) Inductively set fuzes.

(2) Counter-improvised explosive device systems.

d. It is the responsibility of each RDEC, within their mission purview, to maintain an awareness of U.S. obligations for international interoperability agreements, to incorporate them into the requirement set for their systems, and to provide support to the PEO or PM in implementing compliant armament programs.

4–4. International cooperative research, development, and acquisition

a. International cooperative research, development, and acquisition (ICRDA) is designed to improve interoperability for coalition warfare, to leverage scarce program resources, and to obtain the most advanced, state-of-the-art technology from the global technology base and IB. The Army participates in ICRDA ammunition programs and activities with allies and other friendly nations to enhance the security of the United States by contributing to one or more of the following objectives—

(1) Improving multinational force compatibility and coalition operations between the Army and armies of allies and other friendly nations by deploying interoperable equipment and/or integrated logistic support.

(2) Leveraging Army resources through cost sharing and economies of scale obtained through coordinated research, development, acquisition, and logistic support programs.

(3) Avoiding duplication of research and development efforts between the Army, its allies, and other friendly nations.

(4) Leveraging the best technologies available to equip the Army and armies of allied and other friendly nations.

(5) Addressing Army science-, technology-, and materiel-development objectives.

(6) Maintaining a strong ammunition IB for the United States, its allies, and other friendly nations.

(7) Modernizing, strengthening, and expanding existing alliances and friendships by increasing mutual understanding and information exchange in research, development, and acquisition programs and activities.

b. Types of ICRDA include information exchange; personnel exchange; loan, testing, and evaluation of technology or materiel; research and/or development on foreign or jointly developed materiel to meet U.S. needs; cooperative RDT&E efforts resulting from coproduction arrangements, FMS, or direct commercial sales; cooperative production and follow-on support of defense articles or equipment resulting from a cooperative RDT&E effort; and acquisition of foreign equipment, technology, or logistics support.

c. There are five core objectives of international cooperation in acquisition, technology, and logistics for pursuing ICRDAs:

(1) Operational, to increase military effectiveness through interoperability and partnership with allies and coalition partners.

(2) Economic, to reduce weapons acquisition cost and achieve better buying power by: sharing costs and economies of scale; avoiding duplication of development efforts; and achieving the cooperative production or sales of more weapons systems to allies and other friendly nations.

(3) Technical, to access the best defense technology worldwide and help minimize the capabilities gap between allies and coalition partners.

(4) Political, to strengthen alliances and relationships with other friendly countries.

(5) Industrial, to bolster domestic and allied defense IBs.

d. Commanders and directors of military organizations tasked with initiating and implementing ICRDAs should consult with their organization's international point of contact on procedures specified in AR 70–41.

Chapter 5
Test and Evaluation

5–1. Overview

a. Ammunition are thoroughly tested and evaluated to ensure they are safe to use and store and will reliably perform as designed. Ammunition are expended in T&E of munition-support equipment or other equipment, equipment modernization, and equipment software and security upgrades. At a defense-system level, integrated and interoperability testing and evaluation is performed using ammunition at the Service level, at the multi-Service level, and with allied nations.

b. The senior Army official providing oversight on all Army T&E policy and procedural issues is the Army T&E executive within the Office of the Deputy Under Secretary of the Army. Planning for T&E will begin at the earliest stages of the development of user needs and will be further defined during S&T efforts, system-requirements refinement, product development, and the acquisition process. System evaluators must participate in the integrated concept team review of the initial requirements documents when a new system or new technology is being considered for development.

(1) The MATDEV will form a T&E working-level integrated product team (WIPT) with the primary objective of developing and documenting the T&E strategy in the test and evaluation master plan (TEMP). Identify ammunition testing planned during system acquisition, including the live-fire T&E strategy, in the TEMP. An Army-approved TEMP is required before committing T&E resources. The TEMP is the reference document used by the T&E community to generate detailed T&E plans and to ascertain schedule and resource requirements associated with a given system. The TEMP describes the testing required, the testing personnel, the needed resources, and the requirements for evaluation. Guidance for the TEMP can be found in DA Pam 73–1.

(2) Another essential document for T&E planning is the SEP. The program manager will use the SEP to document the ammunition evaluation strategy and overall test or simulation execution strategy of a system or munition for the entire acquisition cycle through fielding. Information in the SEP will support concurrent development of the TEMP. The ammunition SEP focuses on evaluating the munition in the context of mission accomplishment, performance, safety, health hazards, and operational effectiveness, suitability, and survivability.

(3) The ammunition test schedule and review committee (TSARC) provides Army-level centralized management of resources for ammunition OT, force development test and experimentation (FDT&E), and resource support for DT not otherwise available. The TSARC recommends OT and FDT&E priorities, coordinates troop support, and reviews schedules and resources. The commander of ATEC chairs the TSARC.

(4) The TSARC recommends DCS, G–3 approval of the Five Year Test Program (FYTP). The Army FYTP is a compendium of prioritized outline test plans, approved by DCS, G–3, for a 5-year period commencing with the current fiscal year (FY). The FYTP is published every 6 months, normally in June and December.

5–2. Test and evaluation in support of acquisition and development

a. The primary purpose of ammunition T&E is to support systems development and acquisition. T&E is designed to—

(1) Identify and resolve technical and logistical issues.

(2) Support procurement decisionmaking.

(3) Promote efficiencies.

(4) Help refine requirements and development of effective doctrine, training, tactics, techniques, and procedures.

b. Army T&E will—

(1) Demonstrate the feasibility of conceptual approaches.

(2) Evaluate risks.

(3) Identify alternatives.

(4) Compare and analyze trade-offs toward an iterative process so as to verify the achievement of critical technical parameters and to answer critical operational issues and criteria.

c. Continual evaluation of ammunition informs the combat developers and MATDEVs on a proposed acquisition as the acquisition evolves from a laboratory or experiment to an identified and recognized program or project. Continual evaluation is a strategy that ensures responsible, timely, and effective assessments of the status of a munition's or a system's performance throughout its acquisition process.

d. System evaluation focuses on issues of technical and operational characteristics, performance, and safety as a part of system operational effectiveness, suitability, and survivability. The system evaluation report focuses on the capability of the munition or system to accomplish its mission in its intended environment, and it is provided to the MDA at milestone B, milestone C, and the FRP decision review.

e. Army ammunition T&E programs are structured to integrate all T&E activities as an efficient continuum. Ammunition M&S is an integral part of T&E planning and is used to reduce time, resources, and risks involved relative to the T&E programs. The integrated test and simulation strategy can include separate DT, OT, combined DT and OT, M&S, and other events that generate credible data.

f. Evolutionary ammunition acquisition strategies will be used to define, develop, produce, or deploy an initial, military useful capability (increment 1) based upon proven technology, time-phased requirements, projected threat assessments, and demonstrated manufacturing capabilities. Evolutionary acquisition provides for subsequent development, production, and deployment of increments beyond the initial capability over time (increments 2 and beyond).

g. Changes (modifications and upgrades) to an existing munition or system must be adequately tested and evaluated. A modification is a change to a system that is still in production. An upgrade is a change to a system that is out of production. Such changes can be improvements to system capabilities or fixes to correct deficiencies after the FRP decision review.

h. Nonstandard ammunition programs will establish a T&E WIPT and have an approved TEMP that will adhere to the policies and procedures for new acquisition T&E programs.

5–3. Reprocurement

a. T&E requirements for reprocurements vary depending on whether the reprocurement is for a nonstandard munition, a Government-controlled technical data package (TDP), an item from a different contractor than the original item contractor, or an item with a significant break in production (more than 2 years).

b. Reprocurements to a current military TDP require only the appropriate DT as determined by the procuring agency

c. Reprocurement of a nonstandard munition to a current performance specification from the original contractor (make and model) without significant break in production (more than 2 years) normally requires only the appropriate DT, determined by the procuring agency and the combat developer.

d. Reprocurement of a nonstandard munition requires appropriate testing:

(1) If a current performance specification from a contractor is different than the original contractor's performance specification.

(2) If the original contractor intends to field a different model.

(3) If a performance specification is modified or upgraded by the MATDEV or combat developer.

e. Assessments or evaluations (including the safety confirmation—see AR 70–1 and AR 385–10) conducted by the system evaluator will support materiel-release actions for new procurements, reprocurements, and system changes.

5–4. Joint Test and Evaluation Program

a. The office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) sponsors the Joint T&E Program to conduct T&Es and provide information required by Congress, OSD, the Commander in Chief, the Joint Staff, and DOD components relative to Joint systems. The purpose of the Joint T&E Program is:

(1) To bring two or more Services or other Government agencies together to inform them of system requirements and improvements.

(2) To examine a system's Joint interoperability.

(3) To develop and analyze testing methodologies.

(4) To evaluate technical or operational performance under the realistic conditions of interrelated or interacting weapon systems.

b. T&E of multi-Service ammunition acquisition programs are conducted on ammunition or systems being acquired by more than one DOD component. T&E planning, execution, and report writing are done by agreement among the participating services, including sources of funding and designation of the lead service. The lead service prepares and coordinates a single TEMP, a single test plan, and a single T&E report reflecting system technical performance and operational effectiveness, suitability, and survivability for each Service component.

5–5. Types of tests

a. A DT is a generic phrase encompassing M&S and engineering-type tests used to verify that ammunition design risks are minimized, that safety of the munition or system is certified, that achievement of technical performance is substantiated, and that readiness for operational T&E is certified. A DT generally requires instrumentation and measurements and is normally accomplished by engineers and technicians. It is repeatable, may be environmentally controlled, and covers the complete spectrum of munition or system capabilities. There are multiple types of DTs, including for live fire, logistics demonstration, production qualification, first article, and surveillance. Refer to AR 73–1 for additional information on types of testing.

b. OT is a field test of a munition, system, or item under realistic operational conditions with users who represent those expected to operate and maintain the munition or system when it is fielded or deployed.

c. The early user test encompasses all system tests employing representative user troops during concept and technology development or early in system development and demonstration. The early user test may test a materiel concept, support planning for training and logistics, identify interoperability problems, or identify future testing requirements.

d. The limited user test is any type of RDT&E-funded OT normally conducted during munition or system acquisition other than the initial operational test. The limited user test normally addresses a limited number of evaluation issues.

e. The initial operational test supports testing the operational effectiveness, suitability, and survivability of a munition or system operated by typical users under realistic conditions (such as combat and representative threat). Initial operational T&E is required before a major defense acquisition program proceeds beyond low-rate, initial production.

f. Follow-on OT includes production and deployment testing for munition systems. Follow-on OT is an OT that may be necessary during or after production to refine the estimates made during the initial operational test, provide data to evaluate changes, and verify that deficiencies in materiel, training, or concepts have been corrected. The follow-on OT may also provide data to ensure that the munition or system continues to meet operational needs and that it retains its effectiveness in a new environment or against a new threat.

5–6. Evaluation

Independent evaluations and assessments are designed to provide unbiased advice of munition or system development to the Army or DOD decisionmaker from the combat developer and the MATDEV. The evaluator, who is organizationally separated, will provide unbiased advice thereby ensuring a completely objective perspective. The evaluation process

consists of early and frequent assessments of ammunition or system status during development. Early involvement is required to reduce test time and cost through comparative analysis, data sharing, and use of credible data sources.

5–7. Test and evaluation funding

The RDT&E appropriation will fund testing accomplished for a specific munition or system before the production decision. Army procurement authorization and/or OMA funds are used for testing performed after the production decision. The MATDEV developing system changes will fund testing of those changes using the same appropriation that funds the development itself. The OMA will fund follow-on operational T&E.

Chapter 6
Acquisition, Procurement, and Production

Section I

Acquisition and Procurement

6–1. Army ammunition acquisition

a. The Army approval authority for all warfighting capabilities is the Chief of Staff, Army, and it may be delegated to the Vice Chief of Staff, Army. All warfighting needs in the form of capabilities documents, regardless of acquisition category (ACAT), will be submitted to HQDA for validation and approval. The Army Requirements Oversight Council (AROC) advises the Chief of Staff, Army in the assessment and prioritization of capabilities integrated across doctrine, organization, training, materiel, leadership and education, personnel, and facilities. The AROC reviews capabilities documents developed under the JCIDS process. For documents requiring JROC action, the AROC will validate documents (with or without AROC modification) and forward them to the JROC for subsequent review and approval.

b. Once an ammunition capability document is approved, the acquisition responsibility is assigned to the AAE. The AAE is solely responsible for acquisition matters within the DA and is the single decision authority for all Army acquisition matters. The AAE is responsible for approving all requests to initiate new ammunition acquisition programs and will do so only when they are supported by approved capability documents, requisite funding, and program documentation. Each Army acquisition program will have only one designated milestone decision authority (MDA), designated by duty position to ensure clear lines of responsibility. The AAE will serve as the MDA for ACAT International Cooperation and International Armaments Cooperation programs. Unless delegated to a PEO or a direct reporting project manager, the AAE will also serve as the MDA for ACAT II and III programs. If MDA authority is assigned to a PEO (from Ammunition or from Missiles and Space), the AAE will also approve the subsequent materiel development management responsibility to a program manager, project manager, or PM who reports to his or her assigned MDA.

c. The LCMC is responsible and accountable for the life cycle management of ammunition programs from program initiation through demilitarization and disposal. This will include the demilitarization and disposal of nonstandard ammunition, such as prototypes and experimental ammunition. Ammunition management can be considered for transition to sustainment after the munition item is in adequate supply to fully support user training or fielding.

6–2. Acquisition life cycle

a. The ammunition acquisition process consists of sequential DOD- or Army-level management reviews and decisions. The process begins with a materiel development decision (MDD). At the MDD, the MDA authorizes the program's entry into the acquisition management system at a point that is commensurate with the technical maturity of the proposed energetic solution. The program will proceed through a series of decision reviews that occur in accordance with event- or schedule-based criteria. The reviews are structured in logical phases, separated by major decision points called milestones. Milestones will be accomplished as a program evolves from an approved materiel capability requirement, through development, to an operational and sustainable munition or system in the field.

b. The materiel acquisition process is divided into three distinct activities:

(1) Development.

(2) Production.

(3) Sustainment.

c. The three activities are subdivided into five phases:

(1) The materiel solution analysis phase will begin with the development of an initial capabilities document (ICD) followed by an MDD review. Entry into the acquisition process will begin with the MDD; however, entry into the process does not mean that a new program has been formally initiated.

(2) The technology maturation and risk-reduction phase begins with a milestone-A decision. During this phase, the sponsor performs technology maturation activities, builds competitive prototypes, and may perform design activities leading to a preliminary design review and a subsequent capabilities development document for JROC review. The primary objective of this document is to specify the operational technical performance attributes of the munition or system that will fill the capability gaps identified in the ICD.

(3) The engineering and manufacturing development phase begins with a milestone-B decision. Milestone B is the point of formal program initiation for the Army, unless the maturity of the program justifies entry into the Defense Acquisition Management System at a later milestone. Upon completion of this phase, the sponsor delivers a capability production document (CPD).

(a) The primary objective of the CPD is to describe the actual performance of the munition or system that will deliver the required capability.

(b) The JROC objective in approving the CPD is to ensure the system being delivered meets the needs originally defined in the ICD at an affordable cost.

(c) Following approval of the CPD and milestone C, activities commence to attain type classification and materiel release of the item per AR 700–142.

(d) The type-classification process ensures the munition is acceptable for Army use prior to spending procurement funds at the FRP decision review.

(e) The materiel-release process assures the item is safe, suitable, and supportable and can be released for issue to the field.

(4) In the production and deployment phase, the approved CPD informs the MDA of the decision to enter the production and deployment of the munition or system at milestone C from a requirements perspective.

(5) In the operations and support phase, the program meets materiel availability and operational support performance requirements and is sustained and disposed of cost effectively.

d. The five phases contain six work efforts:

(1) Integrated system design.

(2) System capability.

(3) Manufacturing process demonstration.

(4) Low-rate initial production.

(5) FRP.

(6) Deployment, sustainment, and disposal.

6–3. Procurement

a. The ammunition procurement and production phase follows development of requirements and apportionment of appropriated program funds (through OSD and HQDA) to the operating agencies (PEO for Ammunition and PEO for Missiles and Space) with their assigned project management office. The PEOs, in conjunction with AMCOM and JMC, validate the continuing need for procurement of each item of ammunition, and the comptroller certifies the funds and releases them to the procurement organization for acquisition in accordance with the Federal Acquisition Regulation.

b. Once requirements have been approved and program funds have been apportioned, documentation to support the ammunition-procurement process is initiated. Before procurements can take place, a requirements package must be prepared, with the primary document being the statement of work or the statement of objectives; this document describes the Government's objectives for the effort. Prepared requirements packages are delivered to the contracting officer for the next phase in the process.

c. Once the contracting officer receives the procurement package, the solicitation, evaluation, and award phase begins. In this phase, the Government solicits interest in the proposed effort by publishing a notice in Federal Business Opportunities. Interested parties—including GOCO, Government owned, Government operated (GOGO), and private industry producers—can request and receive a copy of the detailed solicitation. Those who receive a copy of the solicitation also receive a required submission date should they wish to submit a proposal. Work to be performed at GOGO plants is established through a scope of work and the issuance of funding via a military interdepartmental purchase request (MIPR), instead of the formal contracting process. The final selection from the proposals the Government receives is not based solely on cost. Proposals are evaluated against best-value criteria, including evaluation of a contractor's technical approach to deliver product, past performance, and staffing to minimize risk to the Government. After the evaluation, a supplier is selected and a contract is awarded.

d. Although ammunition requirements and budgeted programs are expressed as complete rounds, items can be procured as components, via individual contracts, or as complete rounds, via system contracts. When procured as components, the PM breaks the rounds into procurable elements that can be awarded to a GOGO, GOCO, or a private sector supplier. Components of end items are normally shipped directly to the systems contractor or to the load, assemble, and

pack contractor for final end item assembly. System contracts are usually awarded to the private sector, and production may include the use of a mix of GOGO, GOCO, or private sector suppliers. All contracts that procure ammunition or components will include language for disposition of any rejects. Rejects will be shipped to an Army installation unless formally agreed upon between supplier and installation; otherwise, they will remain the responsibility of the supplier for disposition and disposal.

e. Contract types fall into two general categories: fixed-price contracts and cost-reimbursement contracts.

(1) When the Government has a specific, well-defined requirement, it will use a fixed-price contract. This contract type places maximum risk and full responsibility for all costs and resulting profit or loss on the contractor, and it imposes a minimum administrative burden upon the contracting parties. The price remains fixed throughout the contract's life unless the Government changes the item's TDP. The Government's only obligation is to pay the price agreed to at the time of award, regardless of whether the costs to the contractor increase or decrease during performance. When a product has a history of price fluctuations (such as copper), the Government may use a fixed-price contract with an allowance for an economic price adjustment. The fixed-price-with-economic-price-adjustment contract is still a fixed-price contract because the limits and conditions are stated in the contract.

(2) Cost-reimbursement contracts provide for payment of allowable incurred costs to the extent prescribed in the contract. These contracts establish an estimate of total cost to oblige funds and establish a ceiling that contractors may not exceed (except at their own risk) without the approval of the Government contracting officer. Cost-reimbursement contracts are suitable for research and development efforts when uncertainties involved in contract performance do not permit costs to be estimated with sufficient accuracy to use a fixed-price contract.

f. Once production commences, the LCMC will monitor the production effort—using production and delivery schedules and reports. Support comes from the Defense Contract Management Agency, whose professionals serve as information brokers and in-plant representatives for military, Federal, and allied government buying agencies throughout the life of the contract. They monitor contractors' performance, quality-assurance, and management systems to ensure that cost, product performance, and delivery schedules comply with the terms and conditions of the contracts. Procurement contracts and production delivery schedules must consider not only direct Army-funded programs but also customer orders from various funding sources for the same ammunition items and components. Production acceptance testing during this phase of the materiel life cycle is conducted in accordance with AR 73–1. Once the items have been accepted by the Government, the items are shipped to the first storage destination, usually a designated CONUS depot, although an overseas location may be required in some instances.

Section II

Production

6–4. Ammunition production base

The ammunition production base is the global manufacturing complex required to produce ammunition metal parts and components, along with propellants and explosives. It also loads, assembles, and packs ammunition components and end items. The production base consists of numerous current and planned producers categorized into three groups: GOGO, GOCO, and COCO facilities (see figure 6–1 for organic industrial base capabilities).

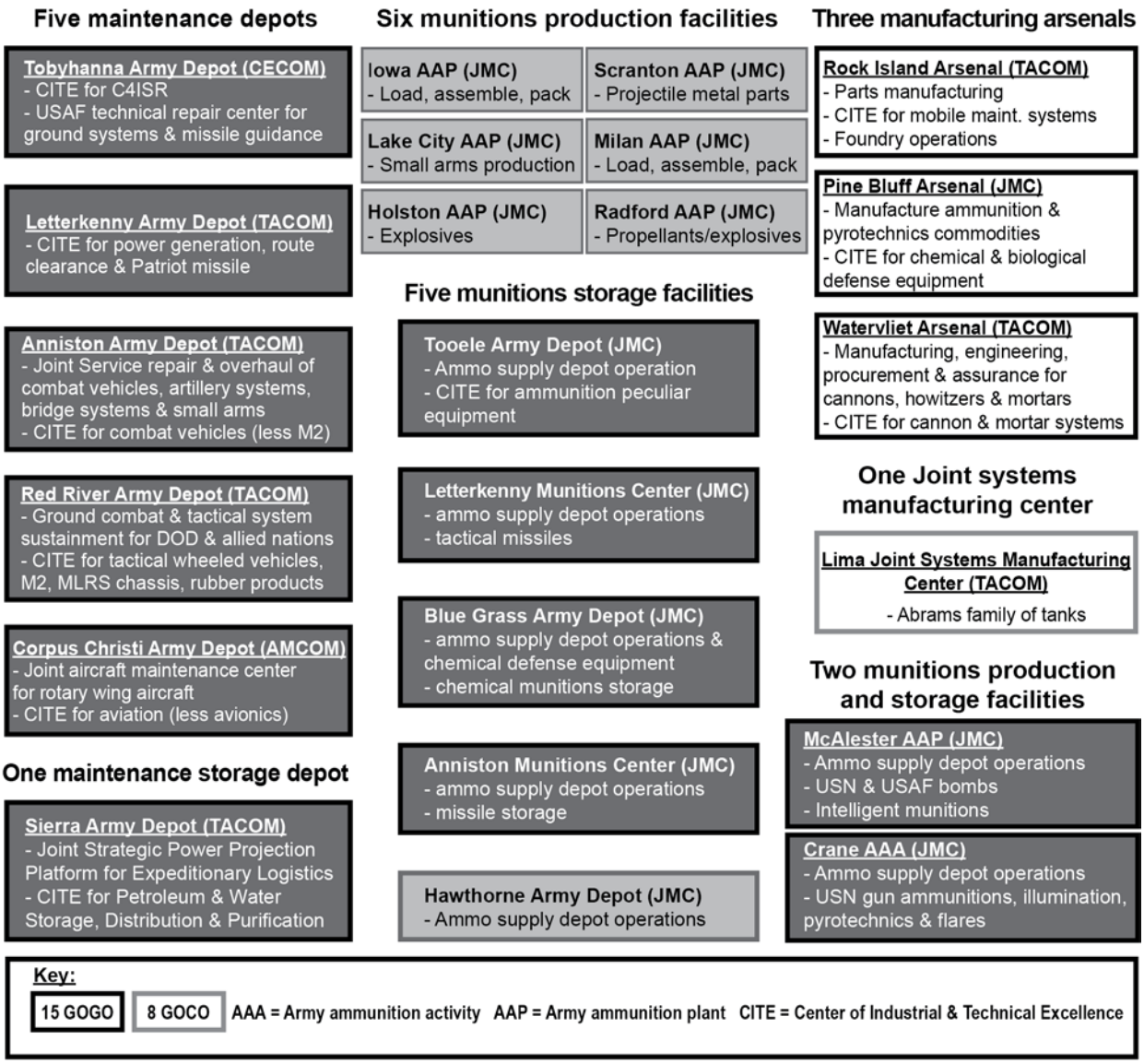


Figure 6–1. Army's organic industrial base capabilities

6–5. Government owned, Government operated

a. Crane Army Ammunition Activity (CAAA) receives, stores, issues (break bulk or container), and produces pyrotechnic candles, flares, naval smoke, and signal devices; C4 extrusion and Navy gun load assemble packs; and metal fabrication of class V and nonclass V components, kits, and devices. CAAA also renovates, disposes, and demilitarizes conventional ammunition stockpile, missile, and related components to meet Joint forces and other DOD contingency requirements. CAAA capabilities also include remote operations, environmental testing, and chemical laboratory and engineering support.

b. McAlester AAP (MCAAP) produces, sustains, delivers, recovers, and demilitarizes conventional and missile ammunition to support joint forces worldwide to enable successful U.S. military operations. MCAAP's capabilities also include training support, safety and environmental protection, and research and development support.

c. Pine Bluff Arsenal (PBA) produces smoke and specialized ammunition and has chemical, biological, radiological, and nuclear defense capabilities through manufacturing, storage, and logistics operations. PBA serves as the Joint Services' Center of Industrial and Technical Excellence (CITE) for chemical and biological defensive equipment maintenance, and it produces, tests, certifies, and trains on chemical and biological defense systems. PBA capabilities also in-

clude the chemical materiel surveillance program, specialty ammunition production, less-than-lethal ammunition production, and quality-assurance and joint-logistics services.

6–6. Government owned, contractor operated

The DOD IB currently includes seven GOCO ammunition and component production facilities.

a. Holston AAP (HSAAP) manufactures a wide range of melt-cast, cast-cured, pressed, and extruded explosives for the DOD, including research-department explosive, high-melting explosive, insensitive-munitions explosive (IMX–101 and IMX–104), and triaminotrinotrobenzene, for use in warheads of bombs, missiles, artillery shells, mortars, and fuzes. HSAAP also produces a number of formulations and specialty chemicals and is capable of large-volume acid recycling and anhydride production. HSAAP is capable of supporting research and development of new explosive formulations—including insensitive ammunition explosives, recrystallization, and purification of explosives from waste organic solvents—and performance testing of explosives.

b. Radford AAP is the sole NTIB producer of nitrocellulose, which is used in nearly all rifle and gun propellants. Radford is also the sole NTIB producer of solventless propellant, which is used in rocket and missile propulsion systems. Other critical capabilities include single- and double-based solvent propellants, nitroglycerin, acid recovery, and strong nitric and sulfuric acid concentration. Major customers are the Army, Marine Corps, Air Force, and Navy. Nitrocellulose is the key component of all single and multibase solvent propellants and solventless propellant used in DOD's small-, medium-, and large-caliber ammunition, mortars, tanks, missiles, and rockets.

c. Lake City AAP provides high-quality, small-caliber ammunition to the warfighter and operates the North American Regional Test Center. Capabilities include producing energetic components, such as percussion and electric primers, pyrotechnics, small-caliber ammunition (5.56 mm, 7.62 mm, 0.50 caliber, and 20 mm), demilitarization and disposal of small-caliber AEs, and reliability testing of small-caliber ammunition (5.56 mm, 7.62 mm, 9 mm, 0.22 caliber, 0.45 caliber, and 0.50 caliber). Major customers include the Army, Marine Corps, Air Force, and Navy.

d. Iowa AAP (IAAAP) is the only DOD installation capable of high explosive (HE), melt-pour loading of artillery and mortars, making IAAAP the DOD's prime source for these products. Iowa AAP produces and delivers component assembly and medium- and large-caliber ammunition items for the DOD. Major customers are the Army, Marine Corps, Air Force, and Navy. Capabilities include tank ammunition (105 millimeter (mm) and 120 mm), HE artillery (155 mm), large-caliber mortars (81 mm and 120 mm), insensitive ammunition explosive, smart ammunition mines and scatter mines, missile assembly and missile warheads, rocket-assisted projectiles, detonators, test ranges, medium caliber (40 mm), SPIDER grenades, demolition charges, mine-clearing line charge, mortars (60 mm, 81 mm, and 120 mm), pressed and cast warheads, and salute rounds (75 mm and 105 mm).

e. Scranton AAP mission includes manufacture of large-caliber metal parts for 105-mm to 155-mm artillery projectiles, the 120-mm family of mortar projectiles, and 5-inch/54 Navy caliber Mark 45 gun projectiles. They are the single source for the M795 155-mm high-fragmentation artillery projectile. Major customers are the Army, Marine Corps, Air Force, and Navy. Capabilities include manufacturing and testing ammunition metal parts and forge pressing and machining producing 60-mm to 8-inch-diameter projectiles.

f. Quad City Cartridge Case Facility can produce both steel and brass deep draw cartridge cases for all services, including 105 mm for the Army Stryker, the Air Force's 40 mm gun, and the Navy's 5-inch gun and 155-mm armored gun system. Quad City Cartridge Case Facility is the only producer of steel cartridge cases for the Army Stryker and the Navy 5 inch gun systems. Capabilities include 5 inch, 105 mm, 40 mm, 155 mm, and 57 mm cartridge cases.

Section III

Industrial Base Considerations

6–7. Single point failure program

a. Single point failure (SPF) is defined as only one (or no) qualified source or producer of an ammunition end item, component, or raw material. A qualified source is defined as a producer that is identified through TDP source control or qualified product list designation or that has delivered acceptable products per U.S. technology research sources within the last 5 years and has maintained that capability.

b. The SPF program is managed by Program Executive Office, Ammunition, and is chaired by the Office of the PDJS. The SPF implementation planning team conducts a process that identifies and evaluates component and end item SPFs for SMCA-procured conventional ammunition. Only SPFs affecting an end item that is actively being procured in the most recent presidential budget are included in each year's assessment process. The program archives assessments of SPFs for items that are no longer being procured.

c. The purpose of the program is to ensure the Program Executive Office, Ammunition, project managers and project directors and the Navy, Air Force, and Marine Corps are aware of the levels of risk posed to their portfolios by SPFs, allowing for effective management of these items.

(1) The items are identified primarily through drawing source controls in which there is only one approved source, or one suggested source, that is actually the only qualified source.

(2) SPFs identified by subject matter experts are also included.

(3) The identified SPFs are individually assessed for risk using factors such as number of affected end items and cost-to-replace capability. The results of the assessments then determine which items will be assessed in more detail by the affected project office. Through this process, SPFs assessed as needing more attention are identified as critical SPFs.

6–8. Section 806, Public Law 105–261

a. Under Section 806, Public Law 105–261, the DOD-designated SMCA will limit a specific procurement of ammunition to sources within the NTIB when necessary to maintain NTIB capabilities. This is in accordance with Section 2304(c)(3), Title 10, United States Code, for any case in which the SMCA determines that such limitation is necessary to maintain a facility, producer, manufacturer, or other supplier to furnish an essential item of ammunition or ammunition component in cases of national emergency or to achieve industrial mobilization.

b. To implement this requirement, the Defense Federal Acquisition Regulation Supplement (DFARS) 207.103 instructs departments and agencies to submit their conventional ammunition acquisition plans to the Program Executive Office, Ammunition (that is, the SMCA executor), and it will not proceed with procurement until written concurrence is received. In the case of a nonconcurrence, the SMCA will resolve issues with the Army's Office of the Executive Director for Conventional Ammunition.

c. The Program Executive Office, Ammunition, PDJS, manages this process. The PDJS, in conjunction with JMC and other key members of the ammunition enterprise, review each acquisition plan for impact to the NTIB at the end item, component, and subcomponent levels. Any high risks are communicated to the requesting agency or department with recommendations for mitigation, if necessary. An IB assessment is written based on these findings along with a recommendation to Program Executive Office, Ammunition, for concurrence or nonconcurrence. Concurrence results in a signed Section 806 Determination, which is a memorandum certifying that the SMCA has analyzed the procurement and it is consistent with retaining the NTIB.

6–9. Armament Retooling and Manufacturing Support Program

a. In the ARMS Act of 1992, Congress directed the Secretary of the Army under Sections 4551 through 4555, Title 10, United States Code, Chapter 434, to establish a program to be known as the ARMS Initiative Program. The Secretary of the Army delegated the ARMS Initiative Program to the Program Executive Office, Ammunition, and the SMCA Executor, who then assigned it to the PDJS, who retains full responsibility and authority for executing the ARMS Initiative Program. The Program Executive Office, Ammunition (specifically, PDJS) established the ARMS Team, which includes members from PDJS and JMC, to provide management and oversight of the ARMS Initiative Program at GOCO installations.

b. The ARMS Initiative Program encourages the use of unused or partially used portions of GOCO ammunition installations by commercial entities and Government organizations, thus compensating for reduced production volumes and installation closures that would negatively impact the local economies. The facility operating contractor at each GOCO markets the unused facilities as appropriate for each facility.

c. The ARMS Team invests PAA funds to repair, refurbish, and upgrade eligible facilities to enable each GOCO entity to make those facilities available to third parties through a tenant-use agreement between the contractor and the third-party tenant. The Government is not a party to the tenant-use agreement and does not deal directly with the tenants. Consideration for the use of the facilities (tenant revenue) generated at each GOCO remains at that GOCO and is used in a variety of ways under the responsibility of the ARMS team to create opportunities to generate additional ARMS Initiative Program revenue and to lower the total sustainment cost for the GOCO, thus lowering the total cost of ammunition and supporting the local economy at each facility. Government organizations or commercial entities interested in participating in the ARMS Initiative Program should contact the PDJS ARMS team within the Program Executive Office, Ammunition.

6–10. Center for Industrial Technical Excellence

a. Section 2474, Title 10, United States Code, requires the Secretary of the Army to designate each major organic depot maintenance activity as a CITE in one or more specific technical competencies required for core capabilities. CITE designated depots, plants, and arsenals are authorized to enter into public-private partnerships that may provide for:

(1) Employees of the CITE to perform work under contract related to the core competencies of the CITE.

(2) Private industry or other non-DOD entities to perform work under contract related to the core competencies of the CITE

(3) Private industry or other non-DOD entities to use, for any length of time consistent with DOD needs, any facilities or equipment not fully used for DOD work.

b. Secretary of the Army-approved maintenance depot CITEs include Anniston Army Depot, Alabama; Corpus Christi Army Depot, Texas; Letterkenny Army Depot, Pennsylvania; Red River Army Depot, Texas; Tobyhanna Army Depot, Pennsylvania; Sierra Army Depot, California; and Rock Island Arsenal—Joint Manufacturing Technology Center, Illinois. Two ammunition facilities are CITE certified but neither is for ammunition-specific areas. PBA is designated as the CITE for Chemical and Biological Defense Equipment and Tooele Army Depot as the CITE for ammunition peculiar equipment (APE) production.

c. Ammunition depots, plants, or arsenals proposing CITE certification will submit requests with detailed justification through command channels to Commanding General, AMC, ASA (ALT), and Secretary of the Army for approval.

Chapter 7
Stockpile Sustainment

Section I

Stockpile Reliability Program

7–1. Overview

Stockpile sustainment includes the processes and procedures essential to ensuring that warfighters receive reliable and safe ammunition at all times. It is also critical to the safe and secure functioning of our DOD strategic industrial ammunition base. Stockpile sustainment includes the ammunition stockpile reliability (including surveillance) and maintenance programs managed and executed by the DA civilian, military, and contractor ammunition workforce. The APE Program is a critical component to ammunition management and stockpile sustainment.

7–2. Ammunition Stockpile Reliability Program

a. The purpose of the Ammunition Stockpile Reliability Program (ASRP), per AR 702–6, is to provide a means of evaluating the operational readiness, serviceability, safety, reliability, and performance of ammunition in the stockpile and/or deployed for use in combat or training and to provide information necessary for decision making in the overall logistic management of ammunition retention, maintenance, modification, or replacement.

b. The DCS, G–4 is responsible for the ASRP, which is regulated by AR 702–6. The ASRP provides cradle-to-grave responsibilities for monitoring the performance, reliability, and safety characteristics of ammunition items and class V components including demilitarization. The ASRP consists of an ammunition surveillance program, a stockpile function test program, and a stockpile laboratory test program. The ammunition surveillance element of the ASRP, is executed by career program 20 QASAS personnel with supplementation from military ammunition specialists, and it applies to conventional and chemical ammunition, small and large rockets, guided missiles, and associated materiel. Detailed procedures for preparing samples for function testing and general guidelines are found in DA Pam 742–1.

c. For each ammunition item or grouping of similar ammunition items of the ASRP, a representative sampling scheme is developed. And samples are selected and subjected to controlled laboratory tests, functional tests, stockpile reliability test firings, and visual inspections to determine the reliability and condition of the current stockpile and to identify trends which may affect the overall quality. Timely identification of undesirable trends allows the ammunition manager to minimize the cost of retention of unreliable and unsafe stocks, to schedule required maintenance actions, or to establish removal and/or replacement intervals or schedule for priority of issue and use.

7–3. Missile Stockpile Reliability Program

a. Missiles are exposed to a wide range of handling and storage environments. Due to their higher sensitivity to the elements, they require a higher degree of care and maintenance. Stockpile reliability testing determines the continued performance, reliability, and safety of these fielded inventories. The goal of the Missile Stockpile Reliability Program (MSRP) is to achieve an effective stockpile reliability program (SRP) while minimizing cost, sample size, and impact to inventory. AR 702–6 requires AMC to notify DCS, G–4, of any recommendation for shelf-life nonextension that will significantly impact the Army's inventory of a weapon system.

b. Missile shelf life is the time during which a tactical missile will remain safe for handling and operations, meets acceptable reliability levels, and performs as expected in tactical engagements.

(1) Early in the development of a missile system, a shelf-life requirement for the system is determined. This is coordinated with TRADOC, included in the request for proposal, and negotiated with the prime contractor. A cost trade-off analysis is also conducted at this time. While the optimal solution is a missile with a lengthy or indefinite shelf life, this can be cost prohibitive.

(2) During system development, test and analysis is conducted to verify that the design meets the shelf-life requirement. Accelerated life testing, qualification test inferences, parts and materiel analysis, and similarity testing are used to support shelf-life verification.

(3) After fielding, the MSRP justifies any further shelf-life extensions. The MSRP has been used where applicable and, on a case-by-case basis, to extend shelf life of some missile systems by as much as 25 years. If the MSRP cannot support shelf-life extensions, expired missiles are placed in condition code (CC) J (suspended (in stock)) and are restricted from further issue or use. Shelf life is calculated in the field using the missile lot number.

(4) When and where applicable, missiles approaching shelf-life expiration should be transferred to training accounts for training expenditure rather than placement in demilitarization or maintenance status. Additionally, missiles approaching shelf-life expiration may be used to support critical RDT&E testing. Requests for transfer of missiles approaching shelf-life expiration to training accounts should be routed through command channels to the specific missile item program office at AMCOM.

(5) The MSRP provides the basis for actions to achieve the longest missile life possible. This includes identification and removal of failing hardware and lower-reliability subpopulations from the go-to-war stocks, identification of best storage and maintenance practices, adjusted engagement or deployment tactics to offset degradation trends, development of logistic solutions to minimize environmental impacts and to best position highest reliability stocks, and proactive identification of rework or replacement requirements to support timely program management decisions.

(6) The MSRP plans are customized to each missile system to account for: reliability requirement, unit cost, testability, production quantity, reparability, and projected life cycle. The plan identifies the methodology and quantities required for testing based on minimum acceptable statistical limits and confidence levels (risk). In accordance with AR 700–142, the MSRP plan is required to be published prior to FMR. In general, MSRPs include only a sufficient amount of testing every two to three years to accumulate enough data to support a shelf-life extension decision. Reduced confidence levels may be used where appropriate, sometimes as low as 70 percent. Sample requirements are consolidated when test results of similar models can be inferred to both inventories. Nondestructive hardware in-the-loop testing is also often used to substitute for a destructive component or flight testing where appropriate. MSRP plans are regularly reviewed and updated during the life of the system to take into account the evolving life cycle of the system (tactical, training-use only, or obsolete) and any knowledge gained from cumulative results of data collected.

(7) Field firing data are used to support missile shelf-life extension decisions, and AR 700–19 requires it to be submitted on each missile firing attempt. Chapter 10 of this pamphlet contains information for units to submit missile firing data reports (MFDRs). The AMRDEC reviews, scores, and analyzes MFDRs for trends associated to manufacturing strata, age, and firing scenarios. These data are also used to support assessments of malfunction reports for proper disposition. MFDR analysis is an essential element of the shelf-life decision, and it can reduce the MSRP testing requirements and costs to the Army. Missiles fired in training, however, are often not wartime assets, and data are often insufficient to support root-cause analysis of failures. In light of this, MSRP flight test firings from static test stands are often required. These tests are designed to mitigate operator-equipment error since soldier-platform involvement can introduce errors, resulting in lost data and lost test assets. They are also designed to fully test mission capabilities and can allow for testing at minimum or maximum temperature, ranges, acquisition modes, and offset angles, among other things, where degradation trends are often first identified. This type of testing environment also allows for higher fidelity data collection using full data collection suites (for example, high speed cameras and prelaunch data-links) and the ability to abort launch to save hardware for failure analysis. This can be a more cost-effective testing method since firing with military units may increase test costs due to additional coordination, training, equipment checkout, maintenance, fuel, manpower costs, and range time. Due to high operational demands, it may also be difficult to find available units to meet test-range schedules. Soldiers are preferred for supporting flight tests when both the required data can be properly collected and training value can be obtained. Information from MFDRs may be used from RDT&E testing to enhance the MSRP.

Section II

Ammunition Compliance

7–4. Ammunition surveillance

a. The ammunition surveillance program is among the most critical aspects of ammunition management. The surveillance program is designed to ensure that the ammunition stockpile is safe to use and store and will function as designed. This section provides a basic understanding of the critical tenants of an ammunition surveillance program. The surveil-

lance program is established by AR 702–6 and AR 740–1. Detailed ammunition surveillance procedures can be found in DA Pam 742–1. The objectives of an ammunition surveillance program are to evaluate fielded ammunition to detect items with increased rates of deterioration and to—

(1) Determine serviceability and identify conditions.

(2) Correct or control storage conditions and handling methods affecting the same.

(3) Detect dangerous conditions increasing the hazards of storage or use.

(4) Suspend the use of ammunition of suspect condition pending further evaluation.

(5) Segregate and report ammunition found to be unserviceable.

b. The surveillance procedures in DA Pam 742–1 and the missile system SBs prescribe inspection types, frequencies, sample sizes, and inspection standards. The Ammunition History Program (MHP) prescribes conventional munition-specific inspection standards. Ammunition defects are classified as critical, major, and minor or incidental with lot acceptance or rejection criteria specified for each, including:

(1) The observation, inspection, investigation, test, study, and classification of ammunition, ammunition components, and explosives in storage, movement, and use with respect to degree of serviceability and rate of deterioration, including:

(a) Initial receipt inspections for conformance.

(b) Cyclical (periodic) inspections for: deterioration, CL for in-use ammunition, storage monitoring for humidity-controlled or condemned ammunition.

(c) In-process inspections and audits performed during ammunition maintenance or renovation.

(2) The inspection of containers and buildings in which they are stored.

(3) The inspection of facilities and methods used in handling, storing, shipping, manufacturing, maintaining, reconditioning, renovating, salvaging, and destroying ammunition to insure compliance with applicable specifications and safety criteria per DA Pam 385–64.

(4) The preparation and maintenance of all reports and records required for the activities listed in paragraphs 7–4*a* and 7–4*b*.

c. The commander of an installation, activity, or command with an ammunition mission is responsible for ensuring all ammunition is subjected to class-V-specific surveillance functions. Nonstandard ammunition will be subject to ammunition surveillance for safety in storage.

d. A DA Civilian who is designated as a QASAS executes the ammunition surveillance function by inspection. The AMC is responsible for fielding each trained QASAS through the career program 20 Ammunition Civilian Career Management Office.

(1) A command designated as a senior QASAS will be responsible for the ammunition surveillance program at each ammunition storage area.

(2) Ammunition warrant officers (career field 890A) and ammunition specialists (military occupational specialty 89B), in the grade of staff sergeant or higher, or designated civilian technicians (including local nationals at OCONUS locations) who have been trained or certified by the Defense Ammunition Center (DAC) may supplement and assist the QASAS in select ammunition surveillance functions.

e. Material defects sufficient to cause lot rejection are reported for disposition on DA Form 2415 (Ammunition Condition Report). It provides the data necessary for the control and management of serviceable, unserviceable, and permanently suspended items; see paragraph 7–19 for preparation and submission flow. The form is located on both the MHP and the Army Publishing Directorate website, http://armypubs.army.mil.

7–5. User ammunition inspections

Do not confuse inspections conducted under an ammunition surveillance program with user inspections. Applicable technical manuals (TMs) and prescribed inspections that are to be conducted by users prior to, during, and/or after use. Absent specific instructions in TMs and field manuals, users detecting nonstandard conditions during such activities will normally contact their supporting ammunition support formation to arrange turn-in of the defective items.

7–6. Ammunition lot history

a. Ammunition is produced in batches or lots and is associated with a lot number. Maintaining lot integrity, identity, and history is essential to ammunition surveillance and explosives safety. A complete lot history provides the ammunition surveillance program and ammunition managers with a wealth of information on those particular ammunition in support of safety, performance, and reliability. Maintaining an accurate lot history also enables the ammunition management community to make otherwise subjective calls, such as CC changes, for the entire lot based on the performance of a single item in that lot. Several enablers support a strong ammunition lot history program.

b. The MHP is the official DCS, G–4 automated database used for class V items, lots, and/or serial numbers (SNs), including AMCOM LCMC-managed items that are suspended or restricted. MHP is Internet enabled and automates most

of the routine reporting and record keeping requirements of an ammunition surveillance program. Automated records include ammunition data cards, depot surveillance records, and ammunition condition reports (ACRs). Additional details on MHP can be found in paragraph 13–11 of this pamphlet as well as at the MHP website at https://mhp.redstone.army.mil/.

7–7. Ammunition information notices and missile information notices

Ammunition information notices (AINs) and missile information notices (MINs) are critical tools in supporting ammunition safety and surveillance. AINs and MINs are used to quickly disseminate critical safety, performance, surveillance, and use information to any organization storing or using the applicable munition worldwide. Surveillance organizations are responsible for disseminating and/or implementing AIN and MIN guidance, as appropriate. To be added to the Army AIN/notice of ammunition reclassification (NAR)/organizational history files distribution list, go to the website at https://jmc.aep.army.mil/mlrc/qa/qas/qasurveillance/default.aspx and click on the "Request distribution of NAR/AIN/OHF messages" link.

7–8. Malfunctions

Response to and reporting of malfunctions involving ammunition are prescribed by AR 75–1. For malfunctions causing injury or significant damage, accident reporting and investigation procedures are also specified in DA Pam 385–40. Malfunctions include hang fires, misfires, duds, abnormal functioning, and premature functioning of explosive ammunition items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions can result in temporarily or permanently suspending the use of the ammunition lot involved. Once a malfunction is reported, perform an investigation to determine the root cause. The lot(s) is (are) suspended until a decision on the disposition of the affected stocks is made. From an ASRP standpoint, the history of malfunctions for a type of munition helps to inform the respective engineering centers as to the efficacy of current designs, specifications, environmental limits, and inspection criteria.

7–9. Malfunction investigations

Malfunctions involving AEs are conducted in accordance with AR 75–1. Key responsibilities in the event of a malfunction include:

a. The QASAS or logistics assistance representative (LAR) is responsible for gathering data necessary for all reported malfunctions and for submitting a preliminary report.

(1) Make preliminary reports for a class A and class B malfunction or, when a critical defect was found, by the fastest means possible.

(2) Make preliminary reports for a class C malfunction using the MHP.

b. The activity commander's, unit commander's, or senior person in charge's unit responsibilities of the firing unit are to—

(1) Immediately cease firing suspected ammunition and notify range control or equivalent.

(2) Immediately contact one or more of the following: the local ammunition officer, installation QASAS, supporting ammunition LAR, or installation safety officer. The nearest EOD unit will be notified if the ammunition is considered hazardous.

(3) Relate all available information on the malfunction.

(4) Secure the malfunction site to prevent the removal or relocation of ammunition, ammunition components, weapons, weapons debris, and ammunition packaging until an investigation is completed and authorization for removal is granted by the investigative lead.

c. The responsibilities of the supporting installation are to ensure an effective notification procedure is in place and to support the responding QASAS, LAR, and/or EOD personnel as required to safely and securely conduct the malfunction response and investigation mission. This could include, but is not limited to, assistance in notifications, fire and emergency response, security to preserve the integrity of the malfunction or accident site, and safety and logistics support.

d. The responsibilities of the Army Combat Readiness Center are to direct and oversee an accident investigation in accordance with DA Pam 385–40 when the malfunction involves major weapon system damage, personnel injury, or work stoppage of 72 hours or more.

7–10. Explosives safety and ammunition logistics operations surveillance

a. Safety and logistics functions—including area, conveyance, major training area or range, water port inspections, and shipping document approval—are the responsibility of QASAS and safety personnel. Surveillance personnel will coordinate inspection and safety procedures with the safety director or manager whose functions include inspecting buildings and areas in which AEs are stored.

b. Where there are no QASAS and/or surveillance personnel assigned to the organization having responsibility for these functions, execute an installation services support agreement or a memorandum of agreement with the organization providing QASAS and/or surveillance personnel to perform these functions in accordance with AR 702–12. Primary areas of concern include safety while conducting operations and ammunition readiness and compliance with SOPs.

7–11. Stockpile function test and lab test programs

a. *Conventional ammunition.* For conventional ammunition, the ASRP is designed to continually measure stockpile performance and reliability so ammunition available for issue is safe, reliable, and able to perform its intended mission. Ammunition representing the worldwide stockpile of different ammunition types are periodically selected and funded for centralized function testing by JMC. Ammunition stockpile test procedures, inspection criteria, and the ASRP stockpile assessments are available in MHP. Function tests and/or laboratory tests are performed to assess the current state of the stockpile. A summary state of the stockpile report depicting assessments for all munition classes is published annually and is also available from the JMC.

b. *Guided missiles and large rockets.* Army GMLR test programs are funded, developed, and managed by Army AMRDEC. The test plans are coordinated with system program managers. The stockpile test program consists of flight testing and component testing of the various strata (lots, manufacturer, storage location, and deployment history). Comprehensive reports for each system, summarizing the cumulative results of SRP tests and analyses, are published by the AMRDEC. The objectives of these programs are to—

(1) Provide maximum assurance that GMLRs continue to meet user-established explosives safety and reliability requirements for continued storage, handling, and use.

(2) Identify and track reliability trends for GMLR items at the system and component level.

(3) Predict, establish, and validate shelf life for fielded assets.

(4) Accumulate and analyze data and findings from inspections and test to identify need for priority of issue, restrictions, suspension from issue or use, and disposal.

(5) Provide input for design improvements and logistics decisions for use in training, repair, and replacement.

c. *Propellant test programs.* The ASRP for propellant contains two distinct stockpile laboratory test programs.

(1) *Propellant Stability Program.* The Propellant Stability Program (PSP) monitors and analyzes stabilizer levels and stability trends of Army-managed propellant lots to identify potentially unstable propellants in sufficient time to safely remove them from the stockpile through use or demilitarization. The JMC Ammunition Surveillance Division centrally administers the PSP. The PSP consists of two subprograms.

(a) Master Propellant Program. Within 6 months after Government acceptance, a 5-pound sample of each newly produced lot of bulk propellant is sent to the Army Propellant Surveillance Laboratory at Armament Research Development and Engineering Center (ARDEC) or as specified in the contract. Samples are monitored throughout the life of the propellant, and master sample stabilizer trends are compared with field-stored propellant stabilizer trends.

(b) Stockpile Propellant Program. This program tests fielded Army propellant assets to assure that environmental effects are accounted for in determining their safe stored condition. Test frequencies vary depending on propellant type, lot history, and chemical stability. The Army Propellant Surveillance Laboratory at ARDEC compares field sample test results with master sample test results. The Stockpile Propellant Program includes bulk propellant, bulk-packed components, and separate loading charges.

(2) *Propellant Reassessment Program.* The Propellant Reassessment Program involves the T&E of stored bulk propellant to determine its functional serviceability, and it provides the basis for issuing propellant-loading authorizations for ammunition assembly. The functional serviceability will be determined by a laboratory reassessment test, a ballistic test, or a combination of both.

Section III

Clearance and Conventional Ammunition Maintenance

7–12. Ammunition functional clearances

The ammunition surveillance program clears (for example, approves shipping documents) ammunition for issue or special uses as follows:

a. *Clearance for shipment or issue.* Before ammunition is shipped to another installation or issued to a user, the records for the nominated lot will be:

(1) Screened by the local QASAS or equivalent for compliance with all inspection requirements of DA Pam 742–1,

(2) Checked for applicable suspensions or restrictions,

(3) Checked for suitability for intended purpose, when specified, and

(4) Determined whether it is suitable to the transport packaging condition. If suitability against any of these screening elements is in doubt, conduct additional inspections or select an alternate lot.

b. *Overhead fire clearances.* JMC will review all appropriate records to assess the suitability of ammunition nominated for firing overhead of troops during training, when such is permitted by AR 385–63 or DA Pam 385–63. The results of these assessments, whether pass or fail, are reported to the ammunition community in overhead fire supplement messages and are recorded in TB 9–1300–385.

c. *Other functional clearances.* JMC conducts similar functional clearances for ammunition lots nominated for long-term storage aboard pre-positioned maritime vessels or for FMS or other foreign assistance programs.

7–13. Technical assistance

QASAS also provides technical ammunition inspection and assistance to using units during CL and OPL inspections or as otherwise coordinated under AR 702–12, the QASAS Program, or ASCC regulations.

7–14. Conventional ammunition maintenance

a. Unlike other commodities, maintenance requirements for ammunition cannot be determined on the basis of predetermined yardsticks, such as flying hours, miles driven, or hours of operation. The degree of conventional ammunition maintenance depends on the type of deficiencies involved. And the degree can range from normal preservation and packaging activities (for example, derusting and repainting), usually performed at the retail or user level, to more hazardous operations of disassembly and reassembly with serviceable components, modification, and conversion, normally done at the wholesale level. A lesser degree of maintenance is normally required for the ammunition to be capable of withstanding long-term storage without degradation. More extensive maintenance may be required to correct deficiencies affecting safety and reliability of the item which could cause malfunctions resulting in death, serious injury, extensive property damage, or loss of expensive weapons and equipment.

b. Maintenance at the user level is normally limited to preservation and packaging (such as derusting and spot-painting) for functional training requirements or limited repacking of small quantities. More extensive maintenance or renovation is performed in theater at theater storage areas (TSAs) and in CONUS ammunition depots, arsenals, and plants. OCONUS TSAs and/or depots may be equipped to perform various types of maintenance. In some cases, the cost of maintaining and operating forward deployed test and repair equipment is cost prohibitive, generating the reoccurring need to periodically retrograde items to CONUS for maintenance purposes.

c. The chief of ordnance established the APE Program to provide specialized equipment for use in the maintenance, renovation, preservation, packaging, demilitarization, and inspection of conventional ammunition. APE was associated with the equipment as the equipment is peculiar to ammunition.

(1) The objective of the APE Program is to provide a worldwide, centralized source of standard, modern, safe, reliable, and environmentally acceptable equipment for ammunition operations and to prevent damage to ammunition or related facilities, as well as to prevent injury to personnel as a result of unauthorized or improper equipment design, use, or modification.

(2) APE is used worldwide with most of the equipment found in the organic ammunition IB (GOGO and GOCO). The equipment supports ammunition maintenance, renovation, inspection, surveillance, and demilitarization operations. The remaining APE is at retail sites, for example, ASPs at Army posts, camps, and stations and in deployed environments. APE is also used by other military services and at COCO ammunition facilities. All APE passes a rigorous safety review based on requirements in Military Standard (MIL–STD) 882E to optimize safety while APE is used for potentially hazardous ammunition operations.

(3) The APE Program is centrally managed by the Ammunition and Logistics Readiness Center at JMC, Rock Island, Ill. Tooele Army Depot, Tooele, Utah, designs, manufactures, and maintains APE and has been designated the CITE, as well as the national inventory control point (NICP), for APE. APE is provided to Army customers on a loan basis and to other customers on a reimbursable basis.

(4) Policies and procedures for the program are in AR 700–20. APE is catalogued in TM 43–0001–47 data sheets. Potential customers with common access cards (CACs) may view the APE catalog at https://prod.jmc.army.mil/apems3_catalog/.

(5) Procedures for APE requirements and requisitioning can be found in AR 700–20.

7–15. Records and reports

a. This section describes how to prepare, use, maintain, and distribute records and reports on the following Army materiel:

(1) Toxic chemical ammunition materiel.

(2) Conventional ammunition.

(3) Class V items of GMLRs.

(4) APE.

b. General and special instructions are given for the following forms for the items listed in paragraph 7–15*a*:

(1) DA Form 2407 (Maintenance Request)/DA Form 2407–1 (Maintenance Request Continuation Sheet)

(2) DA Form 2415 (Ammunition Condition Report)

(3) DA Form 2401 (Organization Control Record for Equipment)

(4) DA Form 2408–9 (Equipment Control Record)

7–16. Special instructions

These instructions do not apply to ammunition malfunctions:

a. Malfunctions are reported in accordance with AR 75–1.

b. Accidents and incidents with chemical warfare ammunition are reported in accordance with AR 50–6 and command directives.

7–17. General instructions

a. *Responsibility for submission.*

(1) Commanding officers of organizations using, handling, or storing ammunition and GMLRs are required to prepare and submit timely ammunition reports through command channels to DCS, G–4, DALO–SPM; DCS, G–3's Aviation and Missile Command; Program Executive Office, Ammunition; Program Executive Office, Missiles and Space; and HQ JMC.

(2) For GMLRs, units will submit DA Form 2407 for defective components. Instructions for completion of DA Form 2407, DA Form 2401, and DA Form 2408–9 are found in DA Pam 750–8. In addition, DA Form 2415 may be required to comply with unserviceable CC reporting.

b. *Classification.* Reports are classified by the latest security regulations. See AR 380–5 and AR 380–86 for additional guidance.

c. *Acknowledgement of receipt and replies.*

(1) Except as noted in paragraph 7–17*c*(2), a final reply is given by the appropriate command. Replies show the corrective action taken and direct action to be taken, or they state that no action is necessary. Replies also give disposition of defective items.

(2) Replies are not given for reports on unserviceable new materiel for which blanket shipping orders have been issued to return the item to the vendor.

d. *Forms.* The Navy, Air Force, and Defense Nuclear Agency organizations that use Army-designed or manufactured materiel and related instructions may send reports on their own Service's forms.

e. *Exhibits.*

(1) Exhibits are samples of an item with a discrepancy that is chosen to support materiel reports. The use of photographs, drawings, and supporting data in place of actual materiel exhibits is encouraged.

(2) Tag exhibits held for disposition instructions. For ammunition lots, use Department of Defense Form (DD Form) 1575 (Suspended Tag—Materiel), DD Form 1576 (Test/Modification Tag—Materiel), or DD Form 1577 (Unserviceable (Condemned) Tag—Materiel), as required.

(3) Mark the forms to identify the reported item and the associated lot. Keep them in order so they do not get lost or mixed up. If shipping instructions are received to return an exhibit, the shipping papers and exhibits must be marked as follows: Exhibit for MIF#/DIF#. For conventional ammunition, mark the tagged exhibits for the malfunction investigation file or deficiency investigation file, whichever is funded for investigation. Defective items identified in an ACR are not funded for investigation.

(4) Package exhibits carefully for shipment to prevent further damage.

(5) Take equipment apart to procure an exhibit only when directed and when that action is within the normal maintenance level.

7–18. The Ammunition Condition Report

The DA Form 2415 (Ammunition Condition Report) provides management information on unserviceable and permanently suspended ammunition items. The instructions for use, completion, and distribution of DA Form 2415 are outlined in DA Pam 750–8.

a. Use DA Form 2415 to report unserviceable ammunition; it may be initiated as a result of, but not limited to, the following actions. DA Form 2415 submittal is also contingent on satisfying conditions as established by the appropriate command.

(1) Ammunition inspection, including periodic inspection, receipt inspection, safety-in-storage inspection, and special inspection.

(2) Permanent suspense assignment by owning service.

(3) As specifically requested by higher headquarters.

b. DA Form 2415 is prepared as follows:

(1) For conventional ammunition and missile items, submit all data through https://mhp.redstone.army.mil.

(2) Complete a DA Form 2415 for each owner of assets and each line being reported. More than one lot number and/or multiple SNs with the same national stock number (NSN) may be reported on the same ACR.

(3) For conventional ammunition and missile items submitted through the Web site in paragraph 7–18*b*(1), include a narrative and attach a portable document format file to an email.

c. The JMC and AMCOM provide disposition instructions by email to the ACR originator within 90 days of receipt of the ACR.

7–19. Ammunition condition report submission flow and preparation

a. Do not use ACRs to report:

(1) Bulk packaging materiel (Federal Supply Classification (FSC) 8140), see AR 700–19.

(2) Ammunition malfunctions (see AR 75–1).

(3) SMCA items with expired shelf life or extended life. Report these by email to the HQ JMC item manager at usarmy.ria.jmc.mbx.amsjm-pdr-cadpad@mail.mil.

(4) Lots containing critical defectives are locally suspended, assigned CC J, and reported to the appropriate major subordinate command (MSC) by the most expeditious means.

(5) Temporarily suspended items; report these to the appropriate MSC as outlined in DA Pam 742–1.

(6) Equipment improvement recommendations; use Standard Form (SF) 368 (Product Quality Deficiency Report (PQDR)) to report equipment improvement recommendations. All Army materiel, including ammunition, is subject to quality deficiency reporting. The purpose of submitting SF 368 (Product Quality Deficiency Report (PQDR)) is to report conditions that are the result of below-standard quality workmanship or materiel deficiencies. Find reporting instructions for SF 368 (Product Quality Deficiency Report (PQDR)) in AR 702–7–1, DA Pam 738–751, and DA Pam 750–8.

(7) Incorrect manuals, drawings, forms, and specifications; use DA Form 2028 (Recommended Changes to Publication and Blank Forms) for these.

(8) Serviceable, obsolete items no longer needed; report these to the appropriate NICP.

(9) Items being tested.

(10) Operational Stinger and Javelin guided missiles without battery coolant units (BCUs).

(11) Quality deficiency reports.

(12) Marine Corps ammunition placed in CC H by specific NAR; such ammunition may be disposed of regardless of dollar value; however, on-hand quantities must be reported in accordance with NAVSUP P801/TWO24–AA–ORD–010.

(13) Industrial- and production-owned class V items (for conventional ammunition).

(14) ACRs from wholesale storage sites on Army-owned, class V items (for conventional ammunition).

b. Send all reports and ACRs through proper command channels.

c. Report, as required to the appropriate NICP, nonsingular, managed, conventional ammunition items with expired shelf life, exceeded storage limits, or cartridge-actuated devices and propellant actuated devices.

7–20. Mobile ammunition renovation, inspection, and demilitarization

a. The Mobile Ammunition Renovation, Inspection, and Demilitarization (MARID) Program is a collaborative effort between JMC and MCAAP to address ammunition stockpile reliability issues deemed beyond the scope and/or capability of a unit or installation to perform. MARID's mission is to provide a rapid, worldwide-deployable team capable of performing a wide variety of services required to retain the overall quality and reliability of the ammunition stockpile and to perform demilitarization as required.

b. A full-time coordinator at MCAAP who plans, coordinates, schedules, budgets, resources, and executes ammunition operations worldwide manages the program. The coordinator is based at MCAAP and has access to employees with diverse ammunition competencies from throughout the enterprise.

c. The program is prepared with equipment to support various requirements including materiel handling equipment, tractor-trailers (box, flatbeds, and lowboys), dromedaries, shipping containers, portable light sets, scales, loading ramps, welding and cutting capability, generators, mobile flash furnace (with air-abatement system), and a mobile metal compactor.

7–21. Procedures for requesting team support

a. Units should request MARID support via command channels to HQ JMC. Commands requesting MARID support are obligated to fund as appropriate.

b. Cost estimates based on command-provided requests for proposal can be provided.

c. ASCCs, ACOMs, and DRUs requiring MARID support will complete the MARID request, submit it through command channels to HQ JMC, and copy the MARID team lead at usarmy.mcalester.usamc.mbx.do@mail.mil.

d. For funding, submit an MIPR to HQ JMC, accompanied by the cost estimate for the specific mission.

e. HQ JMC will enter the MARID project in the Logistics Modernization Program (LMP), and the MCAAP resource manager accepts and releases the project and generates a production order to charge appropriately.

Chapter 8
Distribution

Section I

Positioning

8–1. Overview

The safe, secure, and often rapid distribution of military ammunition is a critical element of the ammunition-management process. Ammunition are distributed using multimodal Government- and contractor-owned truck, train, vessel, and air transport. The movement of military ammunition is often defined by various safety, security, and urgency of need variables. Military ammunition are often pre-positioned OCONUS or afloat to compensate for the difficulties associated with these variables as well as weight, size, ACFT and ship costs, and limitations. The movement of ammunition by ACFT should always be considered as a last resort due to cost, limited availability of ACFT, weight, or cubic volume issues.

8–2. Integrated logistics strategy

a. The JMC logistics network has installations in CONUS that perform supply depot operations (SDOs) functions (receipt, storage, inventory, surveillance, maintenance, issue, shipment, transportation, and demilitarization) for Joint Services. In accordance with a planned integrated logistics strategy (ILS), these include both primary distribution installations and archive installations.

b. Primary distribution installations perform distribution (contingency and recurring demand out-load) and some archive functions (demilitarization and deep storage or stow). Archive installations primarily perform demilitarization and deep storage or stow, and they occasionally distribute. Stored ammunition are conventional ammunition components and end items, missiles, and other ammunition items. These items occupy aboveground magazines, earth-covered magazines, ammunition sheds, and warehouses.

c. The core mission for these facilities is to manage conventional ammunition, missiles, and other class V items and to perform all required SDO activities or functions. ILS primarily addresses SDO workload. Enterprise–ILS is an Enterprise framework for optimizing readiness and efficiency across the wholesale ammunition logistics base. It addresses SDO but also captures third-party and non-SDO workloads, and it uses an approach and methodology aimed at ensuring readiness, efficiency, and effectiveness in the event of fluctuating workload and budget.

8–3. Positioning strategy procedures

The ILS positioning guidelines address placement of new production and retrograde or field returns, including demilitarization and maintenance. In support of JMC's ILS and the Enterprise–ILS, once wholesale (depot) installation roles have been assigned and regional configurations of the ammunition logistics depot network have been established (representing an effective, efficient, and economical preferred future state), an ammunition positioning and transitioning strategy is created to move toward that state. The transitioning strategy is the means to define the future state. Because it has significant effects on wholesale (depot) workload, transportation costs, wholesale efficiencies, and the logistic network's ability to meet contingency and recurring outload requirements, ammunition positioning is a critical element in keeping the logistics enterprise healthy. Further explanation of the positioning strategy and transitioning strategy guidelines can be found in the ILS Playbook.

8–4. Stockpile segmentation

a. Within the ammunition stockpile, each DOD identification code (DODIC) end item is classified as either training unique, training standard (used for both WR and training purposes), or WR depending on the intended use of the munition.

b. Within each classification, a portion of a DODIC's assets are stratified, in accordance with Department of Defense Manual (DODM) 4140.01, volume 6, as:

(1) Requirement related ammunition stock (RRMS), which includes preferred and preferred-substitute ammunition.

(2) Economic retention ammunition stock (ERMS) and contingency retention ammunition stock (CRMS), which are stock excess to RRMS but have been found economically feasible to retain.

(3) Potential reutilization stock and disposal stock, that is, stock greater than the sum of the RRMS, ERMS, and CRMS and considered excess to a military department's requirement.

c. Over time, depending on the number of assets on hand and the requirement of a DODIC, assets could shift from one category to another. RRMS assets of today could become CRMS, ERMS, and/or potential reutilization stock and disposal stock assets of tomorrow, or the opposite could occur.

d. Due to ever-changing asset levels and requirements, JMC and AMCOM conduct continual stratification analysis (at least annually) to assess and assign the aforementioned categories to the stockpile's assets.

8–5. Rules and consideration factors

a. Bearing in mind ammunition asset categorization and wholesale (depot) installation classification, follow these guidelines when positioning assets:

(1) Preferably, position RRMS assets at primary distribution installations. But they can be stored at archive sites on a case-by-case basis.

(2) Preferably, position ERMS and CRMS assets at archive installations. But they can be stored at primary distribution sites on a case-by-case basis.

(3) Position potential reutilization stock and disposal stock assets that have been determined as excess at installations with existing or future demilitarization capability, whether primary distribution or archive.

b. The primary goal of positioning is to align regional supply with regional demand. When determining the DODICs and asset levels of each to be positioned within a specific region and/or wholesale (depot) installation, consider:

(1) CONUS regional historical requirements.

(2) CONUS regional forecasted requirements.

(3) Installation storage capacity and capability.

(4) Installation contingency and recurring outload capacity and capability.

(5) DODIC life cycle management requirements (that is, maintenance and demilitarization).

(6) Installation existing and future ammunition life cycle management capabilities.

(7) FDT and second destination transportation cost and savings.

c. National Level Ammunition Capability's (NLAC's) ILS inventory-manager distribution tool enables viewing the regional distribution of a particular DODIC and its associated primary or substitute items in relation to forecasted and/or historical requirement trends. And it enables exploring various what-if scenarios using the distribution planning calculation capability.

8–6. Transitioning strategy

Once positioning has been assessed, stockage objectives have been established for each wholesale (depot) installation, and misalignments have been identified, implement an integrated transitioning strategy to correct unbalances. Transitioning plans typically consist of multiple methods:

a. *New production.* The preferred and most cost effective method is to position correctly the first time. Use this lever to place new production according to the positioning strategy. This applies to both WR and training stock. If done correctly, placing new production should be a somewhat mechanical exercise.

b. *Outside the continental United States retrograde and continental United States field returns.* Use this lever to strategically place the OCONUS and CONUS retail stock being shipped to the CONUS wholesale (depot) network. Understanding the intended future use of this stock is imperative for placing it at the right installation.

c. *Cross-leveling.* Asset transfers between Services are encouraged whenever it is financially and strategically prudent to prevent physical moves. Use this lever particularly during the stratification process.

d. *Cross-regional shipments.* Use this method to rectify a wholesale (depot) installation demand in one region by transferring assets available from a wholesale (depot) installation in another region. Correct positioning should prevent these types of shipments, but sometimes they are necessary to correct misalignments.

e. *Large-scale repositioning.* This lever is potentially more opportunistic since large-scale transportation tends to be an expensive endeavor.

f. *Demilitarization operations.* Use this lever to decrease stock that has been identified as excess or unserviceable and affects the space at an installation.

Section II

Centralized Ammunition Management

8–7. Conventional ammunition

a. Conventional ammunition are centrally managed using the Centralized Ammunition Management (CAM) concept. CAM is the Army's conventional ammunition supply chain management tool. The CAM process uses well established and efficient requisition (see figure 8–1 regarding requisition flow) and transshipment (see figure 8–2 regarding transshipment flow) process models so ammunition are strategically located within multiple CONUS regions and are delivered on time at the lowest cost possible. The CAM process begins with DCS, G–3-validated requirements and ends with delivery to the supporting ammunition supply activity.

b. The CAM office is located within the HQ JMC, Ammunition and Logistics Readiness Center. The process is centered on monthly resupply efforts for regional ammunition managers to provide accurate, monthly CAM resupply requisitions for ammunition requirements at Army ASPs within the CONUS.

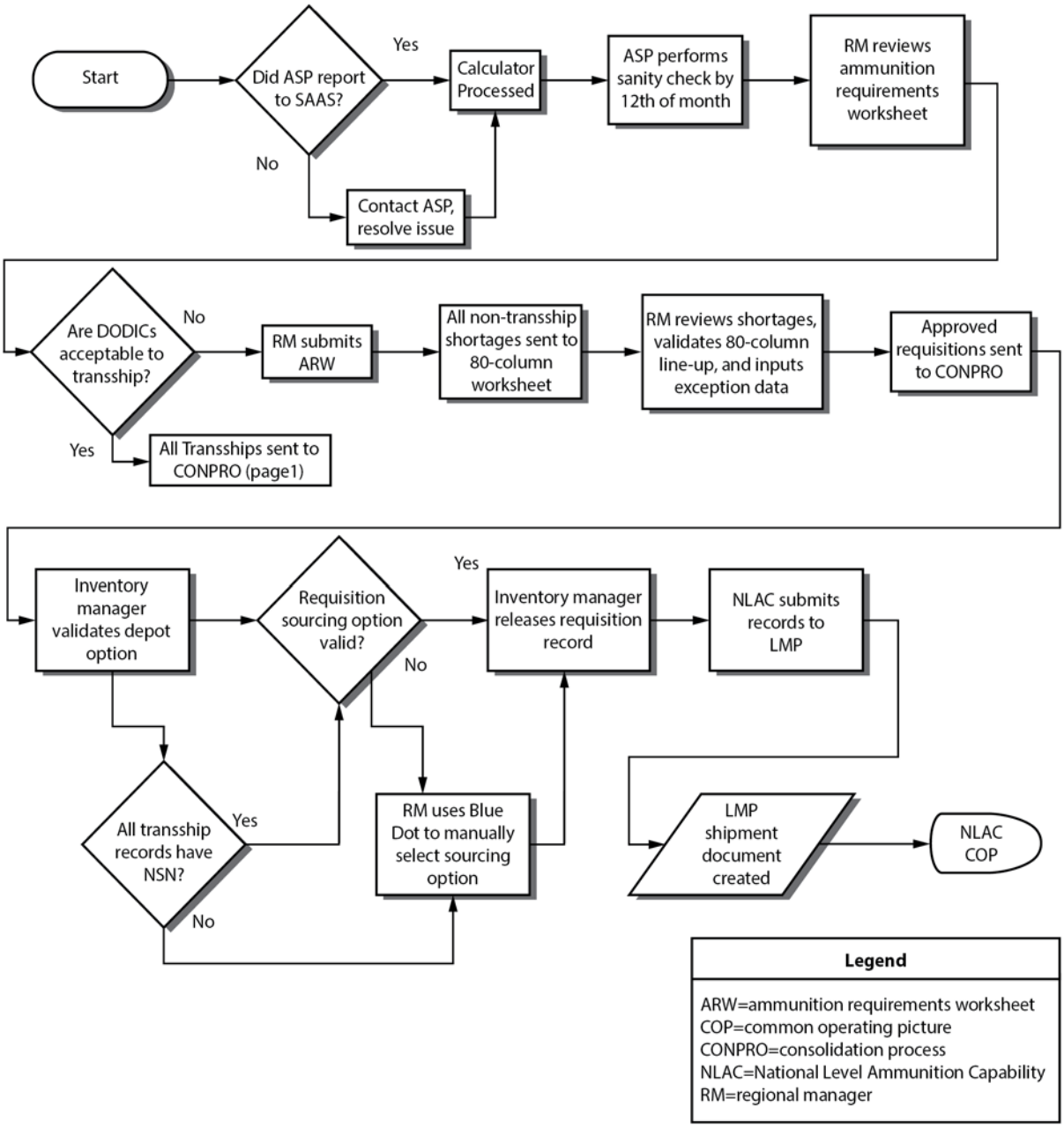


Figure 8–1. Centralized ammunition management requisition flow

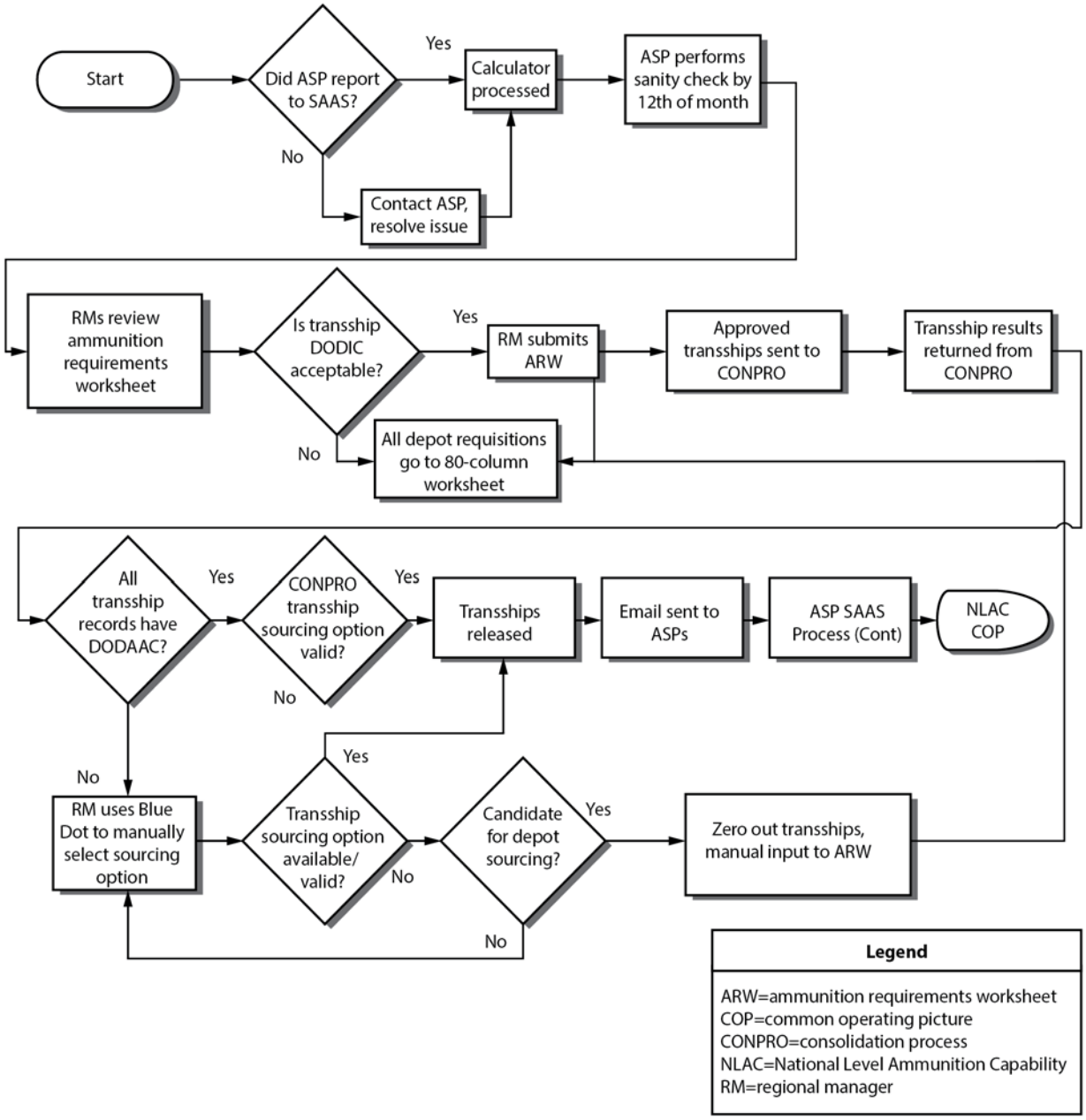


Figure 8–2. Centralized ammunition management transshipment flow

8–8. Procedures for regional managers

The following tasks and procedures are required for the CAM regional managers to provide CAM resupply requisitions for ammunition requirements at CONUS Army ASPs, once a resupply request has been submitted by the ASP through the NLAC website.

a. Resupply requests need to contain, at a minimum:

(1) Requesting ASP name.

(2) Ammunition DODIC and quantity required.

(3) Ammunition nomenclature and unit pack information.

(4) Ammunition group (calibers, noncalibers, information only).

(5) Type of ammunition management account (for example, regular training, OPL, test, Marine Corps).

(6) Required delivery date (RDD).

(7) Any special remarks.

b. Once the resupply request is submitted by the ASP, the CAM regional manager will receive a regional manager notification email. The email will contain instructions for logging on to NLAC as well as which ASP worksheet is available to review, update, and approve.

c. After logging into NLAC, from the main menu webpage—

(1) Hover the cursor over CAMM–AV (also called centralized ammunition and missile management—asset visibility).

(2) Select ASP Monthly Resupply.

(3) Select the "Ammunition Requirements Worksheet" link to display the CAM regional managers along with contact information for each and the ASPs they are responsible for.

(4) Select the "OK" button and then the appropriate region on the Ammunition Requirements Worksheet Query web page.

(5) Select the appropriate ASP name in the drop-down menu and then select the Find button. NLAC will then display the applicable ASP's request, a point of contact, approval authority, DOD activities address code (DODAAC), DODIC, NSN, shortage quantity, requested quantity, RDD, unit pack, remarks, and other applicable information for each item.

d. CAM regional managers will review the worksheet for approval. ASP managers will be contacted immediately to resolve problems and ensure all RDDs are met. Upon reviewing the request and resolving any issues, the regional manager will—

(1) Select the NLAC menu icon at the top of the screen.

(2) Select CAMM–AV.

(3) Select ASP Monthly Resupply.

(4) Select Locked Asset Posture.

(5) Select the Locked Asset Posture link.

(6) Once on the Locked Army Asset Posture Query Web page, find and select the appropriate ASP.

(7) Select the Find icon at the bottom of the page.

e. Using information from the Locked Army Asset Posture Report, verify the Ammunition Requirements Worksheet shortages (shortages will be highlighted in yellow).

f. Once the verification process is complete, hover the cursor over the NLAC menu.

(1) Select CAMM–AV.

(2) Select ASP Monthly Resupply.

(3) Select the Ammunition Requirements Worksheet tab.

(4) Select the Ammunition Requirements Worksheet link.

(5) Select the appropriate region in the Ammunition Requirements Worksheet Query Web page.

(6) Select the appropriate ASP name in the drop-down menu.

(7) Select the Find icon.

g. When the validated requirements spreadsheet is shown, select the "submit" icon on the bottom of the Ammunition Requirements Worksheet Web page.

h. Once submitted, you will see the NLAC menu icon again at the top of the page.

(1) Select the NLAC menu icon.

(2) Select CAMM–AV.

(3) Select then the Requisition-Transship Worksheet.

(4) Choose the applicable region.

(5) Choose Fort, Camp, or Station.

(6) Select the Find button.

(7) Review all columns on the CAM Regional Manager (80 Column Format) web page.

(8) If all entries are accurate, select the Submit to Ammunition Transportation Management System (MTMS) button at the bottom of the page.

i. The report can be printed or saved in a spreadsheet format.

j. Address questions or problems with this process to the HQ JMC CAM Office and/or the NLAC help line found on the NLAC homepage.

8–9. Tracking movement

CAM shipments are done using the Defense Transportation Tracking System (DTTS). Data are fed into the MTMS through a direct link with the Intelligent Road/Rail Information Server (IRRIS). The Surface Deployment and Distribution Command (SDDC) at Scott Air Force Base, Ill., maintains IRRIS.

8–10. Automated sourcing tool

A consolidated processor is located in the MTMS client and is used to source CAM documents. It uses available sources of supply and shipment attributes (such as weight, volume, compatibility, RDD, and mileage from origin to destination) to select shipment sources. The Enterprise–ILS network is used to source from the supporting regional depot first if sufficient ammunition stocks are available to satisfy the requirement. If the supporting regional depot has insufficient stock, focus consolidation efforts on creating the least amount of conveyances for any remaining, non-centrally located items.

Section III

Movement

8–11. Call forward and retrograde

OCONUS ASCCs call forward ammunition and, when possible, retrograde ammunition on the same transport as needed. ASCCs develop annual stock objectives and receive allocations at the TA4C for the Missile Distribution Plan (MIDP). Annual stock objective shortages are shipped to the appropriate commands via DCS, G–4-funded, SDDC-contracted, commercial vessels. Vessel frequency is driven by ASCC requirements and is ultimately approved by DCS, G–4. Ammunition may be flown from CONUS to an OCONUS ASCC. Airlift is limited to emergency situations and must be coordinated and approved by DCS, G–3 and DCS, G–4 due to cost restrictions and limited ACFT availability. Opportunities for training, exercises, FMS, ACSAs, and in-country demilitarization should be considered prior to retrograde of obsolete and excess ammunition to CONUS. These opportunities must be closely coordinated with DCS G–3 and DCS G–4 to ensure requirements for these items do not also exist throughout the rest of the Army or DOD.

8–12. Procedures for transportation personnel requesting commercial truck or postal movement of ammunition

Most daily movements of ammunition within CONUS are done via commercial truck or commercial mail system.

a. At the start of each workday, installation transportation office personnel will download installation-specific documents or shipping-requirement information from LMP.

b. Transfer the information via local procedures (for example, by spreadsheet) to operations personnel in support of shipment builds; update this information throughout the day as needed.

c. Complete shipping or mailing documents and review them for accuracy and exception data. Once complete, take the following steps—

(1) Check each load for compatibility in accordance with DA Pam 385–64.
(2) Determine mode of transportation.
(3) Check LMP for other documents or shipments going to the same location.
(4) Ensure the mode of transportation selected will meet RDD.

d. Upon completion of these checks, retrieve destination information from the Global Freight Management (GFM) electronic transportation acquisition (ETA) terminal facility guide.

e. Ensure that a hard copy is included with the commercial bill of lading (CBL).

f. Input shipping information into GFM ETA as follows. (This example is a single destination shipment with one document)—

g. Log in to ETA

(1) Select Freight/Cargo and select GFM.
(2) Enter log-in information.
(3) Select FAST application.
(4) Select Add New Shipment.
(5) Populate the origin address using a search.
(6) Input emergency phone numbers if not populated.
(7) Populate the shipper address using the search function.
(8) Populate the destination address using a search.
(9) Update requested pick-up and delivery information.
(10) Type the emergency phone numbers which auto populate in the remarks box.
(11) Select military code.
(12) Select DTTS (if required).
(13) Select mode.
(14) Enter shipper initials.
(15) Input desired carrier response time.

(16) Indicate, if required, carrier pick-up is less than 24 or 48 hours.

(17) In the remarks box, type in emergency response guide information based on hazard class.

(18) Populate consignee address using a search.

(19) Select pick-up service furnished.

(20) For Agent Name, enter "X."

h. Select New Equipment (on a new screen).

(1) Enter requested equipment based on size of the load (this is not on DD Form 1348–1A (Issue Release/Receipt Document)).

(2) Select yes on full visible load.

i. Select Services (on a new screen).

(1) Choose services—which are found in Federal Logistics Data on Mobile Media (referred to as FED LOG) and required services are found in the Defense Transportation Regulation (DTR)—based on SRC.

(2) Save information and return to the Equipment Entry screen.

j. Select New Unit (new screen).

(1) Choose Transportation Priority (box 27).

(2) Choose Security Risk Code (box 9).

(3) Enter the commodity code based on highest hazard class in shipment. (Commodity codes can be found in FED LOG).

(4) Enter the project code (box 41).

(5) Enter the transportation control number (TCN) (box 24).

(6) Enter the DODIC (box 27).

(7) Enter the NSN (box 25).

(8) Enter the appropriation code. (Search using known transportation account code (TAC), select and close.)

(9) Enter the remarks. Always include LOT #s (box 40). This is not a present requirement for the CBL but is a requirement for the report of shipment (REPSHIP).

(10) Enter the package count (box 19).

(11) Enter the type (box 18).

(12) Enter a description (item nomenclature box 17).

(13) Enter the quantity (total weight) (box 20).

(14) Enter the length, width, and height.

(15) Enter the cubic feet (box 21).

k. Select New Hazardous (on a new screen).

(1) Enter the United Nations (UN) identification number using search and select (box 16). The UN identification number includes preloaded proper shipping names. Select closest installation transportation office then edit the proper shipping name box to match the DD Form 1348–1A.

(2) The packing group and class division will auto populate (check against box 16).

(3) Check total hazardous quantity (check against box 20).

(4) Enter the net explosive weight (box 38).

(5) Enter the round count (box 26).

(6) Enter the certifier name (box 30).

l. Select Shipment Header (new screen).

m. Note the S-number for later reference.

n. Select Bill of Lading (on a new screen).

(1) Select Rate and Rank button.

(2) Wait for the allowed time to be put in for carrier response.

o. The awards screen will open (the carrier selection process).

(1) Print a copy of the carrier award screen and contact the carrier.

(2) Select the carrier that is available, and validate your nonuse codes if more than one populates.

(a) If the carrier is unable to pick up the shipment, create an incident report, and the next available carrier should populate.

(b) If there are no more carriers, place shipment back to incomplete and rate and rank again.

(c) If you are unable to get a carrier to move a shipment, inform the transportation office immediately to avoid missed RDDs.

p. When a carrier is selected, annotate on the carrier award screen the following. Annotate if 48 hours were given to the carrier and, if not, why they were not.

(1) Date and time the dispatcher accepted the load.

(2) Dispatcher's name.
(3) Date of pick up.
(4) Verification of secret clearances of drivers.
q. Select Shipment Tree.
r. Select the edit button next to Shipment ID (on a new screen).
(1) Update the actual pick-up date and time.
(2) Update deliver to the no-later-than date.
(3) Put in the waybill/pro number if you know it; if not insert a period.
(4) Type the standard carries alpha code per consignee.
s. Select Equipment ID (near the Go button) and select Go (on a new screen).
(1) Select appropriate furnished equipment.
(2) Annotate the date furnished.
(3) Annotate the dispatcher emergency phone number.
(4) Annotate the tractor number.
(5) Annotate the SN.
(6) Enter the seal numbers, if applicable.
t. Select signature and tally form (new screen).
(1) Put in TCN number.
(2) Select OK.
u. Go into the routing identification number block (on a new screen).
(1) Edit the appropriate routing identification numbers applicable, usually 116, 114, or 347.
(2) Click on routing identification numbers menu and then on the shipment header.
v. Click on Bill of Lading (on a new screen)
(1) Click on a printable copy to view CBL for accuracy.
(2) Go back using the arrow key and select Complete Shipment.
w. Print the CBL. HAZMAT certifier will verify information, sign and date. Make as many copies as necessary.
x. Update the seal book with seals used on shipment.
y. Input into shared folder the following information.
(1) Pick up time.
(2) LCL or B5O load or both. Include the document number if B50.
(3) Freight rate's name.
(4) Destination.
z. Input information into LMP: Load Finder.
(1) CBL number in (Details Tab) B/L # (full CBL#).
(a) Conveyance Tab enter.
(b) Transport Mode.
(c) Scheduled Date.
(d) Equipment Code.
(e) Scheduled Time.
(f) Trailer Number.
(g) Truck ID number.
(h) Carrier Code.
(i) Placards.
(j) Protective Services.
(k) Seals.
(2) Load action, inspect, seal, shipment data ready.
aa. After the shipment has departed, mark the shipment as completed in LMP.

8–13. Transportation

a. The transportation processes to move ammunition for sustainment or resupply and contingency or mobilization operations are similar. The principal difference between sustainment or resupply operations and an emergency or mobilization is the quantity of ammunition moved and the timeline requirement. All ammunition requirements or movements begin with the following four operations:
(1) The Service/user generates a requirement.

(2) A sales order for SMCA-managed ammunition is initiated for the requirement and entered into LMP. Non-SMCA items for the services and AMCOM requirements are input directly into LMP. The sales order is then sourced by the JMC ammunition inventory manager and/or the Transportation Division.

(3) SMCA document flows from LMP into LMP for processing in MTMS for JMC depots or activities to execute or source.

(4) JMC Transportation Division selects the transportation movement category and TAC for the requirement. The determination is made to move the requirement by vessel or airlift, primarily based on RDD.

b. The requirements for non-SMCA-managed missiles are passed from AMCOM through LMP to JMC depots. The depot will process the requirements into MTMS, subsequently providing requirements and movement visibility to HQ JMC. HQ AMCOM will identify vessel or air submissions when offering missile movement requirements to JMC depots. Missile requirements are coordinated between DCS, G–4; HQ AMCOM (missile managers); and AMCOM Transportation before releasing to the JMC depots. JMC depots and HQ JMC execute missile shipments based on AMCOM-provided requirement offerings for air or vessel movement.

8–14. Vessel movements

a. JMC Transportation Division notifies SDDC G–3 (the cargo-booking office) of the movement requirement and need for a vessel to move materiel from seaport of embarkation (SPOE) to seaport of debarkation (SPOD).

b. SDDC and Military Sealift Command coordinate a vessel for the movement. The voyage document number is available from SDDC G–3 once the vessel is named.

c. JMC Transportation Division sets each sales order with the SPOE, SPOD, voyage document number, and TAC in MTMS.

d. Several factors are considered when selecting which depots will source ammunition. They include stock availability, container availability, workload, in-port dates, efficient consolidation, and compatibility.

e. Depots begin processing documentation and physically loading materiel. All containerized ammunition shipping OCONUS are fitted with radio frequency identification (RFID) tags, except for FMS, pre-positioned material, and WRSA ammunition.

f. An advance transportation control and movement document (ATCMD) is sent from LMP to MTMS. MTMS transmits it to Global Air Transportation Execution System (GATES). GATES is used for air, ground, and over-ocean movements. The GATES serves as notification of materiel moving to the point of embarkation (POE).

g. JMC depots ship ammunition as break bulk and containerized. When ammunition are designated for over-ocean movement via the Navy Opportune Lift Program or via ships designed to stow break bulk, they're shipped break bulk. Pre-positioned material shipping requirements are moved via break bulk and containerized by JMC installations. They are moved to the SPOE by rail and/or truck.

h. Both MTMS and the DTTS automatically generate a REPSHIP for those shipments requiring Transportation Protective Services per DTR DOD 4900.9R.

i. Both containerized and break bulk ammunition are received and manifested by the port. The port will ship break bulk, or it is capable of loading ammunition into containers for forward movement.

j. Materiel is loaded on a vessel and moved to the SPOD.

k. Materiel is received, processed, and stored for distribution to the end user.

8–15. Air movements

a. Once JMC Transportation Division determines the material must be moved by air, the type of air movement is determined by the Air Mobility Command. There are two options: AMC channel or special assignment airlift mission.

b. If AMC channel is selected, JMC Transportation Division will set the sales order with the aerial point of embarkation (APOE), aerial point of debarkation (APOD), and TAC in MTMS. If a special assignment airlift mission is selected, although JMC Transportation Division coordinates directly with the APOE, no ATCMD is sent to Financial and Air Clearance Transportation System and the air clearance authority (ACA). Ammunition going to APOE are shipped break bulk. See the following process.

(1) Depots begin processing documentation and prepping the material for movement. Once material and shipment data are ready, the depot submits the ATCMD to Financial and Air Clearance Transportation System. The Service's ACA validates the requirement. Once the requirement is validated, the requirement is pushed to GATES. ACA coordinates with AMC airfield to get a clearance date for the ammunition into the APOE.

(2) Once clearance is received, the depot ships ammunition break bulk to the APOE. The POE checks the material into GATES and palletizes the material on a 463L pallet. The APOE then submits the material for diplomatic clearance and assigns the material to an AMC channel mission. Once all clearances are received, material is moved to the assigned APOD.

(3) The airport applies RFID tags to all 463L pallets going OCONUS.

(4) Inter-theater airlift is the responsibility of the Air Mobility Command. Because of the large volume and weight of ammunition required to support large force deployments, inter-theater airlift support is on an exception basis only.

(5) ASCC is responsible for intra-theater movement once ammunition are received in theater.

Chapter 9
Readiness

9–1. Strategic readiness

AR 525–30 defines strategic readiness as a focus on the readiness of the Army as an institution to provide sufficient, capable units to support our national military strategy. Army strategic readiness enables Army senior leaders to integrate their views of current and future strategic readiness. To respond quickly to our nation's warfighting needs, the Army must maintain ammunition readiness. Ammunition readiness applies to APS, conventional ammunition, missiles, and the DOD and commercial ammunition IB.

9–2. Ammunition readiness systems

The DCS, G–3/5/7 ammunition management office is responsible for assessing readiness to provide a common operating picture for worldwide ammunition readiness. The munitions readiness review (MRR), as outlined in AR 5–13, assesses readiness for the current period, and at 6-month intervals out to 24 months. The MRR provides an objective rating to each ammunition item based on requirements, inventory levels, stockpile quality, and production or procurement status. It is typically updated by the 15th of every month to show the readiness as of the end of the previous month.

a. Operations and Intelligence. HQDA uses the MRR information to develop a monthly update for the DCS, G–3 (DAMO–OD), Operations and Intelligence leaders, with an overview of operational issues. The MRR is a mechanism for presenting critical ammunition readiness issues to senior leaders and enables key ammunition managers to present a coordinated status. The report is developed and coordinated with DCS, G–3; DCS, G–4; DCS, G–8; ASA (ALT); and AMC to provide a consolidated Army assessment. The assessment outlines the current status of the worldwide ammunition stockpile and ammunition stocks in any ongoing operations and is briefed to senior leaders as required.

b. Strategic readiness update. The strategic readiness update indicates training ammunition expenditure trends compared to requirements over time. It is presented as part of the G–3/57 DAMO–TR training update.

9–3. Army pre-positioned stocks concept of support

a. The ammunition concept support for the APS program is to match airlifted deploying unit personnel and equipment and pre-positioned equipment with the correct types and quantities of ammunition in the theater of operations to provide initial combat and SL ammunition. To take full advantage of the APS concept, APS ammunition must be available as close to the area of employment as operations will allow. AR 710–1 provides overall guidance for the release of APS. Conditions under which APS ammunition may be released include major combat operations, small-scale contingencies, national emergencies, peacetime emergencies, and exercises.

b. When APS is shipped between theaters, the supporting CCDR in the theater where the ammunition are stored controls the movement of materiel through the theater until it arrives at the final destination or at an intermediate airport or SPOE. The supporting COCOM and AMC are responsible for loading and onward movement of the cargo at the storage site.

c. The unit employing APS ammunition will take possession at an ASCC-designated location. APS ammunition repositioning can also be used to build combat power without the commitment of a substantial Army force. The second benefit of repositioning APS ammunition is the parallel establishment of the necessary ammunition support structure which will become an early established resource, critical not only to APS ammunition issue but also to support follow-on ammunition sustainment operations.

d. Under the APS ammunition support concept, all personnel and a minimum amount of ammunition will deploy from home station via strategic airlift. Depending on the situation, the minimum amount of ammunition that will deploy with unit personnel, including small arms, pyrotechnics, and other ammunition not authorized for preposition, will be designated and approved by the DCS, G–3. Deploying units will check the Army Battle Command System, as outlined in Joint Publication 1–02, and coordinate with applicable ASCC operational and ammunition personnel to determine what ammunition will be brought from home station.

e. Equipment available in each APS unit set is visible in Army Battle Command System, which provides a deploying unit with information on the additional ammunition that it will need to bring from home station. The deploying unit sends nothing needed for immediate use from home station via sealift as this would incur delays and negate the ad-

vantages of employing APS ammunition. Ammunition not mission essential early in an operation may be sent by strategic lift for subsequent linkup with the deployed force. Commanders however, must be aware of the long delays associated with moving ammunition via sealift.

9–4. Conventional ammunition readiness

a. DODI 3000.4 directs Services to develop their ammunition requirements. The Army develops and publishes its requirements annually in the TAMR document. Both conventional ammunition and missile readiness metrics use the TAMR as a key determining factor.

b. The TAMR is a by-DODIC listing of Army near-year and out-year WR, operational, testing, and training ammunition requirements. Army requirements identify the types and quantities of ammunition the Army must have to execute its warfighting and daily operational, testing, and training missions.

c. The ARSTAF uses the Army's near-year and out-year requirements to assist in managing the ammunition stockpile. The DCS, G–3/5/7, Ammunition Management Office (DAMO–TRA) is the lead Army agency for the development, validation, and prioritization of all Army ammunition requirements for both standard and nonstandard ammunition. The only exceptions to this are the special operations forces (SOF's) unique requirements and developmental ammunition (and components) required to support testing.

d. Only test ammunition requirements are exempt from the Army ammunition requirements work group process. Test requirements are developed according to AR 73–1. The ASA (ALT) integrates and synchronizes Army ammunition test requirements to ensure the most effective and efficient use of Army ammunition prior to submitting requirements to the ATEC. The DCS, G–3/5/7, with ASA (ALT) support, approves Army test ammunition requirements in support of POM and year-of-execution resourcing.

9–5. Missile readiness

a. Maintaining a high degree of missile readiness is critical to ensuring a strong military defense. For example, key missile systems are our only viable defense against a ballistic missile threat. Missiles are one component of the DA-approved JROC risk mitigation plan and the TAMR which were designed to maintain a minimum missile inventory level required to meet warfighting requirements.

b. The Phased Array Tracking Radar Intercept of Target (PATRIOT) missile field surveillance program (FSP) was established to provide PATRIOT missile managers with an assessment of the deployed missile stockpile. The purpose of the FSP is to ensure PATRIOT missiles will be maintained at an acceptable level of readiness throughout their life cycle. The FSP provides the necessary field and operational test data to assess and project usable, deployable life for each missile configuration on a missile SN. This was done by integrating programs that evaluate missile and missile subassembly reliability, performance, and safety with other relevant data for timely corrective actions.

c. Each missile is subjected to continuing reliability and performance assessments throughout its life cycle, and is refurbished by periodic replacement of parts which no longer meet established reliability and/or performance criteria. The most critical activities in maintaining reliability of PATRIOT missiles occurs at the PATRIOT missile facility where missiles can be tested, components replaced, and missiles recertified for additional years of maintenance-free service.

d. After missile deployment, results from surveillance firings, storage and aging programs, and PATRIOT missile processing at depot-level facilities will be used to provide the bulk of data for assessments of reliability and performance. Missile firing programs are conducted to demonstrate missile performance while storage and aging programs are designed to provide data to validate and/or extend component usable life. Missile reliability is assessed during regularly scheduled test and maintenance intervals, including missile field testing by users.

e. Annually, the usable life of each limited life component (LLC) is evaluated in view of existing test data to determine whether the usable life of the LLC can be extended. Prior to extending the missile usable life, the Lower Tier Project Office reviews and evaluates the missile flight, PATRIOT missile facility reliability, and the LLC reliability test data.

f. SB 742–1410–92–009, provides criteria to determine the serviceability of legacy and PAC–3 PATRIOT missiles. Surveillance inspections are performed (prior to storage, periodically while in storage, and prior to issue) using general provisions in DA Pam 742–1. General procedures for the MSRP can be found in chapter 7.

g. Maximize use of Automated Information Systems (AISs) and automatic identification technology (AIT) to contribute to and monitor missile readiness. SRPs are those sampling programs instituted to assess and confirm the continued reliability of the missile stockpile. Each program contributes information to the Certified Round Data Management database, maintained by the system prime contractor, and provides a measure of expected reliability; however, the reliability of the entire stockpile can only be assessed when the results of all of the reliability programs are taken in concert.

h. The PATRIOT missile system employs multiple health monitoring devices and initiatives.

(1) Digital humidity indicators with memory upgrades the capabilities of the existing digital humidity indicator to monitor and record humidity over the life of the device.

(2) Recorded data are downloaded and transferred for engineering review to identify issues with missile storage.

(3) Ammunition inspectors will download data from fielded assets using the SRP QASAS user inspection device (SQUID).

i. The health of legacy PATRIOT missiles will also be monitored by a digital shock sensor device, which determines the criticality of a missile or subcomponent shock or drop. The digital shock sensor device is mounted to the canister or subassembly, and data are downloaded via universal serial bus (that is, a USB) (same as the digital humidity indicators with memory). The SQUID or stockpile QASAS user inspection device contains SB inspection requirements and is a collection device for field and depot inspections (for example, humidity, drop, and physical damage). This device streamlines QASAS inspections by reducing time to collect and report data and to generate exception reports. The SQUID maintains a history of inspections, provides data to support failure analysis, and is compatible with multiple systems.

9–6. Industrial base readiness

a. Army ammunition management is predicated upon an efficient and effective IB. The ammunition IB includes organic (GOGO and GOCO) and both CONUS and OCONUS commercial ammunition producers and logistical supply bases. It is designed, maintained, and sustained to meet the needs of our nation's warfighter. It is based upon a responsive, innovative, effective, and efficient engineering, manufacturing and logistics IB capable of meeting national security requirements. The IB process is outlined in AR 700–90.

b. The Defense Industrial Reserve Act calls for the establishment of the following:

(1) A comprehensive and continual program for the future safety and for the defense of the United States by providing adequate measures whereby an essential nucleus of Government-owned industrial plants and an industrial reserve of machine tools and other industrial manufacturing equipment may be assured for immediate use to supply the needs of the armed forces in time of national emergency or in anticipation thereof.

(2) That such Government-owned plants and such reserve will not exceed, in number or kind, the minimum requirements for immediate use in time of national emergency and that any such items which become excess to such requirements will be disposed of as expeditiously as possible.

(3) That, to the maximum extent practicable, reliance will be placed upon private industry for support of defense production.

c. In addition to the Defense Industrial Reserve Act, the Arsenal Act, Section 4532, Title 10, USC 4532, ensures that "The Secretary of the Army shall have supplies needed for the Department of the Army made in factories or arsenals owned by the United States, so far as those factories or arsenals can make those supplies on an economical basis."

d. To minimize risk within the ammunition IB, the SMCA reviews all procurements of conventional ammunition in accordance with Section 806, The Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, Public Law 105–261. Reviews will be designed to determine if the procurement poses an unacceptable level of risk to the NTIB. SMCA performs this function to address critical ammunition supply chain risks. Missile procurements are also reviewed by the SMCA through the same process.

e. IB base modernization is essential to ensure efficiencies, effectiveness, and safety. The SMCA executes an AAP and a selected depot modernization program so the organic IB facilities keep pace with advanced technologies that allow the Army to readily and efficiently equip the warfighter. The AAP modernization program will primarily target capabilities and capacities not available in the private sector. Goals of the modernization program are to—

(1) Mitigate risks to operational continuity.
(2) Improve environmental, safety, and occupational health deficiencies.
(3) Improve manufacturing efficiency.
(4) Reduce the overall operating footprint.
(5) Improve product quality.
(6) Improve quality of work environment.
(7) Increase energy conservation and sustainment.
(8) Improve the economic viability of each site.
(9) Establish initial production facilities.

9–7. Resourcing industrial base modernization

Modernization of the GOCO and GOGO production and logistics installations is primarily resourced using the following funding sources:

a. *Procurement of Ammunition, Army.* There are several initiatives funded under the PAA appropriation, including:

(1) *Providing industrial facilities.* Procures funds for modernization efforts at active GOCO AAPs and commercial facilities, including replacement of obsolete or worn production equipment, correction of deficiencies, and upgrade of infrastructures. Providing industrial facilities BLIN also establishes, augments, and improves ammunition production capabilities through modernization efforts, expands production capacity, maintains environmental compliance, and improves quality of work environment at AAPs, as well as emergency modernization and associated construction to address production disruptions at various sites.

(2) *Maintaining inactive facilities.* Procures funds to support maintenance of inactive facilities, including utilities, buildings, plant equipment, special tooling, and special test equipment being retained to support future production requirements at GOCO, GOGO, and COCO facilities. Additional efforts include supporting associated maintenance of inactive facility costs, such as grounds maintenance, fire protection, equipment security, administrative support, storage and addressing safety and environmental issues.

(3) *Laying-away industrial facilities.* Procures funding for preservation, establishment of appropriate storage environments, and movement of real property facilities and equipment required for anticipated future requirements at active and inactive GOCO, GOGO, and COCO facilities, or laid-away industrial facilities. Laid-away industrial facility funding will also support consolidation of laid-away production equipment and redistribution of production equipment that cannot be stored on-site. Laid-away efforts will also include retaining critical operational and technical knowledge of production equipment, such as engineering designs, process data, and control-manufacturing practices. Efforts will also include safety issues, environmental issues, rehabilitation, decontamination, disposal and demolition of production equipment and facilities, and environmental site assessments.

(4) *Armament retooling and manufacturing support initiative.* Sections 4551 through 4555, Title 10, United States Code, encourages commercial firms to use underused capabilities and capacities at ARMS-eligible facilities (GOCO AAPs and GOCO depots (Hawthorne Army Depot only)) for commercial purposes to maintain a skilled workforce necessary to support industrial emergency requirements for national security purposes, to demonstrate innovative business practices to support DOD acquisition reform, to reduce the cost of Government ownership of eligible facilities and to leverage private investment at eligible facilities through long-term facility-use contracts, property management contracts, and/or leases.

b. Research, development test, and evaluation. This funding supports life cycle pilot process efforts. These efforts support the implementation of the SMCA Industrial Base Strategic Plan (IBSP) through technology investigations, model-based process controls, prototyping of technologies, and industrial assessments. They also assess life cycle production capabilities required for all ammunition families, address design for manufacturability to facilitate economical production, identify industrial and technology requirements, and address the ability of the production base to rapidly and cost effectively produce quality products.

c. Military Construction, Army. Provides for facility construction modernization at GOGO installations and Hawthorne Army Depot for construction that exceeds $750,000.

d. Unspecified Minor Military Construction, Army. Unspecified Minor Military Construction, Army, is under Military Construction, Army, and for construction of $750,000 or less.

e. Capital Investment Program under the Army Working Capital Fund. Provides for facility and equipment modernization at Army Working Capital Fund installations (GOGO production and logistics) and is depreciated through each installation's annual net operating revenue overhead production rate for the execution year plus two budget years. It relies on a consistent level of customer orders.

f. Sustainment, restoration, and modernization under Operations and Maintenance, Army. OMA–Sustainment, Restoration, and Modernization provides for sustainment, restoration of existing structures, and some modernization and minor construction.

9–8. Identification of critical organic manufacturing technologies

a. Similar to Section 2464, Title 10, United States Code, (core depot-level maintenance and repair capabilities), it is essential for our national defense that the DOD maintain a core ammunition manufacturing capability that is Government-owned to ensure a ready, reliable, and controlled source of technical competence and resources to ensure effective and timely response to mobilizations, national defense contingency situations, and other emergency requirements.

b. Per AR 700–90, Section 2535, Title 10, United States Code establishes that, to the maximum extent practicable, reliance will be placed upon private industry for support of defense production, yet it is necessary to maintain industrial manufacturing capability for production of critical items to provide production capacity not available in private industry or to assist private industry in time of national disaster. With support from the DOD Ammunition Enterprise, the Secretary of Defense identifies core manufacturing capabilities as described:

(1) *Ammunition industrial base organizations.* Program Executive Office, Ammunition, and Program Executive Office, Missile and Space, partnered with the AMCOM; JMC; ARDEC; AMRDEC, Army, Sustainment Command; and

numerous additional commands, organizations, staffs, and commercial industry partners to form the ammunition enterprise. The ammunition enterprise seeks to achieve the highest possible degree of effectiveness and efficiencies in DOD operations for production and acquisition of top quality ammunition for U.S forces. All of these organizations play important roles in IB readiness. Roles and responsibilities for each of these can be found in chapter 1. While other service liaisons are represented within the ammunition enterprise, the Joint Ordnance Commanders Group (JOCG) ensures that it fully supports the needs of our joint warfighting force.

(2) *Composition of the ammunition industrial base.* In addition to the commands, organizations, and agency partners that make up the ammunition enterprise, there are GOGO, GOCO, and COCO facilities that produce, store, issue, receive, sustain, and demilitarize ammunition. An overview of these facilities can be found in appendix J and in figure 9–1.

9–9. Long-term industrial base strategic planning

a. In accordance with DODI 5160.68, the SMCA executor shall "Lead in the development and publication of an overarching conventional ammunition industrial base strategic plan that supports the Military Services and USSOCOM's conventional ammunition requirements as reflected in the Future Years Defense Program (FYDP)."

b. The purpose of the SMCA IBSP is to establish a management framework for posturing the ammunition production and logistics supply chain to effectively and efficiently respond to current and future conventional ammunition requirements.

(1) The four major goals of the SMCA IBSP are:

(a) Ensuring readiness while balancing acquisition management and IB risks.

(b) Ensuring depot logistics readiness while balancing stockpile requirements (operational readiness) and financial management (stockpile management funding required versus received) risks.

(c) Transforming the IB to meet current and future requirements.

(d) Operating effectively and efficiently.

(2) Overarching strategies of the SMCA IBSP include:

(a) Factoring IB considerations into the acquisition process.

(b) Synchronizing acquisitions and investments to ensure the required manufacturing and logistics capabilities remain available and viable.

(c) Ensuring acquisitions will posture and sustain the production base.

(d) Sizing the IB infrastructure to retain readiness and maximizing operating efficiencies to reflect DOD strategic guidance and economic realities.

(e) Identifying and implementing opportunities for greater Joint Service activities.

1 Hawthorne Army Depot
Hawthorne, NV
- Western Area Demil Facility
- Supply Depot Operations

2 Tooele Army Depot
Tooele, UT
- Supply Depot Operations
- Ammunitions Peculiar Equip

3 Rock Island Arsenal
Rock Island, IL
-HQ Joint Munitions & Lethality LCMC
-HQ Joint Munitions Command
-Quad City Cartridge Case Facility (Metal Parts, Steel Ctg Cases, 5" Navy gun &105mm Army Strkyer)

4 Iowa AAP
Middletown, IA
- Missile Warheads
- Load Assemble & Pack (120mm Tank, 105/155mm Artillery)

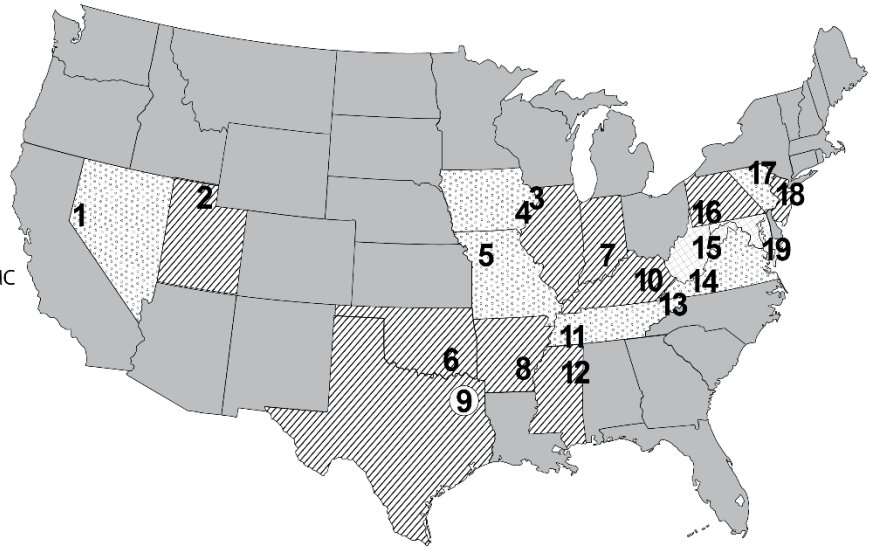
5 Lake City AAP
Independence, MO
- Small Caliber
5.56, 7.62 & .50Cal; 20mm

6 McAlester AAP
McAlester, OK
- 500,1000 & 2000lb Bomb LAP
- Intelligent Munitions
- Supply Depot Operations Defense Ammunition Center
- White/Red Phosphorus
- Smoke/Obscurants
- Supply Depot Operations

7 Crane Army Ammunition Activity
Crane, TN
- 5"/54 Cal & 76mm Load, Assemble & Pack
- Illum, Pyro, Flares
- Supply Depot Operations

8 Pine Bluff Arenal
Pine Bluff, AR
- White/Red Phosphorus
- Smoke/Obscurants
- Supply Depot Operations

9 Red River Munitions Center
Texarkana, TX
- Supply Depot Operations
- Missle Storage
- Demil



10 Blue Grass Army Depot
Richmond, KY
- Supply Depot Operations
- Chemical Defense Equipment

11 Milan Army AAP
Milan, TN
- No production Mission

12 Anniston Munitions Ctr.
Anniston, AL
- Supply Depot Operations
- Missile Storage
- Demil

13 Holston AAP
Kingsport, TN
- RDX and HMX Explosives, and IMX formlations

14 Radford AAP
Radford, VA
- Solventless Propellent
- Nitrocellulose

15 Allegany Ballistics Laboratory
Rocket Center, WV
- Load, Assemble and Pack
- Fuzes

Storage Facility Legend

Army GOGO Installation
Army GOCO Installation
Navy GOGOa or GOCO
BRAC Site

16 Letterkenny Munitions Ctr.
Chambersburg, PA
- Supply Depot Operations
- Tactical Missiles

17 Scranton AAP
Scranton, PA
- Projectile Metal Parts (155mm Artillery & 120mm Mortars)

18 Picatinny Arsenal
Picatinny Arsenal, NJ
- PEO Ammunition and 6 PMOs
- Armament Research, Development & Engineering Center

19 Naval Surface Warfare Center-Indian Head Division
Indian Head, MD
- Cartridge Actuated Device (CAD)/ Propellant Actuated Device (PAD)

Figure 9–1. Overview of storage facilities

Chapter 10
Reporting

Section I

Preparation of Reports

10–1. Overview

This chapter provides reporting procedures for the Worldwide Ammunition Report System (WARS), for preparing the WARS reports, and for preparing MFDRs and firing data reports for the Excalibur artillery round.

10–2. Companion Army regulation

Policies, responsibilities, and guidelines for reporting issues, receipts, and expenditures of class V materiel (that is, Ammunition, Army, and Commodity Classification) are in AR 700–19.

10–3. Description

WARS performs two functions:

a. User reporting, which consists of a consolidated database, generated from various accountable property systems of record (that is, Standard Army Ammunition System (SAAS) and Global Combat Support System—Army (GCSS–A)).

b. WARS reporting, which consists of fixed and user-defined reports providing worldwide ammunition asset posture, information for preparing budget and Army financial statements, other Services' ammunition asset posture for ammunition stored at Army ammunition supply activities, SNs of all physical security risk category (CAT) I missiles or rockets and PATRIOT missiles reported for unique item tracking (UIT), and user-defined custom reports.

10–4. Reports and data description

a. *Worldwide Ammunition Requirements and Assets Report (Part IA).* This report contains conventional and GMLR data.

b. *Worldwide Ammunition Tonnage and Cost Report (Part I–C).* Extract data for computation of this report from the WARS database. Weight and cost factors will be the standard weight or cost for each applicable DODIC in the WARS master data record. Those cost factors are for planning purposes only and are not to be used for pricing.

c. *Worldwide Ammunition Inspection and Lot Number (Serviceability) Report (Part III).*

(1) Reportable items include class V items assigned an NSN. In addition to items of issue, these include missiles, explosive loaded components, and bulk propellants.

(2) This report includes location and condition code of ammunition items by lot number in support of worldwide quality assurance and maintenance programs.

d. *Worldwide Ammunition Readiness Assessment Report (Part IV).* Reports are generated from data available in the WARS database and are based on input provided by the requirements and assets, maintenance, and serviceability modules.

e. *Physical security risk category I missiles and rockets and Phased Array Tracking Radar Intercept of Target unique item tracking report.* This report contains ammunition requirements and asset posture for all CAT 1 ammunition, including PATRIOT missiles.

f. *User-defined reports.* These reports are fully customizable from any of the data elements provided by the systems.

g. *Data for management.* The WARS will furnish data required for---

(1) Budget estimates.
(2) CAT 1 missile or rocket and PATRIOT missile tracking.
(3) Supply control studies.
(4) TA4C and MIDP.
(5) Distribution planning.
(6) Procurement initiation.
(7) Scheduling.
(8) Readiness assessment.
(9) Maintenance programs.
(10) Stockpile reliability.
(11) Ammunition serviceability.
(12) Various other requirements, as determined by DCS, G–4.

10–5. Report contents

Reports will provide the following:

a. Visibility of ammunition by DODIC, location, CC, ownership, quantity, and lot number and/or SN.

b. Worldwide ammunition asset posture information for preparing for missile and conventional ammunition distribution planning, allocation, readiness assessment, maintenance and demilitarization programs, stockpile reliability, and other logistical studies pertaining to ammunition.

c. Asset information for preparing budget and Army financial statements.

d. Other Services' ammunition asset posture for ammunition stored at Army ammunition supply activities.

e. SNs of all physical security risk CAT I missiles or rockets and PATRIOT missiles reported for UIT.

10–6. Worldwide Ammunition Report System policy

Reporting requirements are:

a. Each reporting activity will submit ammunition on hand asset posture and transactional history to WARS electronically via logistics system interfaces. If a logistics system interface between reporting activity and WARS is not operational, then a manual report will be submitted.

b. The WARS Office will maintain a 2-year current transaction history of data and 15 years of report history.

c. Reporting activities will submit ammunition asset posture and transactional history at least once every 30 days.

d. Reporting activities will process reconciliations at least once every 30 days (see tables 10–1 and 10–2 for types Q1 and R1, respectively).

Table 10–1
Asset reporting format—record type Q1, other reconciliations

Item	Data name	Length	Configuration item	Position	Remarks
1	Command code	3	Number	1–3	
2	Route identification code	3	Text	4–6	
3	Transaction format indicator	1	Text	7	Q
4	Record type	1	Text	8	1
5	DODIC	4	Text	9–12	
6	NSN	13	Text	13–25	
7	Lot no.	16	Text	26–41	
8	Condition code	1	Text	42	
9	Ammo owner code	1	Text	43	
10	Manufacture year	2	Text	44–45	
11	Record quantity	7	Text	46–52	
12	Defect status code 1	1	Text	53	
13	Defect component code 1	2	Text	54–55	
14	Defect classification code 1	1	Text	56	
15	Defect remark code 1	2	Text	57–58	
16	Defect status code 2	1	Text	59	
17	Defect component code 2	2	Text	60–61	
18	Defect classification code 2	1	Text	62	
19	Defect remark code 2	2	Text	63–64	
20	Defect status code 3	1	Text	65	
21	Defect component code 3	2	Text	66–67	
22	Defect classification code 3	1	Text	68	
23	Defect remark code 3	2	Text	69–70	

Table 10–1
Asset reporting format—record type Q1, other reconciliations—Continued

Item	Data name	Length	Configuration item	Position	Remarks
24	Defect status code 4	1	Text	71	
25	Defect component code 4	2	Text	72–73	
26	Defect classification code 4	1	Text	74	
27	Defect remark code 4	2	Text	75–76	

Table 10–2
Asset reporting format—record type R1, other reconciliations

Item	Data name	Length	Configuration item	Position	Remarks
1	Command code	3	Number	1–3	
2	RIC	3	Text	4–6	
3	Transaction format indicator	1	Text	7	R
4	Record type	1	Text	8	1
5	DODIC	4	Text	9–12	
6	Space	8	Text	13–20	
7	Basic load	10	Text	21–30	
8	Training	10	Text	31–40	
9	APS	10	Text	41–50	
19	Other	10	Text	51–60	

Notes:
[1] Receiver: Contractor–WARS–S/T.
[2] Action: Transaction processing.

10–7. Submission procedures

a. Formats of reports. Feeder data shall be submitted daily in the record format described in paragraphs 10–16 and 10–17.

b. Reporting dates.

(1) Table 10–3 contains a schedule of due dates for field commands to submit feeder reports to the JMC. It also contains the publication dates of the consolidated WARS reports.

(2) The due date for receipt of feeder data and publication of reports during a mobilization or emergency period will be in calendar days. During peacetime, due dates will be in terms of working days (based on a standard 5-day workweek). Notification of the change from working days to calendar days after the cutoff will be made by the WARS manager.

Table 10–3
Report frequency due dates

Document	Frequency	From	Cutoff	To	Due date
Requirements and Assets Report Feeder Report (Parts I–A)	Monthly	Reporting activities	End of each calendar month	JMLCMC	Daily
Requirements and Assets	Monthly	Joint Ammunition Life Cycle Management Center (JMLCMC)	None. Distribution		
Report (Part I–A)			18th day after cutoff		

Table 10–3
Report frequency due dates—Continued

Document	Frequency	From	Cutoff	To	Due date
Requirements and Assets Reports (Part I–C)	Monthly	JMLCMC	None. Distribution 15th day after cutoff		
Prep Ship Report (Part I–J)	Monthly	JMLCMC	None. Distribution 15th day after cutoff		
Feeder Report (Part III)	Monthly	GOCO and contractors	End of each month	JMLCMC	Last working day of month
Inspections and Lot Number Reports (Part III A–F) (III–C not used)	Monthly	JMLCMC	None. Distribution 15th day after cutoff		
Ammunition Readiness Assessment Reports (Part IV) WRSA	Monthly	JMLCMC	None. Distribution 15th day after cutoff		
Test Requirements Feeder Report (Part V–I)	Monthly	Reporting activities	End of each month	JMLCMC	Last working day of month
Test Requirements Feeder Report (Part V–II)	Semiannual	Reporting activities	End of February and September	JMLCMC	1 March and 1 October
SAAS–ASP Transaction Reports	Daily	Reporting SAAS–ASP	Daily	SAAS–materiel management center (MMC)	When there is activity at the SAAS–ASP
SAAS–MMC Transaction Reports	Daily	Reporting SAAS–MMC	Daily	WARS	Daily
Ammunition basic load and OPL	Semimonthly	Unit property books	1st and 15th of the month	WARS	9th and 27th of the month
National (wholesale) depot level activity	Daily	WARS	Daily	WARS	Daily

10–8. Worldwide Ammunition Requirements and Assets Report (Part I)

a. The Worldwide Ammunition Requirements and Assets Report is designed to provide the worldwide logistical data required for budget estimates, supply studies, allocations, distribution planning, procurement initiation, scheduling, readiness assessment, and various other logistical factors applicable for conventional ammunition and GMLR items.

b. Paragraphs 10–6 through 10–8 provide instructions to prepare the worldwide ammunition requirements and assets reports. In part I of the report, the commander's statement of requirements are assets necessary to perform the mission; they become programming requirements once validated by the DCS, G–3/5/7 (DAMO–TRA).

10–9. The Worldwide Ammunition Requirements and Assets Report, Part I–A, Monthly Report

The WARS Office JMC is responsible for the preparation, finalization, publication, and distribution of this report. The DCS, G–3/5/7 validates all requirements. Enter only validated requirements into WARS. Address questions concerning preparation and distribution of the report to: Commander, U.S. Army Joint Ammunition Command (AMSJM–MMI), 2695 Rodman Ave., Rock Island, IL 61299–5500.

a. Part I–A will be published as noted in table 10–1.

b. The two-section linear or columnar format is as follows:

(1) Section I–Requirements/Assets.

(2) Section II–Remarks.

c. The report consists of conventional ammunition in prime DOD Ammunition Code (DODAC) order followed by GMLR items in prime DODAC order. Each prime DODAC page consists of a heading and two sections.

d. The heading contains prime DODAC, secondary DODAC and nomenclature of the prime item, unit of report, and period of report.

e. Section I contains the requirement and asset data reported by the ACOMs and JMC CONUS depots. Enter only DCS, G–3/5/7 validated requirements into the report as follows:

(1) Section I will have eight major columns containing the following information:

(a) Activity/Purpose.

(b) Stockage objective.

(c) On-hand serviceable (CCs A, B, C, and D).

(d) On-hand unserviceable (all unserviceable CCs other than H).

(e) On-hand total CCs E and N.

(f) In transit.

(g) Receipted during the reporting period.

(h) Issued during the reporting period.

(2) Lines for each ACOM will include:

(a) APS (when applicable).

(b) Unit CL.

(c) Unit CL issued.

(d) Unit OPL issued.

(e) Others.

(f) Training.

(g) Total.

(3) The data for CONUS depots will be combined and will include the following lines:

(a) General issue.

(b) Army preposition stocks 1.

(c) Parachute rigged.

(d) FMS.

(e) CL not-to-accompany troops.

(f) OPROJ.

(g) Special defense acquisition fund.

(h) Excess assets.

(i) FMS intended.

(j) Test.

(k) Others.

(l) Total depot/plant/arsenal/contractor.

(4) Section I will have the following total lines:

(a) Army total worldwide (U.S. owned).

(b) WRSA countries.

(c) Total worldwide.

(d) Total Army assets worldwide (total for columns identified in paragraphs 10–9*e*(1)(*c*) through 10–9*e*(1)(*f*).

f. Section II contains remarks. These remarks should clarify entries in the report.

g. On-hand assets within reporting commands will be stratified within the Report Control System CSGLD–1322 (R1) MIN as follows:

(1) Application of assets to fill CL stockage objective, OPROJ, APS, and training requirements.

(2) Assets in excess of requirements should be stratified in the training account where training requirements exist. In cases where no training requirements exist, excess assets should be stratified in other accounts where requirements for these assets exist.

(3) In some isolated cases, when there are assets on hand for which no requirements exist, these assets should be stratified in the training account, except when assets can be applied as an acceptable substitute to an item that has a shortage.

(4) As an exception to paragraph 10–9*g*(3), if assets are on hand for which no requirements exist however the assets can be applied as an acceptable substitute to an item that has a shortage.

10–10. Worldwide Ammunition Cost and Tonnage Report (Part I–C)

a. The report will show, by ACOM and CONUS depots, the total tonnage and dollar value for the applicable elements listed as follows:

(1) Stockage objective.

(2) On-hand serviceable.

(3) On-hand unserviceable or repairable.

(4) On-hand total E and N.

(5) In process.
(6) In transit to theater.
(7) In transit in theater.
(8) Receipts during the reporting period.
(9) Issues during the reporting period.
(10) Worldwide totals.

b. The report will be compiled at JMLCMC. Extract data to compute the report from the transaction data received from the monthly Requirements and Assets Report. Weight and cost factors will be: the individual item cost and weight for each applicable DODIC, included in the master data record at JMLCMC, and used to compute tonnage and cost data. These cost factors are for planning purposes only and are not to be used for pricing.

c. The Worldwide Cost and Tonnage Report will include an all-items rollup section for conventional and GMLR.

d. The Family Grouping section will also contain ton and cost pages for each of the following groups:

(1) Conventional.
(a) Small arms through 40 mm.
(b) 57/75/76 mm.
(c) Mortars.
(d) Tanks.
(e) 105 mm Howitzer.
(f) 155 mm Howitzer (including propelling charges and primers).
(g) 165/175 and recoilless rifle (90 mm, 105 mm, and 106 mm).
(h) Grenades.
(i) Rockets.
(j) Mines.
(k) Riot control/smoke pot/thickener.
(l) Demolition/crypto equipment/cartridge actuated devices and propellant actuated devices.
(m) Signals/simulators.
(n) Fuzes.
(o) Nonlethal ammunition.
(2) GMLRs.
(a) PATRIOT missiles.
(b) Stinger basic/post.
(c) Stinger test.
(d) Stinger block 1.
(e) Stinger residue.
(f) Stinger reprogrammable microprocessor.
(g) Stinger launch simulator.
(h) Army Tactical Missile System (ATACMS).
(i) Hellfire.
(j) Hellfire II.
(k) Hellfire practice/training.
(l) Multiple Launch Rocket System (MLRS).
(m) MLRS practice/training.
(n) Tube-launched, optically tracked, wire-guided (TOW) missile high-explosive antitank TOW missile 2A, TOW missile 2B, TOW missile Aero.
(o) TOW missile practice/training.
(p) Javelin.
(q) Javelin test.
(r) Javelin residue.

e. The report shall reflect short-ton totals in units of issue as each and dollars in units of 1,000.

10–11. Pre-positioned Ship Report (Parts I–J)

This report contains listings of the ammunition items on board the ships for the Army near term pre-positioned force. The report is published monthly to update the dollar value because of changes in catalog cost and/or as required because of downloading and inspection of a ship. The report is in three parts:

a. Part I lists the quantity on board each ship (by name) and the tonnage and dollar value of the items.

b. Part II lists the total quantity in short tons and dollar value, by DODIC, for all ships. All ships are rolled together by tonnage and dollar value for both conventional and GMLR items.

c. Part III includes conventional and GMLR items that are separated and subtotaled by tonnage and dollar value for each ship. A total tonnage and dollar value is then computed for all items on all ships.

10–12. Worldwide Ammunition Inspection and Lot Number Report (Parts III–A through III–F) (Part III–C not used)

Part III includes location and CCs of ammunition items by lot number in support of the worldwide quality assurance and maintenance/demilitarization programs.

a. Part III includes asset data for:

(1) JMLCMC and AMCOM managed assets.

(2) Other Services' assets stored in Army CONUS facilities.

(3) Assets onboard pre-positioned ships for the rapid deployment force (Army).

b. Part III is applicable to:

(1) Ammunition in the hands of troops (CL, mission, and training stocks).

(2) Active combat areas (depots or ASPs).

c. Data for this report is generated during surveillance inspections performed in accordance with SB 742–1 and other appropriate SBs. Reportable materiel includes class V materiel assigned an NSN, except nuclear weapons. In addition to items of issue, this includes explosive-filled components and bulk propellants.

d. Part III consists of five reports (parts III–A through III–F, part III–C is not used).

(1) Part III–A, DODIC, NSN, and lot number by location, includes the following data:

(a) Command.

(b) DODAAC or unit identification code (UIC).

(c) DODIC.

(d) NSN.

(e) Lot number.

(f) CC.

(g) Date of manufacture.

(h) Quantity.

(i) Year of manufacture.

(j) Month of manufacture.

(k) Defect or remark codes.

(l) Type of storage.

(m) Service ownership.

(n) If it is an SN item or not.

(o) Date of last inspection.

(p) Date of next inspection.

(2) Part III–B, DODIC, NSN, and lot number by location, reflects the same data as shown in part III–A. However, it is a consolidated master report of assets from all reporting activities.

(3) Part III–C is not used.

(4) Part III–D, regarding the analysis of unserviceable assets, is a consolidation of assets assigned CCs other than A, B, or C. It provides, by CCs, an analysis of the remark or defect codes assigned to specific ammunition lots in addition to quantity and location of the lot. Part III–D includes the following data:

(a) DODIC.

(b) NSN.

(c) Lot number.

(d) Quantity.

(e) Type storage.

(f) Defect code 1.

(g) Defect code 2.

(h) Defect code 3.

(i) Defect code 4.

(j) Command/installation name.

(k) DODAAC/UIC/name.

(5) Part III–E, regarding ammunition condition and tonnage by location and DODIC, provides the tonnage on hand for each DODIC and CC by location. Further, it provides the total tonnage by CC for each theater.

10–13. Worldwide Ammunition Readiness Assessment Report (Part IV)

This report, regarding WRSA status, is a readiness assessment for the status of WRSA assets in the Army stocks and is published monthly.

a. This report incorporates data acquired in the WARS database from input to the Requirements and Assets Report. The report consists of a review of the reporting command's readiness in terms of the following factors:

(1) Requirements and asset availability.

(2) Asset condition.

b. The WRSA Status Report contains three sections:

(1) Section I is a summary and represents the dollar value and tonnage of the data elements shown.

(2) Section II is a summary by family. The same family grouping applies to this report as the WARS Part I–C, Tonnage/Dollar Report.

(3) Section III represents the status of each item for which assets are on hand in the WRSA accounts. Quantities are expressed in the same unit of report as in the Requirements and Assets Report. Dollars are expressed in units of thousands, and short tons are expressed in each (M equals thousand, E equals each).

10–14. Worldwide Unique Item Tracking Report (Part VI)

The WARS UIT central registry maintains visibility of CAT I security risk ammunition (as identified in AR 190–11), PATRIOT missiles, and the 155 mm Excalibur artillery round, by SN, within the Active Army, the ARNG/Army National Guard of the United States, the USAR, and Army Reserve Officers' Training Corps.

a. The sources of class V data to update and maintain record keeping at the WARS UIT central registry is the GCSS–A for unit level, SAAS–Service Life Extension at the tactical, retail, and supply support activity (SSA), at the national (wholesale) depot-level activity, and production facilities (contractors).

b. All controlled inventory item code (CIIC) I/CAT I nonnuclear missiles and rockets with SNs, PATRIOT missiles and 155 mm Excalibur artillery rounds will be reported to the WARS UIT central registry.

c. All CAT I ammunition that are introduced into the Army inventory will be reportable to WARS. The requirement to report SNs starts when the DD Form 250 (Material Inspection and Receiving Report) is signed by an Army representative at acceptance prior to shipment to depot. All contractors who provide maintenance support must report receipt, possession, and shipment of CAT I missiles and rockets, by SN, to WARS.

d. Follow-up for CAT I and UIT reportable ammunition in transit will be as follows:

(1) The WARS UIT central registry will follow up on all in-transit open shipments of UIT reportable assets. The WARS shall send a report on open shipments of more than 30 days for CONUS shipments and more than 90 days for OCONUS shipments with no receipt confirmation. The receiving ASP will resolve these discrepancies within 10 working days.

(2) If the WARS UIT central registry receives no response within 10 working days, an electronic message will be sent to the receiving activity with an information copy to the receiving activity's higher headquarters (for example, ACOM) and DCS, G–4, for prompt resolution and intervention.

(3) If there is a negative or lack of response to the message within 15 working days, the DCS, G–4 will direct the ACOM to report the asset(s) as missing, lost, or stolen to the appropriate investigative agency with an informational copy provided to the shipping activity to initiate a financial liability investigation of property loss (FLIPL).

Section II

Feeder Report Formats

10–15. Asset record format—universal format record type "W/A"

There are two formats for asset reporting to WARS: type W/A and type S/T.

10–16. Universal format record type "W/A"

The preferred format is the universal format record W/A (see table 10–4 for the listing). All reporting systems should use this format when possible. The W/A transaction updates are submitted daily and are based on transaction codes that will either add or subtract. A W/A record is required for all class V. Quantitative fields shall be expressed using a unit of measure of each with no decimal assumed. This format is currently being reported by SAAS, LMP, GCSS–A, GOCO, and the test community to meet UIT requirements for CAT I (missile items).

a. A header line will be the first line in each submission.

(1) The batch number should increase each time reports are submitted for the year. The batch number starts over with 000001 at the first of each year. The batch number on the header is a six-position field and must be zero filled.

(2) The record count on the header is a nine-position field and must be zero filled.

b. Enter the DODIC columns 311 through 314 in the appropriate field whenever possible, but they may be blank when no DODIC is available.

Table 10–4
Asset report format—universal format type "W/A"

Item	Data name	Length	Configuration items	Position	Remarks
1	Transaction format indicator	1	Text	1	Constant W
2	Record type	1	Text	2	Constant A for asset transaction
3	NSN	15	Text	3–17	
4	Lot number	18	Text	18–35	Left justified
5	Serial number	18	Text	38–53	Left justified
6	CC	1	Text	54	
7	Routing identifier code (RIC)	3	Text	55–57	
8	Purpose code	1	Number	58	
9	Transaction code	3	Text	59–61	
10	Transaction/lot quantity	12	Number	62–73	Right justified, zero fill
11	Transaction obligated quantity	12	Number	74–85	Right justified, zero fill
12	Year month manufacture date	6	Number	86–91	YYYYMM
13	Quality defect code	6	Text	92–97	
14	Quality defect code	6	Text	98–103	
15	Quality defect code	6	Text	104–109	
16	Quality defect code	6	Text	110–115	
17	Restriction code	3	Text	116–118	
18	Restriction code	3	Text	119–121	
19	Ammunition use code	3	Text	122–124	
20	Ammunition use code	3	Text	125–127	
21	Function code	1	Text	128	LMP
22	Acceptance code	1	Number	129	LMP
23	Ammunition owner code	1	Text	130	LMP
24	Shelf life	1	Text	131	LMP
25	Shelf life expiration	6	Text	132–137	YYYYMM;LMP
26	Type storage point (SP) code	1	Text	138	
27	Type last inspection code	1	Text	139	
28	Month year last inspection	6	Number	140–145	MMYYYY
29	Type next inspection code	1	Text	146	
30	Month year next inspection	6	Number	147–152	MMYYYY
31	Date time	13	Number	153–165	YYYYDDDHHMMSS
32	WARS command code	3	Number	166–168	
33	DODAAC/UIC	6	Text	169–174	Cross reference SP to military organization
34	DODAAC/UIC to/from	6	Text	175–180	Cross reference SP to military organization

Table 10–4
Asset report format—universal format type "W/A"—Continued

Item	Data name	Length	Configuration items	Position	Remarks
35	Document number/transportation control number	17	Text	181–197	
36	Batch number	6	Number	198–203	Batch number, right justified, zero fill
37	Batch record number	9	Number	204–212	Record number in batch, right justified, zero fill
38	LMP owner/purpose code	1	Text	213	Reserved for LMP
39	Blank	12	Text	214–225	Spaces
40	Training event code	3	Text	226–228	
41		4	Text	229–232	Spaces
42	Recording account code	3	Text	233–235	
43	Transportation item number or container	12	Text	236–247	
44	Crop	12	Text	248–259	
45	Configured load	12	Text	260–271	
46	Storage space code	3	Text	272–274	
47	LMP forward support area routing identifier code	3	Text	275–277	Reserved for LMP
48	Type storage to	1	Text	278	
49	Purpose to	1	Text	279	
50		21	Text	280–300	Spaces
51	SP code	2	Text	301–302	
52	Compatibility group	1	Text	303	
53	Type pack code	2	Text	304–305	
54	Line number	4	Number	306–309	
55	Container indicator	1	Text	310	
56	DODIC	4	Text	311–314	
57	Transaction type	1	Text	315	
58	Turn around indicator	1	Text	316	
59	DODAAC name	12	Text	317–328	
60	Storage site identification (ID)	5	Text	329–333	
61	CC to	1	Text	334	
62	Storage site ID to	5	Text	335–339	
63	Required delivery date–period	3	Text	340–342	
64	SP code to	2	Text	343–344	
65	Project code	3	Text	345–347	
66	Priority designator	2	Number	349–349	
67	RIC to	3	Text	350–352	
68	Request quantity	9	Number	353–361	
69	Account code ammunition to	3	Text	362–364	

Table 10–4
Asset report format—universal format type "W/A"—Continued

Item	Data name	Length	Configuration items	Position	Remarks
70	Mode of shipment	1	Text	365	
71	Actual pull date	7	Number	366–372	
72	Government bill of loading	12	Text	373–384	
73	Secondary document number	14	Text	385–398	
74		3	Text	399–401	Spaces
75	Document identifier code	3	Text	402–404	
76	Total Ammunition Management Information System (TAMIS) installation code	4	Text	405–408	
77	User ID	10	Text	409–418	
78		82	Text	419–500	Reserved for SAAS

Notes:
[1] Sender: SAAS ASP and LMP.
[2] Receiver: WARS–GOCO-without standard depot system, used by Iowa, Lone Star, Milan, and Pine Bluff plants.
[3] Action: Transaction processing.

c. The NSN columns 3 through 17 will appear on every transaction. For those items for which neither an NSN or DODIC has been assigned, the NICP will be notified by electronic message.

d. The lot number, columns 18 through 35, is left justified and must be constructed of alphanumeric characters and hyphens with no spaces. Enter the basic or functional lot number.

e. The CC, column 54, will be assigned per AR 725–50.

f. The ownership code, column 130, is an alphanumeric code and will be entered to indicate ownership of assets.

g. Show date of manufacture as a four-digit year and a two-digit month (that is, YYYYMM) number. When the manufacture date is unknown, the field will be zero filled. Fill columns 86 through 91.

h. Report the quantity in units of each; entries must be numeric without an assumed decimal and are right justified. Items with SNs have a quantity of 1.

i. For the remark code or defect (columns 92 through 97, 98 through 103, 104 through 109, and 110 through 115), the first position identifies the percentage of total quantity of representative sample found to be defective. If the percentage is 100, the position will be code C. The second and third positions identify the defective assembly or component. The fourth position identifies the classification. The fifth and sixth positions identify the type of defect and special remarks. All CCs, except A and K, require at least one defect remark code. At least one remark code used for the item that is suspended will coincide with the type suspension imposed. CCs A and K may reflect remark codes, if appropriate. Leave fields not used blank.

j. Code type storage, column 138, as indicated.

k. GCSS–A remarks will be as follows:

(1) GCSS–A reporting system will report property book code 5 (PBC5) as purpose code 5 and will report property book code 8 as purpose code 0.

(2) Units will use the command code of their location.

(3) Forward-deployed units (derivative units) will report to WARS a closure report as referenced in AR 710–2 and AR 700–19. The closure report ends the unit's forward deployment. The WARS Office will check the database to ensure that the forward unit's assets have a quantity of zero. If asset quantities are not zero, the WARS Office will set quantities to zero to prevent duplicate reporting of assets when the forward deployed unit reunites with the parent unit.

(4) The WARS Office will process GCSS–A transactions as overlay records. Assume CC A.

(5) Report every Wednesday.

(6) The transaction code will be PBS.

l. GOCO facilities without LMPs will be as follows:

(1) An additional header line is required because the transaction code will be RE3. After initial batch and record count header, add a second header line in columns 59 through 61 RE1 (which represents DODIC reconciliation) or RE2

(which represents full reconciliation) and columns 169 through 174, DODAAC (Iowa–W53H0G; Milan–W38H0N). See table 10–5 for the listing.

Table 10–5
Asset report format—universal format type "W/A" for reconciliation

Item:	Sender: Materiel management center Source: Reconciliation process			Receiver: Worldwide Ammunition Reporting System Action: Reconciliation process				
	Data name	**Length**	**Configuration items**	**Data name**	**Length**	**Configuration items**	**Position**	**Remarks**
1	Transaction format indicator	1	Text	Transaction format indicator	1	Text	1	Constant W for LMP
2	Record type	1	Text	Record type	1	Text	2	Constant A for asset transaction
3	Blank spaces				56		3–58	Spaces
4	Trans code	3	Text	Trans code	3	Text	59–61	RE 2 (Full recon) or RE1 (DODIC recon)
5	Blank spaces				91		62–152	Spaces
6	Date/time	13	Number	Date/time	13	Number	153–165	YYYYDDDHH MMSS
7	Blank spaces				3		166–168	Spaces
8	DODAAC	6	Text	DODAAC	6	Text	169–174	
9	Blank spaces				6		175–180	Spaces
10	Doc number	17	Text	Doc number	17	Text	181–197	
11	Batch number	6	Number	Batch number	6	Number	198–203	Batch number in batch, right justified, zero fill
12	Batch record number	9	Number	Batch record number	9	Number	204–212	Record number in batch, right justified, zero fill
13	Blank spaces				62		213–274	Spaces
14	LMP forward support area RIC	3	Text	LMP forward support area RIC	3	Text	275–277	
15	Blank spaces				22		278–299	Spaces
16	Ending delimiter	1	Text	Ending delimiter	1	Text	301–500	Spaces
17	Blank spaces				200		301–500	Spaces

Notes:
[1] Sender: SAAS ASP/LMP/GCSS–A/WARS–universal.
[2] Receiver: WARS.
[3] Action: Reconciliation processing.

(2) Reporting shall be an asset balance once a month to the WARS Office by email, with attached text files for uploading or system-to-system file transfer protocol.

(3) The lot number columns 18 through 35 are left justified and must be constructed of alphanumeric characters and hyphens.

(4) For purpose code, column 58, enter “A.”

(5) For the transaction code, columns 59 through 61, enter “RE3” on each transaction line after the second header line (RE1 or RE2).

(6) Enter an alphanumeric code for the ownership code, column 130, to indicate ownership assets.

10–17. Asset reporting format—record type “S/T”

Contractor facilities without LMP capabilities report with record type S/T. S/T is a reporting format. There are two lines per item on contractors’ reports, the S line and the T line. Express all quantities in each with no decimal point assumed. See table 10–6 for the format for record type S/T.

Table 10–6
Asset report format: record type “S/T”

Item	Data name	Length	Configuration items	Position	Remarks
1	Transaction format indicator	1	Text	1	Constant S
e	NSN	15	Text	2–16	
3	Lot number	16	Text	17–31	
4	CC	1	Text	33	
5	RIC	3	Text	34–36	
6	Purpose code	1	Number	37	
7	Transaction code	3	Text	38–40	
8	Transaction/lot quantity	9	Number	41–49	Right justified, zero fill
9	Year/month manufacture quantity	4	Number	50–53	YYMM
10	Quality defect code	6	Text	54–59	
11	Quality defect code	6	Text	60–65	
12	Quality defect code	6	Text	66–71	
13	Quality defect code	6	Text	72–77	
14	Restriction code	3	Text	78–80	
15	Restriction code	3	Text	81–83	
16	Ammunition use code	3	Text	84–86	
17	Ammunition use code	3	Text	87–89	
18	Type SP code	1	Text	90	
19	Type last inspection code	1	Text	91	
20	Month/year last inspected	4	Number	92–95	MMYY
21	Type next inspection code	1	Text	96	
22	Month/year next inspection	4	Number	97–100	MMYY
23	Date time	7	Number	101–107	DDDHHMM
24	DODAAC/UIC	6	Text	108–113	
25	DODAAC/UIC (to/from)	6	Text	114–119	
26	Batch number	3	Number	120–122	Right justified, zero filled
e	Batch record number	6	Number	123–128	Record number in batch, right justified zero fill
28	Transaction format indicator	1	Text	1	Constant T

Table 10–6
Asset report format: record type "S/T"—Continued

Item	Data name	Length	Configuration items	Position	Remarks
29	SN	12	Text	2–13	
30	Blank	86		14–100	
31	Date time	7	Number	101–107	DDDHHMM
32	Blank	12		108–119	
33	Batch number	3	Number	120–122	Batch number, right justified, zero fill
34	Batch record number	6	Number	123–128	Record number in batch, right justified, zero fill

Notes:
[1] Receiver: Contractor–WARS–S/T.
[2] Action: Transaction processing.

a. A header line will be the first line in each submission.

(1) The batch number should increase for each year's submittal. The batch number starts over with 000001 at the first of each year. The batch number on the header is a six-position field and must be zero filled.

(2) The record count on the header is a nine-position field and must be zero filled.

b. Transaction format indicator T, column 1 (constant T), is submitted with an S only when reporting SN items. CAT I items require an S and a T submission.

10–18. Worldwide Ammunition Report System command codes

Use command codes identified in table 10–7 when submitting reports to WARS.

Table 10–7
Worldwide Ammunition Report System command codes

Code	Description	Code	Description
100	Central Europe GE/UK	104	Central Europe GE/UK APS2
101	Norway	105	Bosnia (not applicable (NA))
102	Italy (8th Log Command Camp Darby)	106	Hungary (NA)
103	Italy, Camp Darby APS2	107	Kosovo
108	U.S. African Command		
200	U.S. Army Corps of Engineers (U.S. Army Pacific (USARPAC)) Reserve (RES) (Okinawa)	210	Eighth Army
201	USARPAC RES (JAPAN) (NA)	211	Former WRSA–Korea
202	U.S. Army, Japan–Japan/Philippines	212	Republic of Korea Army (NA)
300	Army Forces Command (FORSCOM)	319	U.S. Army Intelligence and Security Command–U.S. Army Installation Management Command (IMCOM)
301	USARPAC (Alaska)	320	Military Operations Division, HQDA, DCS, G–3/5/7–IMCOM
303	USARPAC (Hawaii)	321	Military Traffic Management Command–IMCOM
302	United States Army South	322	United States Army Criminal Investigation Command–IMCOM
304	USARPAC RES (Alaska) (NA)	323	United States Army Space Command–IMCOM
311	Military District Washington	324	United States Army Signal Command–IMCOM

Table 10–7
Worldwide Ammunition Report System command codes—Continued

Code	Description	Code	Description
312	Medical Command	325	Network Enterprise Command–IMCOM
313	USAR Command	326	U.S. Army Corps of Engineers–IMCOM
314	Multinational forces	327	1 CONUS–IMCOM
315	United States Army Special Operations Command	328	5 CONUS–IMCOM
316	AMC–IMCOM	330	ARNG
317	NA–IMCOM		
318	IMCOM	400	U.S. Southern Command
500	TRADOC–IMCOM		
600	Iowa	610	Newport
602	Lake City	612	Kansas
604	Louisiana	614	Crane
605	Milan	615	McAlester
606	Ravenna	616	Hawthorne
607	PBA	617	Mississippi
608	Rock Mountain	618	Radford
609	Twin City	619	Holston
700	ATEC	710	Research Development and Engineering Command
701	AMCOM	711	Belvoir Research, Development and Engineering Center
702	JMC–SURVEILLANCE	712	Tank–Automotive Command (TACOM)
703	TACOM	713	TRADE
704	RDT&E OTHER	720	ATEC
705	U.S. Army Communications–Electronics Command	741	Aberdeen Proving Ground
706	ARDEC	742	Yuma Proving Ground
707	ATCOM	743	White Sands Missile Range
708	CRDEC		
801	Production	858	Seneca
850	Anniston	859	Sierra
851	Blue Grass	860	Tooele
853	Letterkenny	862	Tobyhanna
854	Navajo (NA)	863	New Cumberland, PA
855	Pueblo (NA)	870	Contractor
856	Red River	880	Retrograde (in–transit to)
901	U.S. Army Central Command (Kuwait)	922	Bob Hope (NA)
902	QATAR (CL/Unit OPL	923	Dahl
903	QATAR	924	Red Cloud (NA)
904	Iraq	925	Charlton
910	Container Ship #1 (John U D Page)	926	Watkins

Table 10–7
Worldwide Ammunition Report System command codes—Continued

Code	Description	Code	Description
911	Container Ship #2 (Eddie Carter)	930–939	WRS Countries A–J
912	Soderman	931	WRS Country B (NA) (Proj EBR)
913	Watson	935	WRS Country F
915	Charleston (Port)	990–999	Other Countries
917	Sisler (NA)	990	Somalia (e)
918	Pomeroy (NA)	991	Haiti (NA)
919	Arizona (NA)	993	Kosovo (see command code 107) (NA)
920	Green Valley (NA)	994	Afghanistan/Uzbekistan
921	Military Ocean Terminal Sunnypoint	995	Djibouti

Section III

Security Risk Category I Nonnuclear Missiles and Rockets, Phased Array Tracking Radar Intercept of Target Missiles, and 155 Millimeter Excalibur Artillery Rounds Serial Number Registration and Reporting

10–19. Items subject to reporting

a. Report SNs of all CIIC I CAT I nonnuclear missiles and rockets, PATRIOT missiles, and 155 mm Excalibur artillery rounds and CAT II ammunition to the WARS UIT missile registry.

b. Report all CAT I and UIT reportable ammunition produced at a contractor-owned or operated facility which are waiting for first-destination transportation for delivery into the Army inventory to the Army SN tracker when DD Form 250 is signed at acceptance by an Army representative prior to shipment.

c. All contractors who provide maintenance support and possess the assets must report receipt, possession, shipment, and destruction of CAT I missiles and rockets, by SN, to WARS.

10–20. Follow-up for unique-item tracking reportable ammunition in-transit

a. The WARS UIT registry will follow up on all in-transit open shipments of UIT reportable assets. The WARS Office will make available a report to an appropriate command or organization that has open shipments.

b. Upon notification, the receiving ASP will resolve all discrepancies within 10 working days for CONUS ammunition storage areas with open shipments and no receipt confirmation for more than 30 days and for OCONUS open shipments and no receipt conformation for more than 60 days.

c. If the WARS UIT registry receives no response within 10 working days, the WARS Office will send an electronic message to the receiving activity with an information copy to the receiving activity's higher headquarters (for example, ACOM) and DCS, G–4, for intervention and prompt resolution.

d. If there is a negative or lack of response to the message within 5 working days, the DCS, G–4 will direct the ACOM to report the asset(s) as missing, lost, or stolen to the appropriate investigative agency with an information copy provided to the shipping activity to initiate a FLIPL.

10–21. Follow-up for open transactions and missing serial numbers

a. The WARS UIT registry maintains data files on SNs that have been dropped from an activity's record.

b. For training ammunition, ACOM MMC will promptly research and resolve missing SN discrepancies that do not have a corresponding closure—such as a turn-in of the SN item, a turn-in of residue of the SN transaction, or a destroyed transaction—for more than 30 days.

c. The WARS UIT missile registry will generate a report for any open transactions or missing SNs that are delinquent for more than 30 days to the ACOM MMC. The ASP and units will resolve the discrepancies within 10 working days.

10–22. Receipt

a. If the SN on the item matches the SN data in the shipment document SN listing, the SN information will be considered correct and the reporting activity will prepare a receipt using appropriate data.

b. If the SN received does not match the SN on the shipping document, the correct SN will be posted to the system and an SF 364 (Report of Discrepancy (ROD)), per DA Pam 25–30, will be prepared and sent to the activity submitting the erroneous shipment data.

(1) If the SN entered is already shown on the UIT database as at another location, process it and consider it an asset of the last reporting location.

(2) The WARS manager will notify both locations claiming ownership that both need to physically verify the item to determine which location is correct.

(3) When the location is verified, the WARS manager will provide resolution instructions to each location.

10–23. Inventory gain

a. Report the gain of a missile or rocket with an SN through an inventory adjustment report (IAR). Transmit data to the WARS UIT missile registry.

b. Additional reporting is as required per AR 710–2 and AR 190–11. Verify gain information with the appropriate accountable officer.

(1) If the SN entered is already shown on the UIT database as being present at another location, process it and consider it an asset of the last reporting location.

(2) The WARS manager will notify both locations claiming ownership that both need to perform a physical verification of the item to determine which one is correct.

(3) When the location is verified, the WARS manager will provide resolution instructions to each location.

10–24. Inventory loss

a. *Suspected inventory loss.*

(1) Units or ammunition storage areas will immediately report a potential lost or stolen asset to the WARS UIT registry and confirm in writing that an investigation or FLIPL is in progress. Prepare a notification of suspected loss transaction.

(2) The WARS UIT registry will—

(a) Review and research each suspected loss against the WARS database master file.

(b) Report to the ACOM MMC if the asset is found under a different reporting activity.

(c) Report suspected loss to DCS, G–4 (DALO–SPM).

(3) The reporting activity will ensure that suspected lost or stolen missiles and rockets are reported per AR 190–11.

b. *Actual inventory loss.*

(1) Immediately report the loss or theft of a missile or rocket, and confirm in writing that an investigation or FLIPL is in progress. Prepare an IAR.

(2) The WARS UIT registry will take the same action in paragraph 10–6*a*.

(3) The reporting activity will take the same action in paragraph 10–6*a*.

(4) Coordinate inventory loss with the responsible accountable officer.

10–25. Recovered missiles and rockets

a. Report assets confiscated, found on post, or otherwise recovered (previously dropped from accountability by an IAR, financial liability investigation of property loss, or board of investigation) to the HQDA per AR 190–11 and register them to the WARS UIT registry as an inventory gain.

b. Report recovered CAT I class V assets without NSN/SNs to the WARS UIT missile registry by message including make, model, caliber, and other nomenclature data. The WARS Office will assign NSNs or new SNs.

10–26. Interrogation

a. When investigative agencies query the WARS UIT registry by message, letter, or telephone, the WARS UIT registry will identify to investigative agencies, within 72 hours, the last known accountable activity possessing a specific missile or rocket with an SN.

b. The WARS UIT registry will query the responsible Army reporting activity as to current CAT I ammunition item status and owning activity (property book or stock record account (SRA)) from the WARS master file or other available SN files.

c. The reporting ACOM MMC, receiving missile or rocket SN verification or status requests from the WARS Office, will direct the accountable or owning unit (property book or SRA) to sight verify the CAT I ammunition item and furnish verification results directly to the WARS Office within 72 hours of the original request.

d. The WARS UIT registry shall maintain UIT registry investigative inquiry records indefinitely and request the logistic support agency to provide historical records prior to September 2000, as needed.

10–27. Demilitarization

a. Report missiles and rockets when demilitarized per DODM 4160.28, volume 1, and DODI 4160.62 and remove them from the accountable record to the WARS UIT registry. Send the transaction to the WARS UIT missile registry and update the reporting activity file.

b. Only the activity performing the demilitarization that removes the missiles or rockets from the system will submit this transaction.

c. The demilitarization activity must retain demilitarization certificates in the accountable record files and submit copies to the appropriate accountable officer.

10–28. Unit deployments

When a unit transfers from the jurisdiction of one reporting agency to the jurisdiction of another, the gaining activity (for example, Kosovo) will follow receipt transaction procedures, and the losing activity (for example, FORSCOM and European command) will follow shipping transaction procedures to show the accurate location of stock.

10–29. Reporting activity changes and corrections

a. *Change to Department of Defense activities address code.* When the DODAAC of a reporting agency changes, notify the WARS UIT missile registry and update the reporting activity file before reporting the transactions.

b. *Serial number corrections.* To correct an asset SN erroneously reported to the UIT missile registry, use procedures outlined in the SAAS or GCSS–A end user manual.

c. *National stock number corrections.* Use same procedures as in paragraph 10–26*b*.

d. *Mass stock number change.* Use procedures outlined in the SAAS or the GCSS–A end user manual.

10–30. Reconciliation procedures

a. Each reporting activity will use procedures outlined in the SAAS or the GCSS–A end user manual.

b. The WARS UIT registry will follow up with reporting activities on nonresponses to previously submitted reconciliation requests and rejects.

c. The WARS Office will perform the annual reconciliation as of 30 September each year.

10–31. Depot or storage facility procedures

a. *Depot and storage facilities.* Depot and storage facilities shall use the procedures in paragraphs 10–31*b* through 10–31*d* to report SN transactions.

b. *Processes for receipts.* How to report various receipts:

(1) *Turn-in receipts from sponsored activities.* Report receipts from supported activities per procedures for LMP or SAAS. For fired (expended) SNs, use the turn-in of residue transaction in SAAS. Expended SN must be annotated on this transaction.

(2) *Other than turn-ins.* Receipts, other than turn-ins, that have been registered in the WARS UIT registry should have a listing of the SN of each asset shipped attached to the shipping documentation when received. Validate that listing by checking the list against the SN of each missile and rocket. Take the SN data from the validated asset SN listing and receipt transactions, and transmit it to the WARS UIT registry.

(3) *Assets without a serial number listing.* Report receipts of assets without an SN listing to the WARS UIT registry. Prepare a receipt transaction, using data from shipment documents, such as document number, shipper's DODAAC, and so on. Report SN data to WARS.

c. *Shipments to other activities.* Include the SN of each asset to be shipped on a list and securely attach the list to the storage containers in plain sight. Report shipment by SN to WARS.

d. *Other transactions.* Report other required transactions as detailed in this regulation.

10–32. Reporting and disposition of expended launch tubes

a. Process the destruction of the expended launch tube in the appropriate automated system using the designated transaction code to indicate destruction.

b. Indicate the expended SN on the destruction transaction, which will close the life cycle for that SN.

c. Report the destruction and final disposition of expended tubes to WARS

10–33. Dropped category I reconciliation

Every activity that has, or has had, possession of CAT I nonnuclear missiles, rockets, and the 155 mm Excalibur artillery round will access the WARS drop CAT I generator at least once every 30 days utilizing their respective DODAAC or UIC. This report reveals those SNs whose last reported location was that particular DODAAC or UIC. This requires ac-

cess to the WARS Web site, which is controlled by user ID and password or CAC. To obtain access, visit https://mhpwars.redstone.army.mil/. Once SNs have been identified, research will be performed to determine disposition of each SN reflected as over 60 days old. Following research, one of the following actions must be performed.

a. Process any missing transactions (for example, turn-in of residue and destroyed) and transmit them to WARS.

b. A flat file of transactions may be emailed to the WARS Office. Obtain instructions by contacting WARS Office personnel via https://mhpwars.redstone.army.mil/.

c. As an alternative, hard copy documentation may be sent to: Headquarters, Joint Munitions Command, (AMSJM–MMI), 2695 Rodman Avenue, Rock Island, IL 61299–5500.

d. Final disposition on dropped CAT I ammunition must be transmitted to the WARS Office via one of the actions listed in paragraphs 10–33*a* through 10–33*c* prior to the line aging to 75 days.

Section IV

Transit Accounting and Reporting

10–34. Transportation procedures

Transportation procedures described in paragraphs 10–35 through 10–37 ensure the generation of in-transit (to theater or command) data required for the WARS Requirements and Assets Reports. The JMC Ammunition Logistics Readiness Center Transportation Office (AMSJM–MMT) communicates directly with all reporting theaters or commands to carry out its transportation activity responsibilities for this report.

10–35. In-transit to theater or command

Data furnished to WARS will be developed by AMSJM–MMT and represent the quantity of total stock in-transit. In-transit status starts with the issue of the material release order (MRO) or LMP-generated delivery order to the source of supply, and it ends with the posting of a receipt transaction in WARS.

a. For airlift, data not in-transit are sent to WARS.

b. FMS data are not sent to WARS.

c. If the national identification number and consignee DODAAC are not in WARS, do not send data to WARS.

10–36. In process

The MTMS reports the data to WARS when the MRO has been received, sourced, and offered to the Integrated Booking System at the military SDDC for movement. This usually occurs within the same day. These data are reported to WARS by MTMS when the MTMS REPSHIP is submitted.

10–37. In-transit data feeds

The in-transit data feeds are done electronically from the JMC MTMS to WARS, as agreed upon in the interface agreement. There is an exception if the vessel is diverted, either en route or at the first scheduled point of delivery by the theater Army commander or the unified or Joint commander. In this case, advise the AMSJM–MMT immediately. Continue to carry assets aboard the diverted vessel as in-transit to theater until the vessel arrives at the newly scheduled point of delivery. Specific procedures for reporting in-transit quantities are as follows:

a. JMC CONUS shipping activities will provide an electronic REPSHIP within 24 hours after shipment of all conventional ammunition or GMLR items to a domestic customer, transshipping activity, clearance authorities (ocean and air), sponsoring service accountable supply activity, ultimate consignee, or final destination. The format and subject will be according to DOD 4500.9–R.

b. GATES will electronically transmit a complete copy of all vessel manifests for all conventional ammunition or GMLR items, including small arms to the JMC MTMS, the first scheduled discharge terminal and the distribution management center within 72 hours of vessel sailing. These manifests must include the vessel name and sailing date. Overseas terminals will provide the same documents and data by mail or electronically to JMC MTMS on conventional ammunition or GMLR items being retrograded.

Section V

Firing Data Reports

10–38. Reports

Firing data reports are required for the reporting systems and provide performance data and field history to develop:

a. A continual evaluation of missile system or artillery round performance and effectiveness.

b. An effective surveillance management tool that will reflect trends and indicate potential problems throughout the life cycle of the system.

c. Reliability trends and estimates reflecting configuration modifications, environment, and system age.

d. Shelf-life and service-life assessments.

e. Data necessary to support malfunction investigations.

10–39. Procedures for submitting missile firing data reports

a. Commanders of active, reserve, and ARNG components; field commanders of active, reserve, ARNG components; and commanders of Army test agencies establish local implementation procedures and submit firing reports for each missile firing attempted. Where missiles are being tested at an ATEC range, MFDRs are superseded by the detailed test report submitted at the end of the test. Where local procedures are applicable, the LAR or QASAS may assist the preparation of the reports.

b. Submit MFDRs by using the fillable forms available on the Army Publishing Directorate's Web site, http://armypubs.army.mil. Submit via email to usarmy.pentagon.hqda-dcs-g-4.mbx.ammunition@mail.mil and usarmy.redstone.redcom-amrdec.list.fireit@mail.mil, or submit via mail to Director USA RDECOM, ATTN: RDMR–SER, BLDG 5400, Redstone Arsenal, AL 35898–5000.

c. Procedures for firing data reports for specific missiles can be found in appendix D of this pamphlet. Copies may be required to be submitted to other agencies as identified in appendix D, depending on the missile system.

d. In the case of a class A, B, or C malfunction during any particular firing attempt, the firing agency will submit both a firing report and a malfunction report. Include the malfunction description information and the malfunction report number (if available) in the firing report. Refer to AR 75–1 for guidance on malfunction reporting.

e. Submit firing reports no later than five days after the event.

Chapter 11
Automated Information Systems and Automatic Identification Technology

Section I

Automated Information Systems

11–1. Overview

a. The Army Ammunition Management System uses a full suite of AISs and AIT to support the ammunition management mission. These systems provide the ammunition community, as well as senior military decision makers, with critical information on the health, size, location, status, and cost of the ammunition inventory. This chapter briefly overviews AISs and AIT, which enhance the Army's ability to provide ammunition in the right place at the right time.

b. The AISs play a significant role in our ability to manage the ammunition stockpile. They support the management and storage of ammunition information from requirements determination through expenditure.

c. Regarding property accountability, commanders at all levels will ensure that available AIT—such as bar codes, two-dimensional bar codes, optical memory cards, RFID tags, contact buttons, satellite tracking, or electronic signature capabilities—are fully integrated into all Government property management and accountability functions (such as, receipt, store, inventory, issue, and ship).

(1) AIT utilization applies to both formal and informal property accounting and greatly enhances management and visibility of arms, ammunition, and explosives (AA&E).

(2) Comply with hazards of electromagnetic radiation to ordnance (HERO) standards when using AIT in close proximity to ammunition.

(3) Ordnance and other devices that contain electro-explosive devices must function in their operational electromagnetic environment without inadvertent actuation. To prevent the susceptibility of electro-explosive devices to radiated or conducted electromagnetic energy, HERO limits are imposed. So the systems achieve these limits, HERO tests are conducted at the naval electromagnetic radiation facility in conjunction with Naval Surface Warfare Center Dahlgren Division. These tests classify the ordnance's susceptibility to electromagnetic radiation as HERO safe, HERO susceptible, or HERO unsafe. RFID-associated HERO certifications are available on the Defense Acquisition University, and https://acc.dau.mil/communitybrowser.aspx?id=142174.

11–2. Ammunition deployment planning process

a. The ammunition deployment planning process (MDPP) is a joint DCS, G–3 and DCS, G–4 effort to enhance the adaptive planning process by identifying time-phased theater OPLAN ammunition requirements within the TAMIS ap-

plication and to provide those requirements to the NLAC MDPP sourcing process, which matches requirements to on-hand theater, afloat, and CONUS wholesale ammunition assets. NLAC MDPP identifies and schedules specific DODIC shipments from various CONUS ammunition depots to meet the theater OPLAN RDD.

b. NLAC MDPP also identifies sourcing mitigation actions to meet OPLAN requirements, such as substitutions, CC availability, and purpose code availability. Once requirements are received from TAMIS or another requirement-generation process the NLAC MDPP sourcing result can be obtained within a matter of minutes.

c. NLAC sourcing data can also be provided to the U.S. Transportation Command for transportation feasibility analysis and time-phased-force-and-deployment-data build.

11–3. National level ammunition capability

a. The NLAC enhances ammunition logistics planning and management by supporting the joint ammunition community, including ammunition users, managers, and planners throughout the DOD. NLAC is managed by the DCS, G–4 Ammunition Directorate. NLAC provides a Web-based total asset visibility system that receives its data from the Services' ammunition management and visibility systems as well as DOD transportation and document tracking systems. Worldwide ammunition stockpile visibility information is viewed in a number of ways, including by location, SN, lot number, CC, Service ownership, and location within the transportation pipeline. In addition, ammunition asset posture and transportation status data are used in conjunction with NLAC's advanced decision support tools, developed to enhance the decision process at the strategic and operational levels and to enhance Service, wholesale, retail, and unit level ammunition operations management functions.

b. NLAC account holders can access worldwide ammunition asset posture, in transit visibility (ITV), CAMM–AV, and OCONUS ammunition operations management, configured load, ammunition reports, and ammunition reference material. NLAC can be accessed via the Internet. NLAC accounts can be requested at the NLAC website, https://hornet.nlac.pentagon.mil. Once at the homepage, select the New Accounts tab on the left of the page.

11–4. Total Ammunition Management Information System

a. TAMIS is the DCS, G–3/5/7, Enterprise Information System of record for calculating, prioritizing, and managing ammunition requirements, forecasts, and requests for issue for the Army.

b. TAMIS generates requirements and reports for annual training, OPLs, CLs, SLs, testing requirements, command stockage objectives, deploying units, readiness assessments, and numerous Army, joint, and DOD studies.

c. The G–3/5/7 Ammunition Management Office uses TAMIS to calculate, validate, approve, and distribute ammunition authorizations and collect expenditures from each ACOM, ASCC, field operating agency, DRU, and the ARNG.

d. ACOMs and other Army organizations use TAMIS to build, prioritize, and sub-authorize (distribute) training ammunition authorizations and to build and establish operational requirements for unit CLs and SLs.

e. The Total Force and the Marine Corps use TAMIS to forecast and approve ammunition requirements, to process and validate requests for both operational and training ammunition, and to report expenditure metrics and ammunition status. AMC and ATEC use TAMIS to build requirements, forecast, and sub-authorize ammunition to support testing.

f. TAMIS is a real-time, web-based Enterprise Information System that processes data defined by the Army as "unclassified but sensitive." TAMIS is the only official Army system for establishing, maintaining, and managing requirements, authorizations, forecasts, requests, and expenditures of ammunition. TAMIS computer-based training is located at https://tamis.army.mil.

11–5. Global Combat Support System—Army

a. The GCSS–A fields an Army automated information system as the primary tactical logistics enabler to support Army and joint transformation of sustainment using an enterprise resource planning (ERP) system; it reengineers current business processes to achieve end-to-end logistics and provides unclassified feeder data to applicable command and control systems. And it implements tactical financial processes relating to supply and maintenance. GCSS–A integrates modular and interactive information management and operations systems across all combat support and command and control functions.

b. The system will operate in a network-information centric environment that incorporates, to the greatest extent possible, DOD standard data by using commercially available software. By providing a seamless, integrated, and interactive information-management and operations system at all force support levels, GCSS–A will execute the Army's combat support or combat Service support transformation vision and will support the tactical component of the Single Army Logistics Enterprise. GCSS–A will field an Army-automated information system as the primary tactical logistics enabler to support Army and joint transformation of sustainment using an ERP system and will reengineer current business processes to achieve end-to-end logistics and to provide unclassified feeder data to applicable C2 and joint systems. It will also implement tactical financial processes relating to supply and maintenance.

11–6. Industrial Base Assessment Tool

a. The Industrial Base Assessment Tool (IBAT) is a Web-based, decision-support tool that provides supply-chain analysis and risk assessment of critical ammunition end items and components across functional organizations to enhance acquisition planning and IB preparedness. HQ JMC is the proponent for the IBAT. IBAT is the repository of industrial preparedness planning data supporting ammunition items and components within the SMCA and was developed in accordance with DODI 5160.68.

b. The IBAT contains industrial preparedness planning information on more than 1,200 end items and 1,300 components as well as data on hundreds of U.S. and foreign ammunition producers. IBAT provides detailed information relative to the production base that supports the procurement and sustainment of ammunition end items and management of the ammunition IB. Examples of industrial preparedness planning data include manufacturing capacities, bill-of-materiel data, item attributes, source dependencies, SPFs, critical skills and processes, and the Section 806 watch list. It also contains hundreds of supply chain maps used to convey the complex ammunition supply chain.

c. IBAT has a robust custom reporting feature as well as several automated reports to extract data on facility capacities; foreign, single, or proprietary sources; and component goes-into information. These tools support decision makers in developing viable acquisition strategies and in maintaining a healthy supply chain.

d. The simulation and modeling function enables a user to conduct ammunition production and demand scenarios across any timeframe, to analyze POM-based scenarios, and to review archived analysis. The IBAT disaster-mapping module is used to assess IB impacts due to disasters, such as floods, hurricanes, or major production malfunctions. The minimum sustaining-rate module is used to predict suppliers at risk due to downturn in ammunition budgets.

11–7. Worldwide Ammunition Report System—New Technology

a. The WARS—New Technology (WARS–NT) is a Web-enabled, comprehensive, class V database with data and information critical for successful ammunition management.

b. WARS–NT provides a number of critical reports for ammunition managers and senior logisticians, including Worldwide Ammunition Requirements and Assets Reports, Worldwide Ammunition Inspection and Lot Number (Serviceability) Reports, and Worldwide Ammunition Readiness Reports.

c. WARS–NT also provides ammunition data used for budget estimates, supply control studies, munition allocations, testing requirements, distribution planning, procurement initiation, scheduling, readiness assessments, maintenance programs, stockpile reliability, ammunition serviceability, and various other logistical factors for conventional, missile, and rocket ammunition.

d. WARS–NT is the CAT I ammunition UIT database that ensures CAT I ammunition are properly accounted for from beginning to end. WARS–NT is also the sole source of retail financial data for the Army financial statement. WARS–NT provides data on ammunition stored at Army locations but owned by the other military Services.

11–8. Army Enterprise System Integration Program

a. The Army continues to modernize its ERP business systems to simplify operations, optimize processes, and provide an accurate, Enterprise view of business information to all users. The Army Enterprise System Integration Program (AESIP) is a key component of this initiative. AESIP integrates business processes and systems by serving as the Enterprise hub for the Army's logistics and financial ERP business systems:

(1) General Fund Enterprise Business System (GFEBS), the Army's financial system.

(2) GCSS–A, the tactical logistics system.

(3) LMP, the national logistics system.

b. AESIP enables integration by linking business processes and data across existing information technology systems. This integration optimizes business processes and supports Enterprise-level information requirements. AESIP houses and enables the Army Enterprise Material Master which provides the Army a single authoritative source for material data supporting all Army constituent (modernized and legacy) systems.

c. This Army Enterprise Material Master provides the catalyst to manage, control, create, change, archive, and validate data, while providing a single global view of material, thus providing the basic building blocks for product life cycle management and weapon system management. Implementation of the Enterprise Material Master has enabled inventory management, accountability, pricing, accounting functions, and material requirements planning operations to be seamlessly integrated into the Army Enterprise vision.

d. The AESIP hub translates and integrates data, manages and synchronizes critical master data into the Enterprise systems, and houses the management tools for the Army's enterprise business intelligence suite. The business intelligence suite aggregates data from ERP and non-ERP systems, eliminating extraneous transactions for queries and reporting.

e. The ERP central component is the central repository for master material, equipment master, customer master, vendor master, and asset master data for the LMP, GCSS–A, and GFEBS. Acting as the hub to integrate ERP and non-ERP systems, the AESIP system sends and receives live updates via ERP central components across and between programs so the most up-to-date information is accessible at any given time.

11–9. Logistics Modernization Program

a. The LMP sustains, monitors, measures, and improves the modernization of the national-level logistics support solution, transitions services from contractor to organic support without performance degradation, delivers new capabilities to achieve business systems information technology and DOD Enterprise transition plan objectives, addresses strategic Army and DOD business transformation elements, and supports DOD and Army ERP integration efforts and related end-to-end processes.

b. The LMP supports the Army national-level logistics mission to develop, acquire, field, and sustain F equipment and services, so Soldiers have decisive advantage. LMP delivers an Enterprise system for the AMC with a fully integrated suite of software and business processes, providing streamlined data on maintenance, repair, and overhaul; planning; finance; acquisition; and weapon systems supplies, spare parts, services, and materiel. LMP also maintains the accountable record for national level conventional ammunition management and its business process execution system. LMP access can be requested through the LMP website at https://cac.po.lmp.army.mil.

11–10. General Fund Enterprise Business System

a. GFEBS develops, acquires, integrates, deploys and sustains Enterprise-wide financial and procurement management capabilities to support Army's current and future missions. GFEBS is the Army's new Web-enabled financial, asset, and accounting management system that standardizes, streamlines, and shares critical data across the active Army, the ARNG and the USAR. GFEBS uses System Applications Products in data processing software, a commercial off-the-shelf ERP solution.

b. Plans for GFEBS are to negotiate roles and responsibilities with the Army Financial Management and Comptroller by identifying subject matter experts on business-process-related issues, working with users to address problems, analyzing business processes, analyzing system or training problems, and proposing changes to tier II support. GFEBS will also be used to review cost estimates to right-size sustainment and will support the maturation of the functional governance board process.

11–11. Military History Program

a. The MHP is a Web-based application that supports the Army's ammunition surveillance mission. MHP was designed to collect and store inspection and test data and to track ammunition technical history quality assurance data. All organizations with an ammunition surveillance mission are required to use MHP to maintain their depot surveillance record information where Internet connectivity is available.

b. MHP provides ammunition managers at all levels with a universal data management system that is fully deployable, easy to use, and maximizes flexibility for a true train-once-deploy-anywhere system. MHP can be accessed at https://mhp.redstone.army.mil. MHP uses public key infrastructure authentication, which requires a DOD-approved certificate. All users must register to access MHP and submit a request for the functionality needed. Access requests for most modules are approved by an HQ JMC administrator while requests for some modules are approved by the module's owner.

c. MHP is an evolving application that is continually enhanced to meet the needs of the ammunition community. MHP is used for the following core ammunition business processes:

(1) Inspection module.
(2) Ammunition Surveillance Information System module.
(3) Notices module.
(4) ACR module.
(5) Worldwide Ammunition Repository Program module.
(6) ASRP module.
(7) DAC application module.
(8) Joint Hazard Classification System.

d. The MHP application has an online help module that explains how to use the various modules and functionality within MHP. These files are maintained and updated as processes are added and enhanced. Refer to the help files and frequently asked questions under the Help menu for specific instructions to use MHP. There is also a forum for MHP users to assist other MHP users with questions regarding MHP or to discuss ammunition-related issues. MHP distance learning training is available through the Army Learning Management System. Register through the Army Training Re-

quirements and Resources System using course number 4E–F64/645–F48. The course provides extensive information to successfully navigate within the MHP website, retrieve depot surveillance records, and create new inspection records and data record headers. Students will become familiar with main menu modules, submenus, links, and other useful features and resources available in MHP.

Section II

Automatic Identification Technology

11–12. Item unique identification

a. Item unique identification (IUID) is a system of marking items delivered to the DOD with unique item identifiers (UIIs), encoded in machine-readable symbols and distinguishing an item from other items. The IUID system is a foundation for enabling DOD to improve readiness, total asset visibility, life cycle item management, and accountability.

b. A UII is a set of data marked on items that is globally unique, unambiguous, robust enough to ensure data information quality throughout life and supportive of multifaceted business applications and users. Eventually, UIIs will functionally replace SNs.

c. DOD requires that all delivered items with an acquisition cost of $5,000 or greater, all serially managed items, and some items meeting other criteria be marked with a UII prior to delivery to the Government (there are few exceptions) if they are acquired as a result of a solicitation issued on or after 1 January 2004. IUID is required for all items meeting the criteria specified in DODI 8320.04. Contracts used to acquire personal property (items) must contain DFARS clause 252.211–7003. Contracts involving Government furnished property must contain DFARS clause 252.211–7007.

d. There are more than 50 ways to encode a UII. The two most common constructs are construct 1 for items serialized within an enterprise and construct 2 for items serialized within a part, lot, or batch number. For items serialized within an enterprise, a UII is derived by concatenating—that is, linking together in a chain—the enterprise identifier and the SN. For items serialized within a part number, the UII is derived by linking the enterprise identifier, part number, and SN. Each item that requires a UII also requires, at minimum, a mark using a two-dimensional data matrix error correction code 200 symbol applied in a way that ensures the UII remains marked for the entire life cycle of the item.

e. Packaging of uniquely identified items is required to be marked in accordance with MIL–STD–129. It is important to differentiate between the UII and the medium that carries the UII. The UII is data. The data matrix symbol is one of many automatic identification technologies that can be used to carry that data. A data matrix is not a UII and a UII is not a data matrix.

11–13. Bar coding and military shipping labels

Linear bar codes can provide item identification and document-control information for individual munition items and shipments by document number. Two-dimensional bar codes and military shipping labels are used when the individual items or the items that make up the document number are consolidated into a larger container (for example, a tri-wall box). They identify the contents of the box or another type of container where individual items are consolidated.

11–14. Radio frequency tracking

a. Once bar codes and military shipping labels are developed for ammunition, RF tags or International Organization for Standardization 18000–7 tags can be applied to either containers or pallets to provide inside-the-box and near-real-time nodal visibility. There are several variants of RF tags that help track pallet and/or container movements, including container intrusion-detection devices and security tags equipped with sensors that detect and report breaches through the use of various sensors, such as ones for light, shock, and temperature.

b. There are also several AISs and hardware items that can be used to place container and pallet data onto the RF tag. AISs often used to write ammunition data to RF tags include SAAS, Transportation Coordinators'—Automated Information for Movements System II, and LMP. As RF-tagged pallets and containers pass within close proximity of RF interrogators, the tags are read and the ITV server updated, thus providing near-real-time nodal ammunition ITV.

c. Shipping data are pulled and pushed from the national ITV server to various systems supporting AISs including NLAC, GCSS–A, and other systems requiring the data. In addition to the national ITV server, there is a trainer server, which can be used for training and testing without putting data on the live server.

d. ITV is also supported by the use of handheld interrogators or Intermec CK70. Unlike fixed interrogators, these devices combine the tag-read capability of a fixed interrogator with a keyboard in a handheld, mobile device. As an example, the handheld interrogators can be used to verify receipt of containers and/or pallets of ammunition at locations where a fixed interrogator may not be installed. They are also capable of searching for specific RF tagged pallets, containers,

and equipment as well as conducting receipt inventories. Once tags are read using the handheld interrogators, the data may be transferred to a computer for uploading to the ITV server providing worldwide visibility.

11–15. Radio Frequency In-Transit Visibility Tracking Portal

With a CAC, authorized users can log on to the RF–ITV Tracking Portal, the user interface to the ITV server, at https://national.rfitv.army.mil. The RF–ITV Tracking Portal has a variety of queries that report ITV information. Authorized users will find queries and reports tailored to unit moves, sustainment cargo, commodities, and ammunition. The ammunition queries allow searches by DODIC, lot number, SN, TCN, tag ID, and NSN. Ammunition can also be tracked by document number, tag ID, container or pallet ID, and satellite device if those items are known. RF–ITV system documentation and training materials also are on the tracking portal, as well as reference features to allow users to look up DODAAC's, classes of supply, country codes, and ports.

11–16. Satellite tracking

Satellite tracking is often used for truck and rail shipments of sensitive, conventional AA&E. Both military and commercial satellite tracking capability is available.

11–17. Defense Transportation and Tracking System

a. DTTS uses commercial satellite positioning and communications technology, combined with digitized mapping and a 24-hour operations center, to execute its primary mission for the DOD arms, AE, and other sensitive material moving via commercial carriers in North America. DTTS initiates rapid emergency response to in-transit accidents and incidents to minimize their impact and public exposure.

b. Shipping activities order satellite monitoring service DTTS using service shipper systems (Cargo Management Operating System, Distribution Standard System, and GFM) or inputting shipments directly into DTTS/IRRIS. Using the service shipper systems, shippers select satellite monitoring service DTTS, the shipment characteristics, and associated data elements that flow directly to the DTTS/IRRIS mapping platform which provides a suite of tools with the capability to track and organize information, provide weather layers, support drivers, and notify appropriate civil and military offices for emergency response.

c. The DTTS operations center is comprised of the computer-based system and operational procedures that provide improved safety, security, and ITV of AA&E and sensitive shipments within CONUS, Alaska, or Canada as they move from origin to destination on contracted commercial motor vehicles and barges. Coastal barge shipments of AA&E and truck shipments of toxic inhalation hazard rocket fuels are also tracked within DTTS. The operation center uses the installation transportation facility guide's emergency contact information to keep installations abreast of events affecting their shipments.

d. DTTS personnel monitor in-transit shipments via satellite-position reports and programmed exception alerts. There are nearly 50 participating commercial carriers registered to move DOD, DTTS-tracked AA&E and other sensitive material. Drivers can alert the DTTS operations center to accidents or incidents via an in-cab panic button that provides DTTS with the truck's current location, shipment details, truck description, closest military installation, and nearest police department or 911 call center. DTTS contacts the Army Watch for EOD response in CONUS, on behalf of the military services and regardless of the DOD shipper.

e. In the event of a panic button alert from a driver, the DTTS program manager's office reports and facilitates an emergency response. Ready access to preloaded shipment data allows the DTTS program manager's office staff to coordinate with local emergency response personnel to inform them of the type of ordnance on board, its hazard class, and the total net explosive weight. When responding to an emergency situation, the DTTS staff implements procedures to attain real-time ITV of the threatened shipment and coordinates with appropriate emergency response personnel to mitigate the situation.

f. DTTS personnel support drivers during mechanical breakdowns to help maintain oversight of the load, provide police escort, or offer traffic control for trucks stranded along the side of the highway. DTTS personnel assist drivers in obtaining safe haven during emergency situations or conditions, and they assist drivers obtaining installation access for after-hour arrivals and secure hold at destination installations.

g. When shipment details released by service shipping systems reach the DTTS software server, an automatic REPSHIP is triggered to the destination activity. Automatic REPSHIPs alert shipping activities to anticipate and prepare for the delivery.

11–18. Joint Battle Command—Platform

a. The Joint Battle Command—Platform (JBC–P), part of the Army joint capability release, is a network battle command information system that enables units to share near-real-time friendly and enemy situational awareness infor-

mation, operational maps and graphics, and C2 messages. CAC-authorized users can request access to the PM JBC–P Readiness Center at https://jbc-p.army.mil/jbcp/menu.cfm.

b. The Army and Marine Corps intend JBC–P to achieve platform-level interoperability for ground vehicles, dismounted Soldiers and Marines, and aviation assets operating in land, littoral, and joint operational environments. JBC–P is fielded in both mobile and command post versions, and JBC–P communications is supported by Blue Force Tracker 2 satellite for mobile operations and the tactical Internet for command post operations.

c. Army, Marine Corps, and SOF commanders use JBC–P to provide integrated, on-the-move, near-real-time, battle-command information and situational awareness from brigade to maneuver platform to dismounted Soldiers and Marines. JBC–P provides a link between command, maneuver, and logistics networks.

d. The JBC–P logistics capability operates on the unclassified side of the network. JBP–P logistics platforms use RFID interrogators to collect and upload cargo data into the RFID ITV server for near-real-time worldwide visibility. Operational and sustainment commanders can plan, coordinate, and track cargo and sustainment services in near-real-time, significantly enhancing the overall common operating picture. Logistics vehicles—including freight haulers, heavy expanded mobility tactical trucks, and fuel tankers that transport ammunition on the battlefield in support of maneuver formations—will be equipped with joint capability release logistics.

11–19. Commercial transport satellite tracking

Depending on the location, transportation mode, and specific ammunition that are moving, satellite tracking via commercial systems is available. Commercial satellite tracking devices are often organic to the transport mode (truck, rail, vessel, and ACFT). In the absence of or to augment available organic systems, an add-on satellite tracking device may be affixed to the transport, ammunition container, or pallet.

11–20. Commercial vessel satellite tracking

Commercial vessel satellite tracking is accomplished using the U.S. Department of Homeland Security's AIS. This AIS provides a shipboard radar or an electronic chart display that includes a symbol for every significant ship within radio range, each as desired with a velocity vector (indicating speed and heading). Each ship symbol can reflect the actual size of the ship, with position to Global Positioning System or differential Global Positioning System accuracy. The AIS provides a ship symbol, through which the ship name, course, speed, classification, call sign, registration number, Maritime Mobile Service Identity, and other information can be obtained. Display information previously available only to modern vessel traffic service operations centers now is available to every AIS user through the web site at http://www.navcen.uscg.gov/?pagename=aismain.

Chapter 12
Ammunition Management

Section I

Managing Operational and Combat Load Ammunition

12–1. Overview

a. Procedures in this chapter apply to the active Army, ARNG, and USAR. All Army organizations, elements, and activities that keep an ammunition SRA—including posts, camps, and installations—maintain accountable records for ammunition stock, which includes training ammunition. Organizations that consume ammunition will use the procedures in this chapter to account for ammunition and missiles at the user level. The Brigade Ammunition Office is not authorized a stock records account, and it is not authorized to use this chapter to maintain accountability of ammunition. Therefore, that office's accountability must be maintained in accordance with property book procedures as outlined in AR 710–2, AR 735–5, and DA Pam 710–2–1.

b. Ammunition is authorized, issued, and expended based on the intended purpose: CL, OPL, training, and test. Using ammunition for other than the intended purpose circumvents current ammunition management policy. As such, an AR 15–6 investigation will be initiated by the commanders on subordinate organizations using ammunition for other than its intended purpose (that is, expend CL for training).

c. For clarification or deviation authority, send correspondence through the chain of command to HQDA, DALO–SPM, 500 Army Pentagon, Washington, DC 20310–0500, for approval and dissemination.

12–2. Operational and combat load ammunition

a. General. OPL and CL ammunition will be accounted for at each level of distribution down to the individual. ACOMs designate the units which must keep CLs of class V (ammunition). ACOMs will determine what CL requirements are required to support specific missions. CL requirements are calculated in TAMIS and units and commands are responsible for validating these requirements.

b. Responsibility. Assign responsibility for CL and OPL ammunition to individuals using standard property book and hand receipt procedures found in DA Pam 710–2–1.

c. Requirements. Organizations will use the requirements module in TAMIS to submit CL requirements. CL, and OPL requirements are submitted through their command to HQDA in accordance with the annual requirements and stockage objective guidance that is published by DAMO–TRA. Organizations will not submit a request for issue of ammunition without an approved authorization within TAMIS. Ammunition that are requested and issued will be accounted for, and it is the responsibility of the organization to report deficiencies. In the ARNG, the state's adjutant general designates those units authorized to maintain ammunition OPL. TAMIS provides by organization authorizations for type and quantity of ammunition.

d. Requesting. Use DA Form 581 (Request for Issue and Turn-in of Ammunition) to request ammunition authorization to request or receipt for ammunition

(1) On appointment, commanders or accountable officers will send a copy of assumption of command orders or appointing memorandum to each ammunition storage area from which ammunition are drawn. This authorizes the commander or accountable officer to request or receipt for supplies.

(2) A DA Form 1687 (Notice of Delegation of Authority—Receipt for Supplies) is used when an accountable or responsible person wants to designate personnel as authorized representatives to request and/or sign for ammunition at the user level. The DA Form 1687 will be used to request and/or receipt all ammunition.

(3) The DA Form 1687 (Notice of Delegation of Authority-Receipt for Supplies) will require both handwritten and digital signatures for the identified authorized representatives.

e. Accountability. AR 735–5 and AR 710–2 require all property, including class V, to be placed on the organizational property book upon issue from the supporting ammunition supply activity or receipt from another organization (including ammunition issued on DA Form 581 and ammunition shipped to a unit via DD Form 1348 (DOD Single Line Item Requisition System Document (Manual)), or a lateral transfer from another unit). The only exception is ammunition used in training (that is, training ammunition) will be accounted for upon issue from the ammunition supply activity until expended and the issue document is reconciled with the ammunition supply activity. Organizations will maintain 100-percent accountability of ammunition either expended or returned to the supporting ammunition supply activity as outlined in section III of this chapter. An AR 15–6 investigation will be initiated for ammunition accounting discrepancies in accordance with AR 190–11 when there is a shortage between the quantity of unexpended ammunition turned-in and the quantity issued less expended. Ammunition utilized for testing that is not currently managed on GCSS–A will be reported weekly to WARS.

(1) *Operational load.* Ammunition is authorized in organizations to support or conduct a broad range of day-to-day operational missions, for example, installation EOD, special reaction team, ceremonies, quarry operations, guard mission, force protection, and SOF predeployment site surveys. Follow standard accountability procedures outlined in DA Pam 710–2–1 for ammunition stored in the arms room.

(2) *Combat load.* Conventional ammunition and missiles that a unit must have on hand or on request at all times. Ammunition CL quantities are specified in rounds, units, or weight as appropriate. Account for on-hand CL ammunition on the unit property book. Follow standard accountability procedures found in DA Pam 710–2–1. Records of responsibility are also required.

(a) When a unit's CL is stored at the supporting ASP and the ASP retains accountability for the ammunition, record in the property book the document number from the DA Form 581 request and the location of the stocks reserved for the unit's CL.

(b) When the ASP issues the CL to the unit and posts the issue as a loss to the ammunition stock records, but provides a locked storage location for dedicated access by the unit (if the unit does not have secure storage facilities), assign responsibility for the ammunition having custody of the keys to the locked storage area.

(c) When the ASP issues CL to the unit, the ASP posts the issue as a loss to the ammunition stock records and may provide secure storage for the ammunition but does not limit storage-location access to the owning unit or assign responsibility for the ammunition to the ASP accountable officer.

(d) The property book officer (PBO) will transfer responsibility for the ammunition to an individual who will store and maintain it by using a DA Form 2062 (Hand Receipt/Annex Number) as outlined in DA Pam 710–2–1.

(e) Use the procedures listed in AR 735–5 to adjust the property book if ammunition is expended.

(3) *Combat load.* Ammunition HQDA designated quantities carried by each deployable weapon system to initiate combat.

(4) *Inventories.* Inventory OPL ammunition per AR 190–11, AR 710–2, AR 740–26, and this chapter.

Section II

Managing Nonstandard Ammunition

12–3. Validation of nonstandard ammunition requirements

Submit requirements to G–37/TRA no later than 15 September of each year to meet the standard ammunition requirements submission deadline. Commands that require emergency, high priority, nonstandard ammunition for both training and operations will coordinate requests for these ammunition through G–37/TRA with a copy furnished to JMC. This process is outlined in AR 5–13 and is not intended to circumvent the operational needs statement process.

12–4. Transportation

a. In the continental United States. If the nonstandard items have a DOD final hazard classification and are listed in the Joint Hazard Classification System database, then normal shipment procedures apply. Changes to the original packaging invalidates the hazard classification and requires reassessment.

(1) If the nonstandard items have a department of transportation (DOT)-assigned reference number (sometimes called an ex number), then shipments can be made using the hazard classification associated with the DOT reference number.

(2) If nonstandard items have an interim hazard classification, carry a copy of the interim hazard classification and DOT SP–15448 with the shipping documentation on board each conveyance used to transport the nonstandard items.

b. Outside the continental United States. Interim hazard classifications are not recognized for international shipments by commercial carriers and may not be recognized by host nations. When shipping AE without a final DOD hazard classification internationally by commercial carrier, shipments require a DOT classification of explosives with a DOT-assigned number. As outlined in the joint TB 700–2, interim hazard classifications and justifications for international shipments must accompany a request for a DOT classification of explosives with DOT-assigned number, which may be issued for a period of up to 2 years.

12–5. Inventory

a. ACOMs, ASCCs, and DRUs will inventory and report existing stocks of nonstandard ammunition by lot number, nomenclature (for example, type and caliber), quantity, manufacturer, source information, and SN (if available) no later than 1 January of each year to DCS, G–3/5/7, DAMO–TRA.

b. Each organization is required to report their inventory to the servicing installation to ensure proper storage and accountability.

Section III

Managing Training Ammunition

12–6. Training ammunition

a. Responsibility. This section prescribes procedures for assigning and maintaining responsibility for training ammunition. Use DA Form 5515 (Training Ammunition Control Document) and DA Form 5515–1 (Training Ammunition Control Document Continuation Sheet) as hand receipts to assign responsibility for ammunition. These forms are available on the Army Publishing Directorate's website.

b. Authorization. AR 5–13 authorizes the quantity of ammunition that a unit may receive of conventional ammunition and missiles in support of readiness training for combat once the requirements are validated. DA Pam 350–38 provides requirements-computation data for training ammunition and missiles based on the number of weapons systems assigned, readiness levels, and quantities of ammunition needed to sustain soldier and crew proficiency. Use the models provided in DA Pam 350–38 to compute the amount of ammunition and missiles needed to support training standards. Training ammunition requirements for deployed organizations will be determined utilizing contingency tables within DA Pam 350–38.

12–7. Training ammunition management and control procedures

a. Units that request and receive ammunition from an ASP must maintain training ammunition management and control documents. Documents consist of–

(1) DA Form 5203 (DODIC Master/Lot Locator Record).

(2) DA Form 581 (Request for Issue and Turn-in of Ammunition).
(3) DA Form 3151–R (Ammunition Stores Slip).
(4) DA Form 5515 (Training Ammunition Control Document).
(5) DA Form 2064 (Document Register for Supply Actions).
(6) MFDR if applicable, outlined in appendix D and located on the Army Publishing Directorate's website.

b. Use these documents to manage the training ammunition and missile authorization, to control issue of ammunition and missiles and so unexpended ammunition, missiles, and residue is controlled until return to the ASP.

c. Use TAMIS to review and validate the annual training ammunition requirement. DA Pam 350–38 (STRAC) and a unit's modification table of organization and equipment or table of distribution and allowances (TDA) is the basis for a unit's annual training ammunition requirement.

d. TAMIS manages a balance of remaining authorizations to support training for the summary report. TAMIS does this by deducting from the current authorization and issues from the ASP as they occur.

12–8. Issuing training ammunition to users

a. Use DA Form 5515 as a hand receipt for issuing ammunition in various quantities from a parent unit to a subordinate unit, from one supervisory level to another, or from one person to several recipients. Also use it as a turn-in document for unexpended ammunition and residue when the training event is completed. Use a different DA Form 5515 for each issue. Additional sub-issues may be made using the second part of DA Form 5515 and additional DA Form 5515s.

b. The organization which receives ammunition through DA Form 581 will maintain a copy of each sub-issue DA Form 5515 to provide an audit trail of expenditures of all ammunition down to the first line supervisor and return. Attach a copy of each supporting DA Form 5515 to the issue DA Form 581. The total of the issues cannot exceed total quantities on hand in the unit. Each level that receives or issues ammunition must keep a copy of the issue DA Form 5515; use those on hand in the unit and use this copy to simplify ammunition and residue turn-in. Do not use DA Form 5515 to issue ammunition lower than the first-line supervisor (a sergeant or the equivalent).

(1) The activity that maintains the DA Form 5203 for ammunition received from the ASP assigns a document number to DA Form 5515 from the expendable items document register. On the document register, show the date issued, the DODIC, and the nomenclature of the first item on the DA Form 5515.

(2) Post DA Form 5203, as appropriate, for all items on the DA Form 5515 with the date issued, document number, unit designation, quantity, and remaining on-hand balance. Use DA Form 5515 as a hand receipt to pass responsibility to subordinate levels. For example, an infantry-company supply sergeant who receives ammunition on DA Form 5515 from the battalion S–4 may use another DA Form 5515 to sub-hand receipt the ammunition to the platoon leader, squad leader, or the range noncommissioned officer in charge who will control ammunition use. Each level that uses DA Form 5515 perpetuates the document number assigned to the form by the level that drew the ammunition from the ASP on DA Form 581. The intent of this action is to maintain signature accountability to a supervisory level closest to the soldier to ensure proper control and consumption of ammunition and to simplify collection of residue after the ammunition is expended.

(3) Brief soldiers on their responsibility for authorized use, turn-in, and reconciliation of ammunition items issued to them. Give this briefing both before and immediately following any training activity that includes ammunition. DA Form 5515 contains the required briefing and debriefing certificates. Open boxes of ammunition only as needed. Returning live ammunition is easier when only the number of boxes required to conduct training are opened. Problems occur when more ammunition than needed is opened and lot number integrity is lost. Upon completion of each training event, ensure that all personnel turn in any ammunition or residue they have in their possession.

(4) After all personnel have turned in ammunition and residue, conduct a safety inspection to ensure that they do not have in their possession, in their equipment, or on their vehicles any live ammunition or residue.

(5) Inventory the remaining ammunition and residue. Repack the live ammunition as close as possible to its original configuration, maintaining lot number integrity. Complete the DA Form 5515 by annotating the appropriate blocks. If the nature of the training conducted (for example, field training exercise, joint training exercise, or live fire exercise) prevents collecting all residue, explain the circumstances on DA Form 5515.

(6) Opened ammunition containers will be inspected by a sergeant first class or higher from the unit returning the items, to ensure that lot numbers agree with the lot numbers printed on the container and that all ammunition components are present and properly repacked. Place an ammunition inspection certificate, signed by a sergeant first class or higher, from the unit returning the items in each container certifying that the information listed is correct. Final determination of the condition of ammunition, that is, serviceable or unserviceable, rests with ASP personnel.

(7) Pack supplementary charges removed from artillery projectiles prior to assembling proximity fuzes to projectiles in the containers from which the proximity fuzes were removed. The containers should be properly marked and will be returned to the ASP.

c. Regarding issuing training ammunition to allied countries within CONUS, allied countries that will train in the United States will purchase their ammunition through the ACSA or FMS.

(1) Each country will be assigned a unique pseudo-DODAAC/UIC to process the shipment in the accountable records.

(2) The ASP will issue ammunition on a manual DA Form 581 to the organization.

(3) The ASP will process an MRO if the ammunition have to be shipped to the organization. The MRO assigns a document number, specifies the ASP, country, organization, primary point of contact, DODIC, quantity to be released, and the individuals identified to receive the items.

(4) The gaining ASP will process the shipment or transfer of the ammunition as outlined in the MRO, and the ASP will maintain a copy of DD Form 1348 as an accountable record.

12–9. User return of ammunition and residue

The activity that first issued the ammunition on DA Form 5515 reconciles the quantities of ammunition and residue returned against the quantity originally issued by—

a. Noting all shortages.

b. Verifying a statement is entered on DA Form 5515 to explain the circumstances causing the shortages.

c. Ensuring the statements on the form are signed and dated.

d. Signing DA Form 5515, confirming that receipt of the ammunition and residue turned in and that the residue does not contain any live rounds, primers, explosives, or other extraneous material.

e. Posting DA Form 5515 to the document register and annotating the issue transaction as completed, including the date completed.

f. Posting the quantity of live rounds received to the appropriate DA Form 5203 as gains.

12–10. Specially controlled training ammunition

a. *Expenditure certification.* (This certification is in addition to requirements in para 12–15).

(1) The unit range officer in charge (a sergeant or higher) will sign and date DA Form 581 or DA Form 5515 and control all items coded with a T (see app F) while at the range.

(2) The unit range safety officer (a sergeant or higher) will certify quantity drawn, quantity to be returned, and quantity consumed in training at the range. A second lieutenant or higher will perform the unit range safety officer duties at any training event requiring expenditure of explosives at locations other than ranges on Army installations; or when CAT I and II items are used in live fire exercises.

(3) The unit range safety officer will personally observe placement of charges, actual detonation, and certify the quantity of all items expended. Certification will be completed on DA Form 5692–R (Ammunition Consumption Certificate). A sample DA Form 5692–R (Ammunition Consumption Certificate) is shown at figure 12–1.

(4) Attach the original copy of each certification of expenditure to the turn-in document (DA Form 581 or DA Form 5515). The unit range safety officer will sign and date expenditure statement placed in block 30 of the DA Form 581. Documents will be provided to the ASP during the turn-in and reconciliation process. The ASP will not clear units without the required certifications and signatures.

AMMUNITION CONSUMPTION CERTIFICATE

For use of this form, see AR 710-2-1, the proponent agency is DCS, G-4.

UNIT	RANGE AND LOCATION
Alpha Company	Range 35 Fort Bragg, NC
DOCUMENT NO.: Issue Doc # from your issue document	DATE: 16062016

ITEM	DODIC	NOMENCLATURE	LOT NUMBER	QUANTITY CONSUMED
1	A059	CTG., 5.56MM Ball M855 CLPD	TAA11E005-070	1680
		----------LAST ITEM----------		
		The Unit Range Safety Officer (RSO) will certify quantity drawn, quantity to be returned and quantity and quantity consumed.		
		The Unit RSO will personally observe placement of charges, actual detonation, and certify the quantity of all items expended. Certification will be validated using this form.		

CERTIFYING OFFICIAL

I certify that I saw the above items consumed during training on *(indicate date)* → DATE: 16062016

NAME *(Typed or Printed)*	SIGNATURE
JANE DOE	Digital Signature
UNIT: Alpha Company	POSITION: Range Safety Officer

DA FORM 5692-R, MAY 1988 APD LC v1.01ES

SAMPLE

Figure 12–1. DA Form 5692–R Ammunition Consumption Certificate

b. Demolition plan.

(1) A copy of the unit's DA Form 2203 (Demolition Reconnaissance Record) will be provided to Range Operations when the unit requests use of the range for training purposes. Use FM 3–34.214 for instructions when preparing the DA Form 2203 and submit to Range Operations prior to using training ranges.

(2) The training unit's Demolition Reconnaissance Report must be approved one level higher than the unit requesting explosives but not lower than battalion level.

(3) Use this plan check against explosives reported as expended.

(a) Range Operations will retain all Demolition Reconnaissance Reports.

(b) Units conducting training will provide Range Operations with the following: time the range was opened and closed, type of training, type and amount of explosives consumed, firing system types and amounts consumed, and a copy of the issue DA Form 581. This information will be provided to Range Operations at the time the range is closed. Range Operations will record this information in a daily log.

(c) Range Operations will compare amounts reported as consumed with the amounts indicated on the training units Demolition Reconnaissance Report. Any differences will be challenged within one working day.

Section IV

Request, Receive, and Turn-in Ammunition

12–11. Requesting ammunition

a. Organizations will request ammunition in TAMIS using a TAMIS-generated DA Form 581. Detailed instructions for preparing DA Form 581 to request ammunition are in figure 12–2. Prepare a separate DA Form 581 for each training or test event code as outlined in AR 5–13. Training event codes are listed in DA Pam 350–38.

REQUEST FOR ISSUE AND TURN-IN OF AMMUNITION
For use of this form, see AR 710-2; the proponent agency is DCS, G-4.

1. ISSUE [X]
2. TURN-IN [ ]
3. DOCUMENT NO. W12ABC61651000
4. LOCAL USE
5. PAGE 1 OF 1
6. FOR LOCAL USE

7. SEND TO: ASP, FORT CAMPBELL, KY
8. REQUEST FROM: 101ST SUS BDE, FORT CAMPBELL, KY
9. DATE MATERIEL REQUIRED (YYYYMMDD): 20160701
10. PRIORITY
11. ALLOCATION PERIOD: 4TH QUARTER
12. DODACC: W12ABC
13a. REQUESTED BY: PATRICK M. SMITH, MSG
13b. DATE (YYYYMMDD): 20160615
13c. SIGNATURE: Digital Signature
14a. APPROVED BY: SUSAN E. AMMO, MAJ
14b. DATE (YYYYMMDD): 20160615
14c. SIGNATURE: Digital Signature

15. ITEM	16. DOCIC	17. NSN	18. NOMENCLATURE	19. UI	20. QTY REQUESTED/ TURNED IN	21. TEC	22. ACTION CODE	23. QTY ISSUED/ RECEIVED	24. LOT/SERIAL NO.	25. CC	26. POSTED BY	27. DATE (YYYYMMDD)
1	A059	1305-01-155-5459	CTG, 5.56MM BALL M855 CLPD	EA	1680	TRS	TIS		LB-91L086-152			
2	A059	1305-01-155-5459	CTG, 5.56MM BALL M855 CLPD	EA	1680	TRS	TIS		LC-04L380-211			
3	A064	1305-01-156-7584	CTG, 5.56MM BALL M855/I TR M856	EA	1600	TRS	TIS		LC87K69L218			
4	A064	1305-01-156-7584	CTG, 5.56MM BALL M855/I TR M856	EA	1600	TRS	TIS		LC-88M691L295			
5	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	800	TRS	TIS		HIB-L-500-29			
6	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	1600	TRS	TIS		LC-LI40125			
7	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	800	TRS	TIS		LC-89F601Y620			

28. REMARKS

Remarks for Training Document:
-Explain the type of training to be conducted
-Training dates
-Requested issue date

POC: Name, phone number, and email address

Remarks for Combat Load:
-Explain reason for issue
-The above items will be accounted for on the property book IAW AR 710-2 and DA PAM 710-2-1 and DA PAM 700-16
-Items listed above are not authorized from training

POC: Name, phone number, and email address

29. RELATED DOCUMENT SERIAL NOS.

30a. ISSUED BY: RON B. SNUFFY
30b. SIGNATURE: Digital Signature
30c. DATE (YYYYMMDD): 20160615
31a. RECEIVED BY: SAMUEL C. JONES
31b. SIGNATURE: Digital Signature
31c. DATE (YYYYMMDD): 20160615
32. TAMIS CONTROL NO.

DA FORM 581, JUL 1999 — EDITION OF AUG 89 MAY BE USED — APD LC v1.02ES

SAMPLE

Figure 12–2. DA Form 581, Request for Issue of Ammunition, regarding request for issue

b. If manual procedures are utilized, the PBOs or supply officer will assign DA Form 581 a document number from the expendable document register. If automated procedures are used, a computer-generated document number will be generated.

c. Have the unit commander (or DA Form 1687-designated representative) sign and date DA Form 581.

d. Keep one copy of DA Form 581 and/or DA Form 581–1 (Request for Issue and Turn-in of Ammunition Continuation Sheet), if applicable, in the suspense file. Forward all other copies through the authenticating officer to the ASP within the time frame and in the number of copies specified in the ASPs operating procedures (usually 3 days prior to the requested pick-up date).

e. Request for ammunition on DA Form 581 should list no more than seven DODICs on each page. If the ammunition requested is for overhead fire, enter in the remarks block of DA Form 581 the statement, "To be used for overhead fire."

f. Requests for pick-up of ammunition are approved by automated means, by the approving commander's signature, or by a DA Form 1687 designated approving official. ACOMs will establish procedures for a records check to be performed by local Provost Marshal Office in accordance with AR 190–11 on each individual authorized to requisition or receipt for AEs. Both the requesting and approving authorities provide DA Form 1687s to the ASP. The approval procedure gives commanders control of ammunition issues to their units. Approval is based on units not exceeding their sub authorization. The ASP will verify that the authorized signatures of the requesting and approving officials appear on each request.

g. Unit commanders are responsible for security and control of the unit's ammunition program and for ensuring that only authorized personnel will receipt for class V drawn from any ASP.

(1) Ensure DA Form 1687 is valid for a period the approving authority expects to remain in his or her position or not to exceed one year from the date annotated in the date box located in the top right corner of the form, whichever is less. Review the dates quarterly for accuracy.

(2) Commanders authorize officers, sergeant and higher and civilian equivalents, to sign requests for pick-up of ammunition. Only persons in the rank of sergeant and higher and civilian equivalents are authorized to receipt for CAT I and II AA&E per AR 190–11. Commanders will designate a responsible person to receipt for CAT III and IV ammunition.

(3) Give two copies of DA Form 1687 (see figure 12–3 for model) to the ASP and one copy to the authenticating officer. Attach a copy of the commander's assumption-of-command orders, and/or battalion supply officer/PBO orders to each of the signature cards.

NOTICE OF DELEGATION OF AUTHORITY - RECEIPT FOR SUPPLIES
For use of this form, see DA PAM 710-2-1.The proponent agency is DCS, G-4.

DATE: 20160601

AUTHORIZED REPRESENTATIVE(S)

ORGANIZATION RECEIVING SUPPLIES: 1234 Army Brigade, Pentagon, Washington, DC Card 1 of 2

LOCATION: Ammunition Supply Activity

LAST, FIRST, MIDDLE INITIAL	AUTHORITY REQ	AUTHORITY REC	SIGNATURE AND INITIALS
DOE, JOHN J., CW5, DOD ID Expiration 3 Nov 16	YES	YES	
JONES, WILL E., SGT, DOD ID Expiration 1 Jan 17	NO	YES	
//////////NOT USED//////////			
//////////NOT USED//////////			

AUTHORIZATION BY RESPONSIBLE SUPPLY OFFICER OR ACCOUNTABLE OFFICER

THE UNDERSIGNED HEREBY ☒ DELEGATES TO ☐ WITHDRAWS FROM THE PERSON(S) LISTED ABOVE

THE AUTHORITY TO: Request/receive ammunition items fro the supporting ammunition supply activity.

REMARKS

The individuals listed above have been screened IAW AR 190-11. All other editions are suspended.

I ASSUME FULL RESPONSIBILITY

UNIT IDENTIFICATION CODE: WAB4DE

DODAAC/ACCOUNT NUMBER: W12ABC

LAST, FIRST, MIDDLE INITIAL	GRADE	TELEPHONE NUMBER	EXPIRATION DATE	SIGNATURE
BOSS, SUSAN P.	LTC	123-456-7890	20170530	

DA FORM 1687, NOV 2015 PREVIOUS EDITIONS ARE OBSOLETE APD LC v1.01ES

SAMPLE

Figure 12–3. DA Form 1687, Notice of Delegation of Authority—Receipt for Supplies

12–12. Receiving ammunition

a. Prior to ammunition pick up, the ASP will use DD Form 626 (Motor Vehicle Inspection (Transporting Hazardous Materials)) to verify the selected vehicles have passed a stringent safety inspection. Vehicle inspection criteria is also explained in the supporting ASP's SOP.

(1) At the ASP, a civilian QASAS, military personnel, ammunition warrant officer (890A), or other qualified person, inspects unit vehicles used to pick up ammunition to ensure the vehicles are safe to transport ammunition. The unit may not substitute other vehicles to transport live ammunition unless the substitute vehicles have a current DD Form 626 issued by the ASP.

(2) DOT regulations and local public laws govern transportation of ammunition on public highways. The ASP will provide the driver with a completed DD Form 2890 (DOD Multimodal Dangerous Goods Declaration) when vehicles are loaded with ammunition for movement over public highways or are travelling on a military installation considered to have public access (see DTR—Part II, Cargo Movement; Chapter 204, Paragraph C, Regulatory Requirements, C5a–c). DD Form 2890 must be completed by a QASAS, an installation-transportation-office-qualified individual, or unit personnel that are certified with Ammo-62 (Technical Transportation of Hazardous Materials) in accordance with DTR—Part II, Chapter 204, Paragraph D–1.

Note. This certification is good for 2 years only, and individuals must take the refresher course, Ammo 37 (General Transportation of Hazardous Materials Refresher), every 2 years. Do not use vehicles to transport ammunition on public highways or open installations without having DD Form 626 and DD Form 2890. Vehicles transporting inert ammunition items and/or inert residue do not require the DD Form 626 or DD Form 2890.

(3) Requirements for the security of ammunition and missiles are prescribed in AR 190–11. When storing ammunition, follow the safety procedures in DA Pam 385–64 unless specifically exempted or when host-nation laws take precedence.

b. Pick-up personnel report to the ASP customer service clerk. Give the clerk the unit suspense copy of the DA Form 581 and request inspection of the vehicles that will transport the ammunition.

c. Follow the ASP checker (escort) to the ammunition storage area.

d. Inventory, load, block, and brace the ammunition selected by the ASP checker. The inventory must verify quantities and lot numbers.

e. Sign and date the Signature of Issuing Checker block of DA Form 3151–R.

f. Return loaded vehicles to the vehicle assembly area for inspection by QASAS personnel for proper loading, blocking, bracing, and safety (including placards).

g. Accompany the ASP checker to the ASP customer service clerk who will complete the issue blocks of the DA Form 581. Sign and date the receipt block of the DA Form 581. Obtain copies of the DA Form 581, DA Form 3151–R, DD Form 626, and, if necessary, DD Form 2890. Ensure that any restrictions pertaining to the use of the ammunition issued are entered on the DA Form 3151–R and DA Form 581 in clear and concise language.

h. When the ammunition is received, the unit will post the issue to the unit document register, DA Form 2064 by completing the date and quantity received as shown on the DA Form 581. File the completed DA Form 581 in the unit voucher file.

12–13. Turn-in live and residue ammunition

a. Prepare separate DA Form 581s to turn in live ammunition and residue (figures 12–4 and 12–5). Assign document numbers to DA Form 581 from the expendable items document register. Requests for live ammunition and residue turn-in require signatures in blocks 13 and 14 of DA Form 581, and date blocks 13b and 14b when the following criteria are met:

REQUEST FOR ISSUE AND TURN-IN OF AMMUNITION
For use of this form, see AR 710-2; the proponent agency is DCS, G-4.

1. ISSUE [ ]
2. TURN-IN [X]
3. DOCUMENT NO. W12ABC61701000
4. LOCAL USE
5. PAGE 1 OF 2
6. FOR LOCAL USE

7. SEND TO
ASP
FORT CAMPBELL, KY

8. REQUEST FROM
101ST SUS BDE
FORT CAMPBELL, KY

9. DATE MATERIEL REQUIRED (YYYYMMDD) 20160705
10. PRIORITY
11. ALLOCATION PERIOD 4TH QUARTER
12. DODACC W12ABC

13a. REQUESTED BY PATRICK M. SMITH, MSG
13b. DATE (YYYYMMDD) 20160618
13c. SIGNATURE Digital Signature

14a. APPROVED BY SUSAN E. AMMO, MAJ
14b. DATE (YYYYMMDD) 20160618
14c. SIGNATURE Digital Signature

15. ITEM	16. DOCIC	17. NSN	18. NOMENCLATURE	19. UI	20. QTY REQUESTED/ TURNED IN	21. TEC	22. ACTION CODE	23. QTY ISSUED/ RECEIVED	24. LOT/SERIAL NO.	25. CC	26. POSTED BY	27. DATE (YYYYMMDD)
1	A059	1305-01-155-5459	CTG, 5.56MM BALL M855 CLPD	EA	1680	TRS	TAR		LB-91L086-152			
2	A059	1305-01-155-5459	CTG, 5.56MM BALL M855 CLPD	EA	1680	TRS	TAR		LC-04L380-211			
3	A064	1305-01-156-7584	CTG, 5.56MM BALL M855/I TR M856	EA	1600	TRS	TAR		LC87K69L218			
4	A064	1305-01-156-7584	CTG, 5.56MM BALL M855/I TR M856	EA	1600	TRS	TAR		LC-88M691L295			
5	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	800	TRS	TAR		HIB-L-500-29			
6	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	1600	TRS	TAR		LC-LI40125			
7	A131	1305-00-143-7163	CTG, 7.62MM BALL M80/I TR M62	EA	800	TRS	TAR		LC-89F601Y620			

28. REMARKS
The above listed items were drawn on document number W12ABC61651000.
All other items on that document were properly expended.
Residue turn-in document number W12ABC61701001.
Requested turn-in date: 5 July 2016.

POC: Name, phone number, and email address

29. RELATED DOCUMENT SERIAL NOS.

30a. ISSUED BY RON B. SNUFFY
30b. SIGNATURE Digital Signature
30c. DATE (YYYYMMDD) 20160705
31a. RECEIVED BY SAMUEL C. JONES
31b. SIGNATURE Digital Signature
31c. DATE (YYYYMMDD) 20160705
32. TAMIS CONTROL NO.

DA FORM 581, JUL 1999 EDITION OF AUG 89 MAY BE USED APD LC v1.02ES

SAMPLE

Figure 12–4. DA Form 581, Live Turn-in

REQUEST FOR ISSUE AND TURN-IN OF AMMUNITION

For use of this form, see AR 710-2; the proponent agency is DCS, G-4.

1. ISSUE ☐ 2. TURN-IN ☒	3. DOCUMENT NO. W12ABC61671001	4. LOCAL USE	5. PAGE 1 OF 1	6. FOR LOCAL USE	
7. SEND TO ASP FORT BRAGG, NC	8. REQUEST FROM 82ND SUS BDE FORT BRAGG, NC	9. DATE MATERIEL REQUIRED (YYYYMMDD) 20160701	10. PRIORITY	11. ALLOCATION PERIOD	12. DODACC W12ABC
		13a. REQUESTED BY JANE I. DOE, SFC	13b. DATE (YYYYMMDD) 20160622	13c. SIGNATURE	
		14a. APPROVED BY JOHN B. DOE, 1LT	14b. DATE (YYYYMMDD) 20160622	14c. SIGNATURE	

15. ITEM	16. DOCIC	17. NSN	18. NOMENCLATURE	19. UI	20. QTY REQUESTED/ TURNED IN	21. TEC	22. ACTION CODE	23. QTY ISSUED/ RECEIVED	24. LOT/SERIAL NO.	25. CC	26. POSTED BY	27. DATE (YYYYMMDD)
1	A061	1305-00-121-0877	CLIP, CTG	EA	305	TRS	TIR					
2	NX69	8140-00-078-8969	BOX, WIREBOUND W/ENDS (M2A1)	EA	5	TRS	TIR					
3	WY89	8140-00-828-2938	BOX, MTL M91A1	EA	7	TRS	TIR					
4	WY91	8140-00-690-1699	BOX, MTL M2A1	EA	6	TRS	TIR					
5	ZSAA	8140-00-864-3194	BOX, WIREBOUND W/ENDS	EA	1	TRS	TIR					
6	ZW43	1305-00-000-0556	CASE CTG, FIRED BRASS 5.56MM	LB	67	TRS	TIR					
7	ZW44	1305-00-000-0762	CASE CTG, FIRED BRASS 7.62MM	LB	41	TRS	TIR					

28. REMARKS

The above listed items were drawn on document number W12ABC61651000 and were properly expended.
All other items drawn on that document are being returned under document number (insert document number).

Contents have been inspected. Contents do not contain any live rounds, unfired primers, explosives, dangerous or hazardous materials

Requested turn-in date: 1 July 2016.

POC: Name, phone number, and email address.

29. RELATED DOCUMENT SERIAL NOS.

30a. ISSUED BY RON D. SNUFFY	30c. DATE (YYYYMMDD)	31a. RECEIVED BY SAMUEL C. JONES	31c. DATE (YYYYMMDD)	32. TAMIS CONTROL NO.
30b. SIGNATURE Digital Signature	20160705	31b. SIGNATURE Digital Signature	20160705	

DA FORM 581, JUL 1999 EDITION OF AUG 89 MAY BE USED APD LC v1.02ES

SAMPLE

Figure 12–5. DA Form 581, Request for Turn-in of Ammunition regarding residue turn-in

(1) The original ammunition issue document was not processed or approved through TAMIS.

(2) Controlled item inventory code I or II ammunition items were issued on the original document.

(3) Turn-in of live ammunition is formally accounted for on the organizational property book (for example, CL and OPL), as outlined in AR 710–2.

b. Ensure that DA Form 581 for residue turn-in contains the statement shown in figure 12–5 certifying that no live ammunition is among the residue materiel. DA Form 581 for live ammunition must contain the statement shown in figure 12–5 certifying that all ammunition received was either expended or turned in. Complete DA Form 5811 (Certificate—Lost or Damaged, Class 5 Ammunition Items) for any residue shortages as shown in figure 12–6. The first lieutenant colonel in the chain of command or civilian equivalent signs the certificate. Make every effort to collect all residue for turn-in, even when the nature of the event prevents collection of all residue. Missing live ammunition requires action under AR 190–11. An AR 15–6 investigation will be initiated when a shortage of CAT I ammunition or CAT I residue occurs.

c. Commanders are required to initiate action and attach evidence of that action (for example, a copy of AR 15–6) when:

(1) Turn-in action and all administrative requirements were not completed within five working days following the event for which the ammunition was issued and an extension was not granted due to abnormal circumstances.

(2) The combined quantities of live ammunition and residue turned in is less than the quantities of ammunition initially issued by the ASP and is not accounted for by the commander's statement.

(3) Damage to live ammunition is from other than fair wear and tear (FWT).

CERTIFICATE - LOST OR DAMAGED CLASS 5 AMMUNITION ITEMS

For use of this form, see DA PAM 710-2-1; the proponent agency is DCS, G-4.

PART I - CERTIFICATION

I certify that the item(s) described in blocks 1-5 below were as stated. Circumstances of the loss or damage are accurately described below.

1. STOCK NO.	2. DESCRIPTION	3. QUANTITY	4. ITEM WAS *(Check)*		5 DAMAGED BY NEGLIGENCE? *(Check)*	
			a. LOST	b. DAMAGED	a YES	b NO
1305-01-266-9570	CAS CTG, FIRED BRASS 7.62MM	4 LBS	☒	☐	☐	☐
LAST ITEM----------	----------	----------	☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐

6. CIRCUMSTANCES OF LOSS OR DAMAGE

The items listed above were loss during an Aviation Live Fire Exercise. The rounds were fired from an aircraft over an area with high vegetation. The brass could not be recovered.

The above items were drawn on Doc# W12ABC61661000 on 17 June 2016.

7a. SIGNATURE	7b. DATE
Digital Signature Organizational Commander	20160619

PART II - ACTION

8. I have reviewed the evidence pertaining to the loss or damage as stated. I agree ☒ do not agree ☐ that the loss or damage to the class 5 item *(s)* was ☒ was not ☐ due to negligence, willful misconduct, or deliberate unauthorized use. The following actions shall be taken.

	CHECK ALL THAT APPLY
9. No further action is required. →	☒
10. An administrative adjustment shall be made in the property book for the class 5 item *(s)* that were not lost through negligence, willful misconduct, or deliberate unauthorized use.	☐
11. The damaged class 5 item*(s)* shall be repaired as fair wear and tear as the damage was not caused by negligence, willful misconduct, or deliberate unauthorized use.	☐
12. The circumstances surrounding the loss or damage warrant the processing of a formal Report or Survey that will be initiated immediately by the responsible property officer.	☐

13a. SIGNATURE	13b. TITLE	13c. DATE
Digital Signature	LTC or GS-14 or above	20160619

DA FORM 5811-R, AUG 1989 APD LC v1.02ES

SAMPLE

Figure 12–6. DA Form 5811, Certificate—Lost or Damaged Class 5 Ammunition Items

d. ASPs must meet a unit's requirement to return ammunition and residue and to reconcile the documentation within five working days after completing the training event, or the ASP must grant an extension. The ARNG state marksmanship coordinator is responsible for turning in all marksmanship ammunition and residue on a quarterly basis. A complete reconciliation of prior issue documents is required before receiving additional training ammunition.

e. ASPs provide temporary storage for ammunition and residue pending completion of the turn-in action. At the end of a training event, prior to close of the training day, return all ammunition and residue to the ASP or guarded ammunition holding area (AHA) for temporary storage pending completion of turn-in action. Before taking ammunition to the ASP or AHA, sort all explosives from inert residue and inspect all items for safety. Coordinate turn-ins in advance to ensure timely acceptance. The ASP may grant exceptions to the same-day turn-in requirement when factors such as distance, weather, and record-processing workload prevent the turn-in.

f. When the unit exceeds the five-working-day, turn-in, documentation-reconciliation period without prior coordination, the ASP initiates command notification, places the unit on the delinquent document list, and will not issue more training ammunition to that unit until the turn-in action is completed or proof of initiation of an investigation is provided to the ASP.

g. Following turn-in of the ammunition and residue, the ASP reconciles the turn-in quantities using the weight factors in appendix G or an item count, as appropriate. The ASP gives signed copies of the DA Form 581 and DA Form 3151–R to the unit. File these forms with the issue copy of the DA Form 581 and appropriate DA Form 5515s. Maintain the file under AR 25–400–2, as applicable.

h. For training units, add the quantities of serviceable live ammunition turned-in (ammunition CCs A, B, and C), as indicated by the ASP, as a gain to adjust the running balance on the unit copy of the TAMIS Authorization Report.

i. Ammunition items returned in their original containers with the seals intact, will be credited to the units when DA Form 581 is processed through TAMIS via the ASP transaction.

j. Use the following procedures when training units have AE on hand, regardless of the reason or circumstance, after turn-in has been completed and documents reconciled—

(1) Prepare a new DA Form 581 for the AE. Note in block 11, the original issue document number and state “This is an amended turn-in document” (see fig 12–7).

REQUEST FOR ISSUE AND TURN-IN OF AMMUNITION
For use of this form, see AR 710-2; the proponent agency is DCS, G-4.

1. ISSUE ☐ 2. TURN-IN ☒	3. DOCUMENT NO. W12ABC61791001	4. LOCAL USE	5. PAGE 1 OF 1	6. FOR LOCAL USE	
7. SEND TO ASP FORT CAMPBELL, KY	8. REQUEST FROM 101ST SUS BDE FORT CAMPBELL, KY	9. DATE MATERIEL REQUIRED (YYYYMMDD) 20160705	10. PRIORITY	11. ALLOCATION PERIOD 4th Quarter	12. DODACC W12ABC
		13a. REQUESTED BY JANE E. SMITH, SFC	13b. DATE (YYYYMMDD) 20160627	13c. SIGNATURE Digital Signature	
		14a. APPROVED BY JAMES J. JONES, CPT	14b. DATE (YYYYMMDD) 220160627	14c. SIGNATURE Digital Signature	

15. ITEM	16. DOCIC	17. NSN	18. NOMENCLATURE	19. UI	20. QTY REQUESTED/ TURNED IN	21. TEC	22. ACTION CODE	23. QTY ISSUED/ RECEIVED	24. LOT/SERIAL NO.	25. CC	26. POSTED BY	27. DATE (YYYYMMDD)
1	ZAAA	8140-00-960-1699	Case ctg, brass, 5.56mm	LB	15	TRS	TIR					
------	-------	LAST ITEM	----------	------	----------	--------	--------					

28. REMARKS
This is an amended turn-in document due to (state reason).

Signature Block of First O-5

The above listed items were drawn on document number W12ABC61651000.
All other items on that document were properly expended.
Live Turn-in document number W12ABC61701000.
Requested turn-in date: 5 July 2016.

POC: Name, phone number, and email address

"Contents have been inspected. Contents do not contain any live rounds, unfired primers, or explosives, dangerous or hazardous materials."

29. RELATED DOCUMENT SERIAL NOS.

30a. ISSUED BY FRANK B. SNUFFY	30c. DATE (YYYYMMDD)	31a. RECEIVED BY CHERYL D. DOE	31c. DATE (YYYYMMDD)	32. TAMIS CONTROL NO.
30b. SIGNATURE Digital Signature	20160705	31b. SIGNATURE Digital Signature	20160705	

DA FORM 581, JUL 1999 EDITION OF AUG 89 MAY BE USED APD LC v1.02ES

SAMPLE

Figure 12–7. DA Form 581, Request for Issue and Turn-in of Ammunition, regarding amended residue turn-in

(2) The unit commander will ensure that AE scheduled for turn-in will be maintained under the appropriate controls and safeguards until it can be turned in to an ASP.

(3) Turn in AE during normal duty hours for the ASP.

(4) The first lieutenant colonel in the chain of command will—

(a) Sign and date the amended return. Ensure units do not abuse the amended turn-in procedures.

(b) Use the amended turn-in procedures to monitor AE control in his or her subordinate units.

12–14. Unit turn-in actions at the ammunition supply point

a. Provide adequate personnel to accomplish the turn-in task. Turn in the personnel report to the ASP stock control clerk, give the clerk the unit turn-in document(s), and request inspection of the unit vehicles.

b. Accompany the ASP checker and take the live ammunition to the ammunition segregation and inspection area. Unload and segregate the live ammunition by DODIC and lot number. Assist ASP personnel in inspecting, inventorying, repacking, and stenciling containers as necessary. Reload the repacked ammunition on the unit vehicles and follow the ASP escort to the appropriate ammunition storage areas. Unload and place the ammunition in storage as directed by the checker.

c. Accompany the ASP checker to the residue salvage yard. Unload and segregate the residue by type. Assist ASP personnel in weighing or counting the residue.

d. Accompany the ASP checker to the ASP stock control clerk who will complete the appropriate blocks on the DA Form 581s, ensuring that blocks 26 and 27 are filled in for each line item present. Obtain signed copies of DA Form 581 and DA Form 3151–R.

12–15. Consumption of ammunition

a. *Reporting.* Units will report the loss, destruction, and expenditure for combat, sustainment, operational, and training ammunition using DA Form 4949 (Administrative Adjustment Report (AAR)) for all ammunition, missiles, and explosive items and on an MFDR for all applicable missiles.

(1) TAMIS manages the roles and permissions to transmit electronic forms by user rights. Ammunition consumers, managers, or unit reporting officials must establish a user account within TAMIS and be granted the rights to submit DA Form 4949.

(2) Commanders and PBOs do not require a TAMIS account. TAMIS-generated DA Form 4949s are designed to be sent via link to the PBO's email directly from TAMIS once the routing is established. RDT&E units are exempt from this requirement, as PBOs don't normally review or approve DA Form 581s for test use.

(3) Accounts are required for commanders, delegated officials, or PBOs requesting access to previously signed forms and reports. DA Form 4949 is retained on the TAMIS server to maintain auditability and data validation.

(4) Unit PBOs or designated representatives will use their TAMIS account to review, verify, and approve all ammunition expenditures or loss.

(5) The TAMIS user guide provides detailed instructions to establish and maintain DA Form 4949 routing. Organizations will establish a routing chain for all assigned UICs in TAMIS.

b. *Expenditure.* Posting will include, at a minimum, the DODIC, SNs of items consumed, lot numbers, and quantity expended. Units will make every effort to identify the document number against which the ammunition consumed was issued. Information for ammunition issued through TAMIS is maintained and available during the DA Form 4949 creation process to assist with expenditure reporting. Ammunition issued in support of testing is exempt from using DA Form 4949. Units will annotate the type of expenditure from the following categories:

(1) *Consumed.* Ammunition, missiles, or explosive fire from weapons systems for its intended purpose to meet mission requirements

(2) *Demilitarization.* Ammunition, missiles, or explosives destroyed through means other than those already described. Ammunition consumed as part of the destruction (C–4, blasting caps, and other donor materials) will not be captured in this category. All ammunition consumed to affect demilitarization of other ammunition will be captured as consumed as outlined in paragraph 12–15*b*(1).

(3) *Combat loss.* For use in forward operations for ammunition issued as CL or SL only. It includes ammunition, missiles, or explosives that are lost due to enemy action or are damaged through fire, explosion, or delivery process (such as air drops and speedball) that renders the ammunition unusable or unrecoverable. Do not report ammunition captured as combat loss as demilitarization if additional destruction is not required during clean up or recovery.

(4) *Mission event code.* Units will select the proper mission event code, as outlined in the TAMIS user's manual, and ensure the reported date of expenditure is the actual date consumed, lost, or demilitarized. Report expenditures on DA Form 4949 only once in addition to the required missile firing reports or supplemental firing reports required by regulations.

Section V

Physical Security, Amnesty, Inventory Inspections, and Audits

12–16. Physical security

a. Upon departure from the ASP, the receiving unit must provide physical security for the ammunition per AR 190–11 and this chapter. Armed guards are required for CAT I and CAT II missiles and rockets. ARNG units and active Army units located overseas, at the discretion of their ACOMs, are authorized home storage of training ammunition. When keeping ammunition on hand in the unit for more than 30 days, but not more than 90 days, follow the storage and inventory procedures that apply to CL ammunition. Store training ammunition not in use in ammunition storage rooms or magazines that meet the construction requirements in AR 190–11. Just prior to and during training events, the using unit may store training ammunition on vehicles, in open field storage, or uploaded in AHAs provided the following criteria are met:

(1) A perimeter barrier, either temporary or permanent, is maintained.

(2) Continual surveillance is provided by on-duty or specifically appointed guard personnel.

(3) Security lighting is provided, if available, during hours of darkness or poor visibility.

(4) The area is posted as a restricted area.

(5) Access is denied to unauthorized personnel.

(6) Communications are provided for guard personnel, for example, radio or telephone.

(7) The ammunition in field storage is inventoried by the responsible person at the time of storage and every 24 hours thereafter. Report verified inventory shortages per AR 190–11 and submit appropriate serious incident reports. When

more than one unit is using the same storage area, separate and identify training ammunition stocks by unit. Only one unit at a time is responsible for providing security for the field storage area.

b. As an aid to maintaining ammunition security, ACOM, installation, battalion, and company commanders should implement, if possible and applicable, local measures to deter access to training areas and ranges when not in use, that is, post them off limits, employ roving patrols, or make periodic checks to deter the presence of unauthorized personnel. These security practices discourage unauthorized access to these facilities and reduce the scavenging of ammunition items that units may have either purposely or inadvertently left on the range or in the training area.

c. After use, certain items of ammunition retain some value for training; for example, a light anti-tank weapon launcher. Such items are commonly reissued from ASPs to support unit training. For safety, security, and accountability purposes, ensure that all such items are conspicuously marked per DA Pam 385–64, have holes drilled in them, or are identified in some other way to prevent them from turn-in as accountable residue or restoration to their original configuration. Check all such items and return them to the ASP if they are not marked, drilled, or prominently identified in some other manner.

d. Units are not authorized to request ammunition residue from the Defense Logistics Agency (DLA). When residue is needed for a specific training purpose, request the residue from the ASP. Units or unit personnel will not purchase ammunition residue from DLA. The ASP demilitarizes ammunition residue before issue and disposal, sale to authorized contractors, or return to the wholesale level, as appropriate.

e. Ammunition issued in support of testing will follow physical security measures outlined in AR 190–11.

12–17. Ammunition and explosives amnesty program

a. *General.*

(1) *Ammunition and explosives amnesty programs.* AE amnesty programs are intended to maximize recovery of military AE items found outside the supply system. They are not intended to circumvent normal turn-in procedures. Garrisons, installations, and forward-operating bases having elements that use ammunition will establish an AE amnesty program.

(2) *Ammunition and explosives found on post.*

(a) All found AE, excluding small arms ammunition (up to and including 0.50 caliber), will be considered hazardous and will not be moved by untrained personnel. Supporting EOD personnel will respond upon request to recover AE found on post. EOD need not be called when small arms ammunition is found. These items are to be delivered to the ASP. No documentation is required.

(b) EOD units may store recovered AE overnight in the EOD storage locations and may turn in serviceable AE to the ASP as soon as workload permits but no later than three duty days following recovery. If the EOD unit does not have a storage facility, ASP storage personnel will be on call to receive AE from EOD at the ASP. EOD units are exempt from the 24-hour, advance turn-in notification to the ASP, when turning in recovered items found on post for amnesty for AE.

(c) Military police responding to a call to investigate AE found on post, will coordinate all activities with supporting EOD.

(d) At installations without EOD support, commanders will establish a roster of properly trained personnel to evaluate ammunition prior to movement. Formal support agreements will be established with the nearest DOD installation having EOD capability to support the amnesty program.

(3) *Arms, ammunition, and explosives found off post.* When any type of AE or explosive material is found outside an installation boundary, contact local civilian authorities, host nation military authorities, or military police. EOD units will respond to off-post incidents only at the request of civilian authorities or military police.

b. *Roles of commanders.*

(1) The adjutant general for ARNG establishes and implement an AE amnesty program that does not intimidate the individual or prevent the individual from freely turning in ammunition. Each organization commander having elements that use or expend ammunition or explosives will develop an amnesty program that supports the ACOM AE amnesty program.

(2) All commanders—

(a) Monitor the amnesty program as an indicator of the effectiveness of ammunition accountability, so the program is not used to circumvent accountability.

(b) Ensure assigned personnel are briefed on AE amnesty program policies and procedures semiannually and prior to each exercise or training event that requires the use of AE.

(c) Monitor the AE amnesty program to ensure units do not abuse the program instead of using proper turn-in procedures.

(d) Post the location and telephone number of the nearest military turn-in point and provide directions to anyone (military or civilian) who wants to turn in AE under the program.

(e) Develop an SOP detailing specific functional responsibilities and highlighting explosive safety requirements for handling AE amnesty items.

(3) Installation commanders—

(a) Furnish qualified persons to technically supervise amnesty operations and request EOD support as needed.

(b) Establish, at a minimum, an AE amnesty program with the following provisions: publicizing in the media, unit training programs, and community operated facilities and military organizations; amnesty days.

(c) Schedule AE amnesty days annually for collection of abandoned or unauthorized AE. CONUS ammunition production facilities and CONUS wholesale depots will schedule amnesty days at least annually. Coordinate and amnesty day schedule with supporting ASP 60 days prior to each amnesty day. Forward the schedule of the AE amnesty day to all subordinate commanders. Establish collection points that are easily accessible to persons desiring to turn in AE. Safeguard turned in AE and transport it to the ASP. Exercise extreme care in handling both serviceable and unserviceable AE that has been turned in.

(d) Ensure EOD personnel, QASAS, or Soldiers (military occupational specialist 89B) or Ammunition Warrant Officers (890A) are available on AE amnesty days to supervise the collection process. Ensure that medical personnel are on call for emergencies, that explosive safety personnel approve collection procedures and facilities, and that the fire department is notified and firefighting equipment is on call.

(4) ACOM commanders may:

(a) Designate EOD units as amnesty turn-in points.

(b) Provide amnesty collection containers at each ASP.

(c) Make these containers available 24 hours a day for recovery of amnesty AE.

(d) Inspect amnesty containers at irregular intervals. The ACOM Provost Marshal Office, in coordination with the ACOM safety officer and ACOM chief QASAS, will establish the interval. Document results of the inspection and remove and secure any amnesty items found in the containers.

(e) Authorize amnesty containers for AE items in locations other than the ASP.

(f) Have both the ACOM safety officer and ACOM Chief QASAS approve the design, identification, location, and operating instructions of all amnesty containers.

c. Ammunition supply points. ASPs (or surveillance and accountability control teams) will accept ammunition turned in under the provisions of the AE amnesty program. Individuals turning in AE under the amnesty program are not required to have a turn-in document and are exempt from the 24-hour advance turn-in notification to the ASP.

(1) When AE is turned in to the ASP under the amnesty program, the individual making the turn-in will not have documentation. Therefore, the ASP will initiate a DA Form 581 turn-in document to establish an audit trail. The Request From block of DA Form 581 will contain one of the following entries (no other entries are permitted):

(a) Individual.

(b) Amnesty container.

(c) EOD.

(2) ASP storage personnel will respond in a prompt and timely manner to accept AE recovered by EOD personnel.

d. Telephone numbers. Each installation commander will establish a 24-hour telephone number to provide directions to anyone (military or civilian) who wants to turn in military AE under the amnesty program. A recorded message providing information and procedures may be used.

(1) Designate a telephone number at each installation to provide information and procedures for amnesty turn-ins.

(2) This requirement can be satisfied by providing a recorded telephone message, with information and procedures for found ammunition and ammunition amnesty turn-in.

(3) Where recorded messages are not used, individuals working in the area of the phone will be knowledgeable of the AE amnesty program.

e. Publicity. All commanders will ensure AE amnesty program procedures and the location of the nearest amnesty turn-in point are advertised throughout their command's area. ACOM commanders may choose to publicize the amnesty policy in the surrounding civilian community. Installation commanders will ensure the following will be widely publicized:

(1) A telephone number for information on the AE amnesty program and procedures for found ammunition.

(2) The location of the nearest amnesty turn-in point.

12–18. Inventory

a. Physical inventory is accomplished by counting palletized configuration and/or outer packs. Do not disassemble banded pallets to count individual boxes. Do not open sealed boxes to count individual items. If markings are believed to be incorrect, actually count each item of those configurations.

b. Use DA Form 3020–R (Magazine Data Card) only to aid in the resolution of discrepant accountable records and for storage of ammunition. DA Form 3020–R is available in MHP and on the Army Publishing Directorate's Web site. Do not use DA Form 3020–R to determine quantities when conducting inventories because inventories will be recorded on DA Form 3020–R as they are conducted.

c. When ammunition is in storage, use a protective seal on the storage structure, and keep in place the same unbroken seal that was installed on the structure at the completion of the last inventory; data from the last inventory may be used.

d. During an inventory, if any class V items are missing, take immediate action under AR 190–11.

e. Post results of the inventories to accountable records within three working days after completion of the inventory action. For those units not operating automated systems of stock accounting, refer to chapter 13 for instructions on posting inventory results to lot-locator record via SAAS or manually using DA Form 5203.

f. The commanding general of Army Criminal Investigation Command will specify procedures to inventory the ammunition reference file at the Defense Forensic Science Center.

g. Count each item stored at a particular floor location as one item. Data elements required for each stocked item are: DODIC, quantity, SN, lot number, and location. An error in any one of those data elements, means an error for the item. The formula to compute first count inventory accuracy is: total number of items inventoried minus number of items with errors, divided by total number of items inventoried, multiplied by 100.

h. For physical inventory count palletized configuration and/or outer packs, that is, the number of pallets multiplied by the number of containers per pallet, multiplied by the quantity of rounds per container. Do not disassemble banded pallets to count individual boxes. Do not open sealed boxes to count individual items. For less-than-full quantities, either box or pallet, record the quantity used on the light box or the number of boxes on the light pallet multiplied by the number of rounds per box.

i. Inventory procedures for ammunition annotated on the property book or stored in the arms room are outlined in DA Pam 710–2–1.

j. Ammunition issued to users at RDT&E facilities will—

(1) Be accounted for on the property book by quantity, lot number, and SN if applicable.

(2) Be accounted for by users and stored in an approved AHA.

(3) Be inventoried monthly by two personnel to ensure accountability. The same two personnel will not inventory for two consecutive months. Inventories will be annotated on DA Form 3020–R for each DODIC, lot, and CC.

(4) Comply with all ammunition and safety requirements for storage as outlined in DA Pam 385–64.

(5) Comply with ammunition physical security requirements and key control procedures as outlined in AR 190–11 and AR 190–51.

(6) Comply with accountability policy and management procedures outlined in AR 735–5, DA Pam 700–16, and DA Pam 710–2–1.

(7) Maintain strict accountability by using consumption reports to update user-level accountability systems on a daily basis.

(8) Be accounted for in TAMIS accounts established per local need required for processing DA Form 581 and to manage requirements in support of testing, training, and OPL.

(9) Have maintained supporting accountability records generated during RDT&E operations as outlined in AR 735–5 and AR 25–400–2.

12–19. Audits and inspections

The Office of the Assistant Secretary of the Army Financial Management and Comptroller, Accountability and Audit Readiness Directorate, will conduct operating material and supply audits monthly for both retail and wholesale ammunition management procedures and business processes with the exception of ATEC, Communications-Electronics Command, and RDECOM. The HQDA Worldwide Ammunition Logistics/Explosive Safety Review and Technical Assistance Program reviews and audits are conducted approximately every four years or as required by the Logistics Review and Technical Assistance Office (LRTAO) from the Army DAC. ACOMs prescribe the frequency for command inspections and audits for compliance with the procedures in this chapter.

Section VI

Storage

12–20. Introduction.

a. DOD ammunition are stored, monitored, maintained, and moved through a combination of military and commercial means. This network includes military, DA Civilian, and commercial facilities, equipment, and personnel. Perma-

nent and temporary storage locations that are located throughout the CONUS, OCONUS, and afloat are listed in appendix J. Ammunition in these facilities must be monitored and periodically maintained to ensure reliability, safety, and security as outlined in DOD 4195–R, AR 190–11, DA Pam 385–64, and DA Pam 75–5.

b. A stock control account will be set up at each storage activity. The stock accounting system will be designed to permit recording of multiple locations by condition of each stock line.

12–21. Types of storage

a. *Strategic storage.* Storage of ammunition throughout the DOD ammunition enterprise occurs at a number of depots, plants, arsenals, ammunition centers, and commercial storage facilities. These locations store fully functional ammunition or ammunition components, nonstandard ammunition, and bulk energetic materiel within the production and distribution cycle.

b. *Operational storage.* Operational storage is the linkage between strategic storage to tactical storage of ammunition, support tactical storage facilities, and store reserve stocks.

c. *Tactical storage.* Tactical storage of ammunition directly supports the combat division or portions of the division. The type and quantities stored varies depending upon the type of unit supported and their mission.

12–22. Coalition and multinational ammunition and explosives storage

Procedures in this section outline the storage of coalition and or multinational AE on areas (for example, forward bases and staging areas) under Army control. All AE operations on Army-controlled AE storage sites and facilities (for example, ASP, AHA, CL AHA, basic load ammunition holding areas, ammunition transfer and holding points (ATHPs), forward arming and refueling points, and combat ACFT parking areas) will comply with applicable policy.

a. Coalition and or multinational AE may be stored with DOD AE only if it has been hazard classified in a manner equivalent to DOD explosives hazard classification procedures as outlined in TB 700–2. Coalition and/or multinational AE with a DOD equivalent hazard classification that is stored with DOD AE:

(1) May be stored in the same storage structure or on the same storage pad but must be separated from DOD AE.

(2) May be stored in the same storage structure or on the same storage pad with DOD AE provided the Deviation Approval and Risk Acceptance Document (DARAD)—which considers the surveillance, propellant stability controls, packaging, and transportation, handling, and operational practices of such AE—is prepared and approved by the appropriate level per DA Pam 385–30.

b. Separate coalition and or multinational AE, either without a DOD equivalent hazard classification or when the equivalency of the hazard-classification procedure is uncertain, from DOD AE by inter-magazine distance.

12–23. Coalition and multinational ammunition and explosives operation

a. The safety separations between an AE operation and a storage site depend on several factors, including the hazard class present, the net explosive weight present, and the level of protection required. The following are the minimum required levels of protection when AE operations are involved:

(1) Concurrent U.S. Army and coalition and/or multinational AE operations (for example, ammunition issues, turn-in, and inspections) will be separated by a minimum of intraline distance.

(2) Noncurrent U.S. Army and coalition and/or multinational AE operations may be performed on the same storage pad, site, or facility provided the AE of the first operation is removed prior to starting the second operation.

(3) AE operations (United States, coalition, or multinational) at risk from AE storage sites will be given intraline distance level protection from that storage site.

(4) AE storage sites (United States, coalition, or multinational) at risk from AE operations will be given inter-magazine-distance level of protection from that AE operation.

b. Coalition and/or multinational AE storage or operations will be separated by inhabited building distance and/or public traffic route distance from non-AE facilities or locations that require this level of protection as outlined in DODM 6055.09–STD and DA Pam 385–64.

c. When mission necessity or operational constraints will not allow these minimum separation distances to be maintained, the U.S. Army will obtain approval of a DARAD at the appropriate command level or, when required, from the CCDR. When the United States requires storage with coalition and/or multinational AE hazards, coordinate the DARAD with the coalition and/or multinational units involved with the storage of ammunition. Mitigating measures may include a memorandum of agreement to all affected allowing U.S. Army commander to inspect coalition and or multinational AE sites for compliance with safe storage and operating practices. Such agreements will be coordinated in accordance with COCOM policies and instructions.

12–24. Nonstandard ammunition storage

a. To properly store nonstandard AEs on an Army installation requires a DOD hazard division (HD) and compatibility group. Nonstandard AEs without a DOD HD and compatibility group will be stored as HD 1.1 and compatibility group L. Small arms items (0.50 caliber and below in which the projectile does not contain energetics other than tracer material) will stored as HD 1.4 and compatibility group G.

b. Storage items that require compatibility group L will take up excessive storage space at ASPs. Such storage is discouraged, so make every attempt to get a DOD HD for storage as outlined in Defense Finance and Accounting Service Manual 37–100–16, which is updated each FY.

c. Life cycle management plans, including the disposal of unused nonstandard ammunition, must be available to the NICP prior to storage except for nonstandard ammunition used by RDT&E activities in support of testing sites. Demilitarization, residue, and emergency destruction procedures must be included in the acquisition plan.

12–25. Safe haven or secure hold

a. In accordance with DTR 4500.9–R, Part II—Secure Holding, any vehicle using the DTTS will be allowed access at any time to installations designated as secure holding facilities in the Transportation Facility Guide for secure holding, including during a nonemergency situation.

(1) In accordance with DODM 5100.76, DOD installations must accept AA&E shipments for safe haven or secure hold, regardless of arrival time or final destination. If safe haven or secure hold cannot be provided, the DOD activity, in coordination with civil law enforcement authorities, will assist and escort to a suitable location.

(2) A safe haven is a DOD installation parking location where a driver carrying AA&E can secure the vehicle in the event of an emergency situation, such as vehicle breakdown, driver illness, terrorist threat or action, criminal activity, civil disturbance, or natural disaster.

(3) Secure hold is a DOD installation parking location where a driver carrying AA&E can park under nonemergency situations, such as arrival after duty hours.

b. Protection of shipment will be commensurate with the sensitivity of the AA&E. Under safe haven conditions or secure hold, explosive safety quantity distance requirements must be considered but these requirements will not eliminate the responsibility to provide safe haven or secure hold to mitigate shipment vulnerability.

(1) Verification of the driver's or passenger's clearance in the Joint Personnel Adjudication System is mandatory prior to entry. Commanders will ensure Joint Personnel Adjudication System access is available at all times. Installation security personnel can validate the DOD carrier's identification by calling the SDDC Operations Center at 800–826–0794.

(2) Commanders may set local policies for hours that drivers may retrieve their loads from secure hold areas. Commanders of impacted ammunition facilities will develop local SOPs in accordance with applicable regulations to ensure safe, secure, and efficient secure holding capability is available as needed.

12–26. Explosive safety siting

a. Storage of AEs requires minimum safety distances to prevent a cascade of damage in the event of an explosion at a storage location. To identify and abide by these distances, accurate information about an installation's explosives storage is needed.

b. Trained explosive safety personnel at approved storage facilities will identify and record all storage locations and HDs so that the information can be entered into the explosive safety siting (ESS) program for analysis.

c. Explosives safety quantity distance is the distance created by explosive safety arcs generated by ESS procedures and software when explosives are present. The arcs' inter-magazine distance, intraline distance, public traffic route distance, and inhabited building distance correspond to the total net explosives weight of all explosives in an open storage pad, aboveground magazine, or earth-covered magazine. These distances are minimum safety distances between magazines, open storage pads (inter-magazine distance), ammunition mission related work areas (intraline distance), roads (public traffic route distance), and non-ammunition mission areas (inhabited building distance).

d. When an installation receives approval from the DOD Explosives Safety Board for a site plan, the net explosives weight limits represent the maximum amount of AE that an installation is approved to store. If this limit is exceeded, it not only violates and invalidates the explosive safety site plan, but it can also greatly reduce the minimum safety distance from non-ammunition related areas and activities.

e. Army commanders and directors of AE storage facilities will ensure that ESS software, using up-to-date installation Geographic Information System (GIS) map data, combined with real property inventory (RPI) data and potential explosion sites (PESs) data, are used to calculate, analyze, and generate explosive safety quantity distance arcs. Before starting this process, GIS, RPI, and PES data must be prepared for use with the ESS software.

f. ESS uses GIS data for map window display, spatial analysis of separation distances between map features, detection of barricaded facilities using line of site between features and development of site plan drawings.

g. RPI data are used with the ESS software to indicate the use of each facility. The ESS software reads category codes found in RPI data and automatically translates the information into three letter type codes that define the general use of a facility. RPI data comes from the Army Integrated Facilities System, Internet Navy Facilities Asset Data Store, Air Force Automated Civil Engineer System, or ARNG Planning Resource Infrastructure Development and Evaluation database.

h. ESS software uses PES data to define the net explosives weight and properties of each explosives storage and handling location. This information is usually managed by the Installation Safety Office. ESS software will link the GIS, RPI, and PES data sets using a number associated with each storage facility.

Chapter 13
Manual and Automated Stock Control Procedures

Section I

Stock Record Accounting

13–1. Stock control system

The stock records are the core of the stock control system. The key to an effective supply support operation is an accurately posted and efficiently kept SRA. When these records are also kept by automated means using the SAAS, the AMCOM Ammunition Tracking Systems, or the Ordnance Management System, it is equally important to be able to recover from a data loss or system crash. To do this effectively and timely, back up data files and software operating files to a reliable storage device and store them in a safe place. In short, an effective continuation-of-operation plan must be in place. Maintain all stock records for 6 years—1 year active and 5 years inactive.

a. Purpose of a stock record account.

(1) The SRA is a holding account for ammunition stocks, and ammunition is recorded in an SRA while stored for issue or disposal. Users must return all ammunition items, residue packing material, and components to an SRA before those items are removed from the Army inventory. The SRA is not used to account for property once the property is issued to a unit.

(2) The SRA is used by table of organization and equipment (TOE) and TDA units having an ammunition support mission to service their customer units.

(3) The SRA is an ammunition support activity accounting record. An accountable stock record officer (SRO) must keep the ammunition accounting record on prescribed forms or in an approved automated system. The only authorized automated system that may be used to account for ammunition is SAAS. The SRA has data to support three major supply functions:

(a) Inventory control decisions. An accurate inventory is required to make proper decisions that control the inventory. The data in the SRA is the basis for inventory control functions of requirements, acquisition, disposal, inspection, and repair of stock.

(b) Item control. The vouchers posted to the SRA are the basis for the ammunition control functions of receiving, issuing, recovering, shipping, and storing.

(c) Accountable records. The records and files of the account are the basis for the stock control functions of stock accounting and asset reporting.

b. Authority to keep a stock record account. The TOE or TDA authorizes an organization to establish and maintain an SRA. Mission support SRAs (supporting special development maintenance, manufacture, production, renovation, research, or test missions) are unauthorized unless approved by the ACOM commander.

c. Stock record account serial numbers. AR 735–5 requires assignment of an SN to each SRA to identify the SRA and to prevent establishing unauthorized SRAs.

(1) The DODAAC is the SRA SN (see AR 725–50).

(2) The ASP accountable officer or unit commander requests an SN when a new account is established or when an SN was not assigned to an existing account.

(3) The SRO requests cancellation of the SN when the account is closed.

(4) SNs remain with the SRA, even when the SRO who keeps the SRA rotates to another unit.

d. Stock record officer. The SRO operates the SRA. The SRO is an accountable officer who is accountable for the ammunition from the time of receipt until the ammunition is issued, released, or dropped from accountability (see AR 735–5). When SROs change, the outgoing SRO transfers accountability to the incoming SRO under AR 735–5 following the inventory procedures outlined in AR 710–2. The inventory will be conducted as a 100-percent and wall-to-wall ef-

fort. The ACOM may grant exceptions to the wall-to-wall requirement (using a sample percentage) provided the cause for exception is due to the size of the account. The outgoing SRO is responsible for conducting all causative research and adjustments prior to departure. Emergency procedures outlined in AR 735–5 may be used if warranted. All discrepancies found after the outgoing SRO has departed will be investigated and adjusted per AR 735–5. Instead of a board of officers, an investigation per AR 15–6 will be done for all adjustments.

e. Disposing of stock records. Use the directions in AR 25–400–2 and files prescribed in this chapter to dispose of ammunition stock records. The archived history files and closed document registers from the automated system will be maintained the same as the stock records for a manual system.

13–2. Maintain stock records

Current and accurate postings ensure records always show the true balance of stock. Post gains, losses, or adjustments to the records within one workday; otherwise records are useless for editing requests, controlling levels, or gathering statistics. Manual and automated entries are the two posting methods used in the SAAS MMC system.

a. Manual. One way is the preposting method for DODIC master and lot-locator records; the other way is the preposting method to due-in and due-out records.

(1) Use indelible ink for all postings unless indicated otherwise in this chapter.

(2) Post receipts from the release document, shipping document, turn-in document, or materiel inspection and receiving report. Also post receipts from any other document on which the receiving section has noted receipt of ammunition or components.

(3) If posting is delayed for any reason and, as a result, several postings to a stock record are necessary, make the postings in the following sequence:

(a) Inventory adjustments. First, post increase adjustments as gains, then post decrease adjustments as losses.

(b) Receipts from ammunition supply sources.

(c) Turn-ins from customer units.

(d) Shipments to other ammunition supply activities.

(e) Issues to customer units.

(f) Cancellations of receipts due-in from ammunition supply sources.

b. Automated. One way is the preposting method for some types of transactions (issues, turn-ins, shipments, receipts, and intra-depot transfers (IDTs)); the other way is the post-posting method (single entry) used for other types of transactions (account code change, CC change, and maintenance transfer).

(1) Prepost transactions from the release documents, shipping documents, turn-in documents, or materiel inspection and receiving reports. Post transactions from the verified copies of DA Form 3151–R.

(2) If posting is delayed for any reason and, as a result, several postings to a stock record are necessary, make the postings in the following sequence:

(a) Inventory adjustments. First, post increase adjustments as gains, then post decrease adjustments as losses, including posting error adjustments.

(b) Receipts from ammunition supply sources.

(c) Turn-ins from customer units.

(d) Shipments to other ammunition supply activities.

(e) Issues to customer units.

(f) Cancellations of receipts due in from ammunition supply sources.

13–3. Stock record set

a. Manual. Keep a stock record set for each item authorized for stockage or having an on-hand balance. A stock record set for a single item is made up of one or more of the following forms filed together:

(1) DA Form 5203. Use DA Pam 710–2–2 for instructions when preparing the form.

(2) DA Form 3151–R is a multipurpose form (manual and automated) used when ammunition is issued, shipped, received, turned in, or relocated. This form can be located on the Army Publication Directorate's website. Instructions to prepare the form are outlined in paragraph 13–16.

(3) DA Form 1298 (Due Out Record) should be used for manual operations to record obligations to fill requests for ammunition from ASP customers or pending shipments.

(4) Use DA Form 4999 (Due In Record) to record expected receipts of stocks when conducting manual operations based on an estimated ship date from NICP.

b. Automated. All the data files within the automated SAAS system have a prefix. Various files within the automated system can be equated to the forms used in a manual stock record system. DA Form 3151–R will print the same via SAAS; lot-locator file and SN file are equivalent to DA Form 5203. Both history files contain records of each completed

transaction, except inventories with no discrepancies. None of the files within SAAS will be modified, edited, or altered in anyway, outside of normal transaction posting, without the approval of the SSA commander.

c. Building support files. Prior to posting any transaction, support files must be built using the System Maintenance menu option. Those support files include---

(1) Account code table file.
(2) Catalog data file.
(3) Explosive safety limits file.
(4) SP or SP to file.
(5) Transaction type file.

13–4. Maintaining document control

a. A good document control system reduces the chances of losing documents and makes it easier to retrieve documents when information is required. Controlling ammunition documents is so important that ASPs are authorized to assign internal document numbers to all transactions and record the assigned document numbers on a document register.

b. SAAS procedures control all documents that affect the accountability and status of ammunition stocks. Some examples of accountable documents are:

(1) DA Form 581 (Request for Issue and Turn-in of Ammunition).
(2) DA Form 4508 (Ammunition Transfer Record).
(3) DD Form 1348–1A (Issue Release/Receipt Document).
(4) DD Form 1384 (Transportation Control and Movement Document)
(5) DA Form 444 (Inventory Adjustment Report (IAR)).

c. Assign a document control number to each transaction document received or initiated in SAAS that affects the accountability, status, or condition of ammunition stocks on hand. In the automated system, a document control number will automatically be assigned to each one of these transactions when posted. These numbers will end with a four-digit number that will reset in sequence each day, for example, -0001, then -0002. It may be necessary, at some SAAS sites, to create a segmented document register to initiate documents within SAAS. For other than automated document numbers, record the transactions on DA Form 2064.

(1) Use the document control number to identify all postings to the stock records.

(2) The ASP document control number is the Julian date of the transaction plus a four-digit SN, for example, 5173–0019. The first transaction processed each day is transaction number -0001, the second is -0002, and so on. For example, 5173–0019 is the 19th document processed by a SAAS activity on Julian date 5173.

13–5. Document register

The document register file will be maintained automatically by SAAS. If a segmented document register is used, blocks of numbers will be assigned, in writing, to other sections or for specific uses. For example, the surveillance section needs a block of numbers to process DA Form 4508 for a CC change. Therefore, surveillance needs a block of numbers to create the form. The SAAS control number is then assigned by the computer when it is posted. Use DA Form 2064 to record document number sequences for all supply transactions for the account. A segmented document register may be established if various sections need to establish or create documents. The ultimate responsibility for these segments lies with the SRO.

a. Active file. This file contains document registers for the current year. The entire document register will be kept together until closed. When a new document register is opened on 1 January, all open documents will be transferred to that document register. In the remarks column on the old document register, for each entry carried forward, write “forward” in ink. Enter the documents carried forward on the new document register in document number sequence starting with the oldest first. Keep this file on DA Form 2064 in document number sequence. In the automated system, this will be done by the ACOM SAAS MMC system administrator. In the case of segmented document registers, treat those portions that are maintained on a DA Form 2064 as a manual register.

b. Inactive file. This file contains document registers for past years. All the documents are either closed or have been brought forward to the current year. After the automated document register file is closed and the open documents are put into the new document register file, back up the old file electronically and maintain it with the history files for that year.

13–6. DA Form 5203

This form is the manual accounting ledger for ammunition, ammunition residue, ammunition components, and ammunition packaging material. Use it to record all transactions for a single item. Keep all forms for a single DODIC (DODIC master and supporting lot-locator records) in the visible file.

a. Using DA Form 5203 as a Department of Defense identification code master record.

(1) Complete the bottom portion of the form before posting any transactions. Use DA Form 5203 as a master record for each DODIC within a storage site. Annotate separate account codes in the remarks block with the quantity for each account.

(2) Enter transaction heading data at the top of the DODIC master record as follows:

(a) Enter transaction data in columns A through I of the DODIC master record. Enter one complete transaction, referred to as a DODIC transaction, per line.

(b) Record up to 16 DODIC transactions on each side of the DODIC master record.

b. Using DA Form 5203 as a lot-locator record.

(1) Make entries in blocks at the bottom of the lot-locator record, before posting transactions. Enter transaction heading data at the top of the lot-locator record. A lot-locator record is required for each combination DODIC, NSN, and lot number. Account codes do not have to be assigned to lot numbers.

(2) Enter transaction data in columns A through I of the lot-locator record. Enter one transaction, referred to as a lot number transaction, per line. Record up to 16 lot number transactions on each side of the lot-locator record. If more than one lot number is involved in the transactions, post two or more lot-locator records.

c. Use of DA Form 5203 as a Department of Defense identification code master record or lot-locator record for residue, components, and packaging material.

(1) This form is the accounting ledger for ammunition residue, components, and packaging materiel without DODICs or NSNs assigned. Use it to record all transactions for a single item. Keep all forms for a single item in the visible file.

(2) Complete blocks 1 through 6 at the bottom of the form before posting any transactions. Enter transaction heading data in columns A through I of the master record. Enter one complete transaction, referred to as a master record transaction, per line. Record up to 16 transactions on each side of the master record.

(3) Use local SOPs (see appendix F and SB 755–1) to identify packaging material that requires accountability when turned in. A brass conversion chart is located in appendix G. Those items returned by the customer unit that are placed in trash or disposed of as scrap (other than expended brass) do not require accountability at the ASP or direct-support level.

13–7. Vouchers

The voucher is the evidence of a transaction in an SRA. Documents processed as adjustments, issues, shipments, turn-ins, or receipts, whether posted to the records or not, are vouchers.

a. There are three types of vouchers:

(1) *Adjustment voucher.* This voucher is used to make the recorded condition or quantity agree with the actual condition or quantity of items on hand. Post adjustment vouchers to the stock accounting record.

(2) *Credit voucher.* This voucher lists items deducted from the account. Credit vouchers decrease assets; post them as losses. Issues and shipments are credit vouchers. Post credit vouchers to the stock accounting record.

(3) *Debit voucher.* This voucher lists items added to the account. Debit vouchers increase assets; post them as gains. Receipts and turn-ins are debit vouchers. Post debit vouchers to the stock accounting record.

b. Mark vouchers that are canceled or rejected for any reason as “cancelled” or “rejected.” Write the reason for cancellation or rejection on the voucher. The SRO signs the revised voucher. If the voucher was posted to the stock accounting record, reverse the posting. Make a second posting notation on the voucher. Prepare a memorandum for record to explain what happened and enter the voucher number on it. File the memorandum for record as a completed document and keep a copy with the original voucher.

c. Hold incomplete vouchers in the suspense file until they are completed. Examples of incomplete vouchers are those that have a wrong signature, missing signature, missing date, statement missing, or backup document. Ensure that only completed vouchers are filed in the completed voucher file.

d. When a voucher is missing, make a thorough search. If the voucher is not found, file a certificate in the voucher file in place of the voucher. In the Remarks column of the document register entry for the missing voucher, enter “lost.” The certificate must include:

(1) All data in the document register entry for the missing document and any applicable posting data.

(2) An explanation of actions taken to find the missing document.

(3) Copies of correspondence or documents that prove all possible sources were checked for the missing voucher.

(4) The SRO’s signature and date.

13–8. Completed voucher file

This file has a copy of each voucher processed as an adjustment, issue, shipment, turn-in, or receipt, whether posted to the stock accounting record or not. Start a new file each calendar year.

a. File all vouchers in SAAS-document-number sequence. Mark vouchers requiring posting to the stock records to show they were posted before they were filed. After posting the voucher, the posting clerk writes “posted,” the Julian

date, and his or her initials in any blank space on the face of the voucher. When a posting block is provided on the voucher, use it.

b. The SRO verifies the accuracy of all completed vouchers posted to the account. Check completed vouchers before filing them to make sure no postings were overlooked.

c. File a voucher to support each posting to the SRA. File canceled vouchers to support their cancellation. There must be at least one piece of paper to support each voucher number.

d. File completed vouchers in voucher number sequence in manila folders, 100 vouchers to each folder. Separate files will not be created for each type of transaction or customer. All types of transactions will be filed together. However, create a separate file for each direct support customer (unit) for reconciled training issues. This file will contain a copy of all the necessary documentation needed to prove expenditure or turn-in of ammunition issued for training. File these documents in issue-voucher-number sequence with all supporting documentation attached. Label the folders.

e. Do not remove vouchers from the voucher file except when removal is specifically authorized by the SRO. Before releasing any voucher from the file, prepare DA Form 543 (Request for Records) in two copies. Have the person receiving the voucher sign and date both copies of the DA Form 543 for the voucher. Place one copy of the DA Form 543 in the voucher file in place of the removed voucher. Give the other copy of the DA Form 543 to the SRO to monitor the return of the voucher. This requirement does not apply to ASP personnel during duty performance, nor does it apply to auditors and inspectors during an audit or inspection unless the voucher is removed from the immediate work area.

13–9. Suspense voucher file

This file contains a copy of adjustments, requests for issue, pending shipments, requests for cancellation, reports of excess, requests for turn-in, unreconciled training issues, and any other incomplete voucher until they are completed. This file has four sections. File suspense vouchers in document-number sequence within each of the following sections:

a. *Due-in status section.* This file contains the incomplete vouchers for turn-ins and receipts. After posting DA Form 4999, place a copy of each in transit-in notification (IIN) or incomplete request for turn-in in this file, pending completion. Also file a copy of each document and status card received later. File all the documents on each document number together so that the oldest is in the back and newest is in the front. Hold all documents of each document number until the items due in are received. When filing the receipt voucher or cancellation confirmation is the completed voucher file, include the supporting documents.

b. *Due-out status section.* This file contains the incomplete requests for pending shipments, issues, and reports of excess. After posting DA Form 1298, place a copy of each incomplete request for pending shipment in this file. File the documents related to each document number together so that the oldest is in the back and newest is in the front.

c. *Incomplete voucher file.* Place a copy of each incomplete adjustment, and any other incomplete voucher that must be posted to the stock records, in this file.

d. *Training issue reconciliation file.* Place a copy of each training issue in this file. As turn-ins and other documentation are received to support the expenditure or reconciliation of the issue, add them behind the issue document. When all necessary documentation is received to support the complete reconciliation (when all ammunition and residue is accounted for), mark the front of the issue document "reconciled" and file the complete packet in the unit reconciliation file.

13–10. Stock record file

a. *Active stock record.* This file contains a stock record set for each item on hand or authorized for stockage. These records are required for accountability and asset visibility or ammunition, ammunition residue, components, and packaging material.

(1) A stock record set contains at least a DA Form 5203, DA Form 4999, and DA Form 1298.

(2) File stock records in visible file cabinets in DODIC sequence. File lot-locator records that support each DODIC master record in NSN sequence. Reserve some empty card pockets at the bottom of each visible file drawer to accommodate card rearrangement as changes in stockage occur.

(3) For an automated system, this will consist of the daily backup of the data files. These files must be backed up each day that transactions are posted. No fewer than three backups will be maintained because recovery is more likely should a problem arise with the database.

b. *Inactive stock record.* This file contains stock accounting records that were completed but their balances carried forward or for items at zero balance.

(1) When a stock record set (para 13–3) is removed from the active stock record file, place it in this file. Keep this file in DODIC–NSN-lot number sequence.

(2) The inactive stock record file for an automated SAAS MMC is the archived history file. This is the equivalent of the manual stock accounting system. The file is created during the end-of-day, backup process. This file must be backed

up not less often than annually and stored in a safe place. Because ammunition records are kept by calendar year, this backup should be conducted on 31 December after running the end-of-day processes. Maintain the original disks for five years past the cutoff (31 December of the year it was backed up). For example, a history file created 31 December 2015 must be maintained until 1 January 2020. Printed history files may be used in addition to the file backup but not in place of the backup file.

13–11. Ammunition surveillance records and reports

a. All ammunition, ammunition components, and residue on hand at the depot, ASP, ATHP, and AHA are subject to ammunition surveillance by inspection during movement, storage, and maintenance. Some examples of accountable documents are:

(1) *DA Form 3022–R (Army Depot Surveillance Record).* Maintain inspection records on MHP for each lot number, SN, or group of ammunition on hand. The MHP inspection record has information on the technical history of the materiel, such as the results of all investigations, examinations, or tests, as well as any unusual or changing conditions that affect the ammunition and type of storage. Maintain surveillance record in MHP as outlined in paragraph 7–6.

(2) *DD Form 1650 (Ammunition Data Card).* When ammunition is renovated, modified, and/or regrouped, revised data cards are prepared by the unit performing the operations and are approved by the inspector in charge. The requirements for new ammunition data cards, including their distribution, are shown in MIL–STD–1167C and specific instructions from the national maintenance points. Enter the CC in the remarks section for materiel that does not meet the requirements for CC A because of functional defects found during initial or renovation acceptance testing. Include a statement explaining the reason for the CC.

(3) *Record notice of ammunition reclassification.* This lists ammunition suspected of being unsafe or defective. Such ammunition is placed under suspension to prevent the issue or use of a lot or item. This action is based on malfunction or accident reports, function tests, or inspection reports.

(4) *TB 9–1300–385.* These bulletins, issued by message and published by JMC and AMCOM, list up-to-date notices of worldwide ammunition suspension, destruction and release.

(5) *DA Form 1575 (Request for/or Notification of Regrading Action)).* This form is used to preclude unauthorized handling or issue. Surveillance ensures that suspended items are tagged and restricted from handling or shipment, except as authorized.

(6) *DA Form 2415 (Ammunition Condition Report).* This form reports failures, discrepancies and other conditions of ammunition materiel.

b. The ASP will provide a stock status report to the surveillance section monthly or as required. This report will provide the necessary data to surveillance personnel for the performance of their periodic inspections.

c. The purpose of the lot number restriction file is to provide any necessary restriction data to the stock control clerks at the time of lot selection for issues and shipments. Those lots cleared for overhead fire may be located in this file. It is the surveillance section's responsibility to maintain the data in this file.

d. Within SAAS there is an explosive safety limits file that controls each storage magazine warehouse or pad. The information necessary to build or update each record should come from the surveillance section since the data required pertains to quantity distance, explosive weights allowed, and compatibility. The stock control section maintains this record with input from the surveillance section.

Section II

Stock Control Procedures

13–12. Catalog data

a. The primary source for ammunition data for SAAS is the Army Enterprise Material Master, which provides the catalyst to manage, control, create, change, archive, and validate data, while providing a single global view of material supplies. Process cataloging of standard and nonstandard ammunition through the AESIP. The logistics support activity is responsible for the standard and nonstandard material and nonstandard line item number records in AESIP.

b. AESIP publishes and distributes the necessary catalog data for ammunition transactions supply via automated updates to SAAS. To gain access to the AESIP material database, submit a request as outlined in chapter 11.

c. Data for GMLRs is provided by the AMCOM.

d. If items are received that are not listed in AESIP, the information will be requested from the end user through the Enterprise Material Discrepancy and Challenge System which enables reporting material-master data discrepancies, coordinates discrepancy resolution, and enables syndication of master data correction. Challenges may be initiated manually or automated.

13–13. Document numbers

When using SAAS at an ASP, all documents recorded in an SRA must have a SAAS document control number. Documents initiated by customer units or other supply activities are vouchered under the SAAS document number. Documents initiated by the ASP are also vouchered under the SAAS document control number.

a. Document control numbers are 14 positions divided into 3 fields as follows:

(1) *Department of Defense activities address code.* The SRA SN is in positions 1 through 6 of the SAAS document control number.

(2) *Date.* The Julian date the document control number was assigned is in positions 7 through 10 of the SAAS document control number.

(3) *Serial number.* The SN of the document is in position 11 through 14 of the SAAS document control number. Do not duplicate SNs on the same day. Start with 0001 each day.

b. SROs may reserve blocks of SNs to segment the document register. Normally these will be assigned within the supply activity to various sections. A separate DA Form 2064 will be maintained for each segment of the document register. The SRO is responsible for each segment of the register since it is still part of the account.

c. When a SAAS document control number is canceled for any reason, write "cancelled" in the Remarks column of the DA Form 2064. Do not reuse canceled SAAS document control numbers. All supporting documentation will be filed as a completed document.

d. Unused SAAS document control numbers at the end of a series do not require cancellation.

13–14. Processing account code changes

Ammunition stocks are maintained at an SP by DODIC, NSN, lot number, CC, account code, warehouse location and sometimes a CAGE code/part number assigned by AESIP. An account code is a three position code that identifies the owner or intended user of the ammunition. It may also explain the reason why the ammunition is reserved. Account codes are assigned by SAAS MMC (for example, JMC, Army Sustainment Command, Training Support Center/Enlisted Safety Council) when available above the SAAS ASP. If the SAAS ASP is operating independently—as do some TDAs, installations, or posts, camps, and stations—commodity managers assign the account codes locally. When ammunition is found during an inventory or turned in under amnesty, place it in account code MAA (excess).

a. *Notification.* SAAS MMC directs account code changes at the SAAS ASP activities in their area by message via SAAS or in memorandum format. The memorandum must be signed and dated by the MMC representative directing the account code change. Each message will have sequential SNs and be transmitted to all subordinate SAAS ASPs. If the SAAS ASP is missing a message, it can be requested from the SAAS MMC. Account code changes conducted as a result of ammunition becoming unserviceable are exempt from this paragraph and can be directed by the QASAS and accountable officer.

b. *Posting account code changes.*

(1) When an account code message is received from the SAAS ASP, it is forwarded to the stock control clerk.

(2) The stock control clerk will assign a document control number to it and return it to the stock records section.

(3) The stock records clerk will then post the account code changes as directed in the message. Mark the Posted option, initial and date the message, and then forward it to the document register clerk.

(4) The stock control clerk will close the transaction on the document register file and file the voucher in the completed voucher file.

(5) When all postings are complete, transactions for each record changed will be sent to the SAAS MMC. Stock control is required to screen print the posting in SAAS ASP and file it to stock records.

13–15. Processing condition code changes

a. *Notification.* Surveillance personnel use DA Form 4508 to notify stock control of ammunition suspensions, function tests, and inspections that result in changes in CC in on-hand stocks.

b. *Posting condition code changes.* Upon receipt of DA Form 4508 from the surveillance section, the stock control clerk—

(1) Sends the DA Form 4508 to the document register clerk who assigns a document number to the form, posts it to the document register as an open action, and returns it to the stock control clerk.

(2) Posts the lot-locator record or SN record, as appropriate.

(3) Posts the CC change to the applicable DODIC master record.

(4) Updates the magazine data card with the correct CC.

(5) Marks the Posted option and the posting date on the face of DA Form 4508, then initials the entry.

(6) Sends DA Form 4508 to the document register clerk who closes the entry in the document register and files the form in the active supporting voucher file. Stock control is required to screen print the posting in SAAS ASP and file it to stock records.

c. Supply system ammunition supply point activities that report to n Standard Army Ammunition System materiel management center activity. SAAS ASP activities that report to a SAAS MMC activity prepare and process transactions to adjust the SAAS ASP activities records.

13–16. Processing issues

a. Transfers. An issue is the transfer of ammunition stocks from a SAAS ASP activity to an authorized user. Using units request ammunition by submitting DA Form 581. Issues decrease ammunition stocks on hand in SAAS ASP. Post issues as losses on the lot-locator record or SN record (as applicable) and the DODIC master record. Post the lot-locator record or SN record first.

b. Authority to request or receipt for supplies. The SAAS ASP activities maintain DA Form 1687 for all personnel authorized to receive ammunition.

(1) Using unit commanders must designate, on DA Form 1687 submitted to the SAAS ASP activity, unit members authorized to receive class V items. DA Form 1687 is required to have both handwritten and digital signatures for the identified authorized representatives, accompanied by the assumption of command, or appointment orders (for example, class V accountable officer, brigade ammunition officer), for the individual delegating the authority.

(2) Before accepting DA Form 581 for processing at the SAAS ASP activity, ensure the request is properly authenticated.

c. Authentication.

(1) A designated officer from the customer unit must authenticate all valid requests for issue of ammunition submitted to a SAAS ASP activity. The commander who controls the ammunition allocation may designate a responsible person to authenticate (sign block 14a on DA Form 581) ammunition requests, for example, the brigade ammunition officer or the representative supply officer. Authentication gives commanders control of ammunition issues. This designation will be provided to the SAAS ASP activity on DA Form 1687.

(2) The authentication DA Form 1687 must be accompanied by the appointment orders or assumption of command orders for the individual delegating the authority.

d. Types of issues. Issues are either routine, or they are immediate or emergency.

(1) Routine issues request ammunition for pickup on a specific RDD. Most peacetime issues are routine and normally involve two actions. The first action establishes a due-out for the requested stocks; the second action (the actual issue) reduces the balance on hand. Do not confuse routine issues with the forecasts that users submit to TAMIS to ensure sufficient stocks are on hand to support projected training or operating requirements.

(2) Immediate or emergency issues provide ammunition for unscheduled or short-notice requirements for combat issues. Establish a due-out if the issue is not required within 24 hours, so visibility of the pending issue is not lost. Post the loss to the lot-locator record and DODIC master records as soon as possible.

e. Processing issues.

(1) Normally, a routine issue is not fully processed until one to three days before the RDD, since actual lot and location selections are involved. However, limited processing is required when a routine request for issue is received. Edit the request (ensure it is filled out properly), use its assigned document number, and post the request to the due-out record. File the request in a suspense file. Process RDD-suspense requests a given number of working days before the RDD (normally 1 to 3 days). On the date processing begins, the document control section forwards DA Form 581 from the suspense file to the stock control section for review and selection of appropriate DODICs and CC stocks by lot number and location. Account codes may also be used to determine which stocks are issued. The chief of the stock control section gives stock selection guidelines, per issue priorities established for the SAAS ASP activity, for selecting stocks for issue.

(2) Take the following data from the lot-locator record for the ammunition selected for issue and enter it on DA Form 3151–R:

(a) NSN or equivalent type of stock number.

(b) Lot number.

(c) CC.

(d) Location.

(3) After completing DA Form 3151–R, send it to the surveillance section for lot clearance and restriction certification. The surveillance section returns the approved DA Form 3151–R to the stock control section. If more than 30 days pass before the issue is completed, the surveillance section must recheck the document.

(4) The checker uses the approved DA Form 3151–R, to select stocks and load items on using-unit vehicles. The checker initials each line item and returns DA Form 3151–R, showing quantities loaded, to the stock control section for final processing.

(5) Stock control reviews entries and completes DA Form 581.

(6) The customer unit is provided a copy of the SAAS-generated DA Form 581 and DA Form 3151–R. The unit will also receive documents for live and residue turn-ins.

(7) When the issue is completed, post it to the accountable records. Post the due-out record, lot-locator record or SN record, and the DODIC master record (in that sequence).

f. Filing. After the issue is completely processed, including posting to the document register and stock records, file DA Form 581, DA Form 3151–R, and any additional supporting documents at the SAAS ASP activity in the completed voucher file (para 13–8) by SAAS document control number. Training issues will have a copy of DA Form 581, a copy of DA Form 3151–R, and a copy of the residue requirements placed in the training issue reconciliation suspense file (para 13–9*d*).

g. Issues for demilitarization or destruction. Ammunition stocks identified for demilitarization or destruction are issued by the SAAS ASP activity on DA Form 581. Process them as follows:

(1) Assign a SAAS document control number from the document register.

(2) For demilitarization, place an X in Issue (block 1). In Remarks (block 28), enter the statement "ammunition certified unserviceable by qualified inspector and authorized for destruction under the provisions of DA Pam 750–8." Show the ACR number, authority message number, or other reason or authority for disposal. Enter the signature block of the individual certifying the destruction and a blank line to sign.

(3) The stock control section prepares and forwards DA Form 3151–R to the surveillance section for verification of lot serviceability.

(4) The surveillance section returns the verified DA Form 3151–R to stock control. Stock control forwards DA Form 581, DA Form 3151–R, and a residue requirements list for the items issued (or DA Form 581) to the storage section for issue to the unit that will demilitarize or destroy the ammunition. The individual receiving the ammunition will sign and date in block 31. Stock control keeps suspense-file copies of all the forms in the due-out file.

(5) When the demilitarization or destruction is completed, the individual certifying the destruction will sign and date in block 28. DA Form 581 is then returned to the stock records section, now serves as a demilitarization certificate, and is posted to the stock records. The residue turn-in is handled the same as a normal residue turn-in.

13–17. Processing turn-ins

a. Accepting ammunition. SAAS ASP activities must accept ammunition, explosives, and residue turned in by using units. Units will submit turn-ins using DA Form 581. A turn-in causes an increase to ammunition stocks at the SAAS ASP activity. Post a unit turn-in as a gain to the lot-locator record or SN record (as applicable) and DODIC master record. Use the document number from the DA Form 581.

b. Use and edit of DA Form 581 by Standard Army Ammunition System. Using units will use separate DA Form 581s to turn in serviceable ammunition, unserviceable ammunition, and residue. Ammunition residue is defined as components and packaging materiel identified as recoverable by the SAAS MMC activity. The SAAS ASP activity's SOP will identify items customers are required to turn in. Turn-ins of live ammunition are considered serviceable when they have not been opened or the seals are not removed or broken. Other live turn-ins are considered unserviceable. The stock control clerk who receives DA Form 581 edits it to ensure the form is complete and correct.

c. Processing DA Form 581.

(1) Normally a turn-in will not require preposting to the due-in record. It can be done, though, for items in short supply to better manage those assets.

(2) Assign the turn-in a SAAS document number from the document register.

(3) Prepare DA Form 3151–R from the information on DA Form 581. Select a tentative warehouse location based on the storage plan or from the stock records if the lots involved are currently on hand.

(4) Have a checker accompany the unit to the turn-in facility.

(5) Surveillance personnel will verify lot numbers, SNs, and dates of manufacture for items and CCs. The checker will verify count. Any items found damaged by other than FWT will require action by the unit (investigation per AR 15–6 or Report of Survey) before final action can be taken on the turn-in.

(6) Only those items listed on DA Form 581 will be accepted on that form. No items will be added to it. If additional CCs or lot numbers are present, note them on a blank DA Form 3151–R.

(7) The checker will initial each line item, sign and date DA Form 3151–R as the receiving checker and return to the stock control office. The stock control section will transfer the data from DA Form 3151–R to DA Form 581. In the

event items were noted on a blank DA Form 3151–R that do not appear on DA Form 581, the unit will have 24 hours to process another DA Form 581 to cover those items.

(8) Report only live serviceable turn-ins to TAMIS. Until surveillance is completed, charge any items found unserviceable against the unit's TAMIS account.

(9) The stock records section will complete DA Form 581.

(10) Provide the customer unit with a copy of the SAAS-generated DA Form 581 and DA Form 3151–R. Also provide a copy of any DA Form 3151–R that was for items received without a DA Form 581.

(11) File any completed voucher in the completed voucher file. File incomplete vouchers in a due-in suspense file.

d. Training and testing turn-in reconciliation.

(1) Accomplish reconciliation of training and testing ammunition issues within five working days of the training or testing completion date listed on the issue document.

(2) The stock control clerk will compare the training event codes, issue document numbers, and lot numbers or SNs on the issue with that information on the turn-ins to ensure they match. If discrepancies are found, the SRO will resolve them.

(3) Determine quantities of residue and packing materiel required by subtracting the quantities used to pack the live turn-ins from that issued on the issue. Determine brass requirements by weight conversion.

(4) Items required for turn-in with short quantities must have a valid DA Form 5811 or other evidence of a pending investigation. Refer to AR 710–2.

(5) Special items are AA&E identified on the Army master data file (AMDF) with a CIIC of 1 through 9, $, N, P, Q, R, or Y which requires DA Form 5692–R. This must be present to reconcile the document.

(6) Investigate losses of residue from CIIC 1, 5, 6, or C items per AR 15–6, and report them per AR 190–11.

(7) If the issue cannot be reconciled within five days of the completion of the training date, no further issues will be made to that training unit until such time as the issue is reconciled.

(8) When the reconciliation is complete, the stock control clerk stamps or marks the suspense copy of the issue (from the unit reconciliation suspense file) as reconciled, initials it, and dates it. File all documents supporting the reconciliation as stated in paragraph 13–9*d*.

e. Amnesty turn-ins. Amnesty turn-ins will be conducted per chapter 12.

f. Completing turn-in processing. When turn-in processing is completed, including posting to the document register and stock records, the stock control clerk will mark the Posted option, initial, and date DA Form 581 and DA Form 3151–R. The stock control clerk will file the DA Form 581s, and any additional documents supporting the turn-in, in the completed voucher file by SAAS control number. This file will contain the original DA Form 581s and DA Form 3151–R. The unit reconciliation file will contain copies.

13–18. Processing shipments

a. Movement and transfer.

(1) Shipments are defined as the movement and transfer of ammunition stock and are usually directed by SAAS MMC. Most often, shipments are made to other SAAS ASP activities, but they are also made to other activities, such as ATHPs or storage locations outside the corps.

(2) Shipments decrease ammunition stock on hand. Process shipments when the notice to ship is received at the SAAS ASP activity. In some instances, a shipment directed for an RDD or ration distributing point (RDP) far in the future may require an obligation of stock for the shipment.

b. Directive. SAAS MMC directs ammunition shipments by sending a message, with a transaction code for Intransit From Directive, Intercorps Directive, or Location Transfer Directive to the SAAS MMC activity that will make the shipment. RDT&E sites using SAAS usually ship at the direction of customers, not SAAS MMC. A directive is sent for each quantity and DODIC/CC/account code to be shipped. The directives inform the consignee and RDD/RDP that the SAAS ASP activity needs to prepare DD Form 1384 (Transportation Control and Movement Document) and DD Form 1348–1A for the shipment. Preparation instructions for DD Form 1348–1A is in AR 725–50. Preparation instructions for DD Form 1384 are in DTR 4500.9–R.

c. Shipment processing.

(1) When directives for shipment are received, the stock control section reviews the information, selects the stocks, and obligates them on the due-out record for shipment. Post DA Form 1298 immediately. For shipments where the RDD/RDP does not require immediate selection, file the directives in suspense until stock selection is necessary.

(2) When stock selection is made, stock control prepares DA Form 3151–R and sends them to the surveillance section to verify the condition and suitability of the stocks selected for shipment. When approved, an information copy of the DA Form 3151–R is given to the storage section for planning shipment requirements. The remaining copies are placed in suspense files until there is transportation for shipping.

(3) The transportation section prepares DD Form 1384 and submits the request to the local transportation and movement officer. Prepare DD Form 1384s per DTR 4500.9–R.

(4) Inventory and inspect the shipment before and after loading. Send the completed DA Form 3151–R, signed by issuing checker, to stock control for final processing.

(5) The stock control section verifies the returned DA Form 3151–R against suspense copies and prepares DD Form 1384 and DD Form 1348–1A or DA Form 1348–2 (Issue Release/Receipt Document with Address Label)). Surveillance and transportation sections review DD Form 1384 and release the shipment. Surveillance personnel will sign and date shipping documents.

(6) Post the stock records using the completed DA Form 3151–R and prepare the transaction record(s) for each DODIC, CC, or account code shipped. Use appropriate SAS transaction codes, such as the Integrated Facilities System or lateral transfer shipment. Enter the transaction record data into SAAS Modernization (SASS MOD) and forward to SAAS MMC with the next transaction report.

(7) Mark, assemble, and file all documents supporting the shipment using the document number assigned from the document register. When the shipment is released, the document control clerk closes out the document register entry and files the supporting document.

(8) Prepare a REPSHIP message if required per DTR 4500.9–R.

13–19. Processing receipts

a. Ammunition received. The SAAS ASP activities receive shipments of AEs as directed by the SAAS MMC activity, based on reported issues and remaining on-hand stockage levels. An RDT&E ASP activity may receive shipments of AEs from other shipping activities, such as manufacturers or commercial activities, in support of RDT&E testing. Receipts are defined as ammunition received from an ammunition supply activity and do not include unit turn-ins. Receipt of ammunition shipped from other SAAS ASP activities or higher echelon class V activities increases ammunition stock on-hand. Upon receipt, an assigned supply activity document number or TCN, post the transaction to the due-in record, lot-locator record or SN record (as applicable), and the DODIC master record.

b. Advance shipment notice.

(1) SAAS ASP gets advance notice of an ammunition shipment from SAAS MMC. All essential data about the shipment is on the IIN message, including DODIC, CC, quantity, document number (TCN), account code, and RDD.

(2) Do not record the IIN message on the document register. Do not assign a document number to the IIN message.

(3) The stock control section posts the message to the due-in record. The stock control, storage, and surveillance sections use the information on the IIN message for planning.

c. Receipt processing.

(1) The action officer or their designated representative will sign block 22 and date block 23 on DD Form 1348–1A upon receipt of a shipment.

(2) The stock control section prepares DA Form 3151–R before the ammunition is off-loaded and stored. Warehouse locations are selected from the storage plan. DA Form 3151–R is forwarded to the storage section.

(3) When the storage section sends the completed DA Form 3151–R signed as the receiving checker and dated with initials for each line item to stock control, the stock control clerk compares the DODIC, NSN, lot number, CC, and quantity received to DA 3151–R and DD Form 1348–1A. If there is a discrepancy, the storage section rechecks the actual receipts. If rechecking does not resolve the discrepancy, prepare SF 364 (Report of Discrepancy (ROD)) and local directives. To show receipt of the item, write the quantities and CCs actually received.

(4) Post the quantities received by DODIC and CC to the lot-locator or SN record (as appropriate) and the DODIC master record. If the account code is not known, contact the SAAS MMC or SRO for a determination. Once posted the stock control clerk will mark the Posted option, initial, and date DD Form 1348–1A and DA Form 3151–R.

(5) File all advance shipment notices with supporting documents. Prepare transactions with the appropriate SAAS transaction code for each DODIC, account code, and CC received. This reports the receipt to SAAS MMC. SAAS ASP activities that do not report to SAAS MMC activities will report receipts per ACOM-established instructions.

(6) All documents supporting the receipt are completed, assembled, and filed in SAAS document number sequence. When the receipt is completed, the document control clerk closes out the document register entry and files the documents.

(7) The CONUS installations or units and OCONUS SAAS activities will submit a materiel receipt acknowledgement via SAAS. The OCONUS units not subordinate to a SAAS MMC activity must submit a material receipt acknowledgment via SAAS. The submission will close the accountability loop from depot to consignee.

(8) AR 725–50 addresses the logistics intelligence file documentation and customer responsibilities.

d. Partial receipts. Process partial receipts the same way as complete receipts. Prepare receipts transactions by reporting each DODIC, account code, and CC to SAAS MMC. The transaction quantity shows the quantity actually received (by DODIC and CC). Do not close out the document register entry until all partial receipts have arrived.

e. Receipt without advance notice. When a shipment is received and there is no advance notice of the shipment, process the receipt per paragraph 13–19*a*.

f. Container receipts for depot and retail level. If more than 100 containers are received in one receipt, the ammunition supply activity will have 24 hours to post CAT I and II and up to 7 days to post the entire shipment from the time of receipt. If less than 100 containers are received in one receipt, the ammunition supply activity will have 24 hours to post CAT I and II and 48 hours to post the entire shipment.

13–20. Processing intradepot transfers

a. Movement of stocks. An IDT is the movement (rewarehouse) of ammunition stocks from one storage magazine or pad to another storage magazine or pad within the same SP (ASP). Do not change the total balance on hand by DODIC, CC, lot number, and account code at the SP (ASP).

b. Preparing and posting intradepot transfer transactions.

(1) Prepare DA Form 3151–R for each item scheduled for rewarehousing. Multiple lines may be used. Assign a SAAS document control number from the document register to DA Form 3151–R and send the form to the storage section for action.

(2) After moving the stocks, update the magazine data card and return the completed with initials next to each line item and signed DA Form 3151–R to the stock control section.

(3) The stock control clerk posts DA Form 3151–R to the lot-locator record or SN record, as applicable, within 24 hours. No entry is required on the DODIC master record. After the posting is completed, the stock control clerk will mark the Posted option, initial, and date DA Form 3151–R, close out the entry in the document register, and file DA Form 3151–R in the supporting voucher file.

(4) DA Form 4508 may be used in place of DA Form 3151–R for IDTs at depot level (LMP). However, only one NSN may be placed on the form. The DA Form 4508 generated at the retail level by QASAS will require stock control to create a 3151 IDT for location changes.

13–21. Inventory procedures

a. Inventories and adjustments. The purpose of inventory and adjustment is to—

(1) Verify the general condition, quantity, and location of ammunition stock by a physical inspection and count.

(2) Adjust stock record balances as required to match the results of the physical inspection and count.

b. Types of inventories. Conduct ammunition inventories as follows:

(1) *Scheduled wall-to-wall.* In this inventory, count all stock as of a specific date. In place of doing a wall-to-wall inventory under one SAAS control number, special inventories by warehouse maybe conducted. However, all storage structures must be inventoried within the prescribed time frame. During a wall-to-wall inventory, all receipts, issues, obligations, and shipments are held until the inventory is over. Do not post transactions to the accountable stock records. If emergency issues and receipts are necessary, tightly control and supervise them to minimize discrepancies. Wall-to-wall inventory is coordinated with customers in peacetime and not permitted in wartime. The SSA commander may not close for more than five working days.

(2) *Scheduled cyclic.* In a cyclic inventory, a selected number of DODICs are inventoried during a prescribed period so that all DODICs on hand are inventoried at least once annually or as prescribed by AR 710–2. During a cyclic open inventory, processing and posting of receipts, issues, obligations, and shipments continue.

(3) *Damaged warehouse.* Damaged warehouse inventory is used only in wartime and then only against a warehouse that has been damaged or destroyed.

(4) *Special.* A special inventory is taken on selected ammunition items for a specific reason. Special inventories are conducted either by DODIC, lot number, or warehouse.

c. Inventory time constraints. Conduct special inventories (DODIC, lot number, or warehouse) within one workday. Conduct cyclic inventories for any single DODIC in one workday. Do not exceed five workdays when doing a wall-to-wall inventory unless the support command or installation commander selectively authorize additional count days. In the ARNG or the Army Reserve, 10 days are allowed to complete the count. A 10-day extension may be approved by the state adjutant general or major Army reserve command. This does not include pre-inventory actions which must be completed while the ammunition supply activity remains operational.

d. Ammunition inventory requirements.

(1) Ammunition inventory frequency is outlined in AR 710–2. The intended use, or account code, for all ammunition falls into two categories: training and other. The inventory frequency is based on this intended use or account code and

the CIIC. The only authorized source for the CIIC is the AMDF, which is FED LOG and is available through Logistics Information Warehouse in logistics support activity.

(2) Physically inventory all ammunition issued to units including CAT I missiles and rockets (CIIC of 1, 5 and 6) monthly.

(3) Physically inventory all ammunition including CAT I missiles and rockets (CIIC of 1, 5 and 6) at the retail ammunition supply activity (installation-level) quarterly.

(4) Physically inventory depot and theater support activities' ammunition in CIIC codes 1, 5, or 6 (including CAT I) semiannually.

(5) For retail level ammunition stored at TSAs, TSAs will follow the same inventory frequency stated in paragraph 13–21*d*(3).

(6) Physically inventory RDT&E stocks issued to testing activities monthly.

(7) Physically inventory other ammunition in CIIC codes other than 1, 5, or 6 annually.

(8) Conduct special inventories whenever:

(a) Non clerical errors are found in recorded balances.

(b) There is materiel release denial (stocks cannot be shipped or issued as indicated or directed).

(c) Inventory discrepancies are found during a location survey.

(d) There is evidence of forced entry to a warehouse, magazine, or other storage area.

(e) If outer packages have been tampered with and confirmed by surveillance personnel.

(f) When directed by higher headquarters.

e. Location surveys.

(1) Location surveys physically verify the actual location of stocks in the SAAS ASP activity. A location survey may be conducted:

(a) To ensure that location data on the lot-locator and/or SN record is correct.

(b) To verify that the balance on a given record is zero.

(c) To verify the accuracy of stock records when directed by the commander or accountable officer.

(d) Prior to a wall to wall inventory.

(2) Maintain the location accuracy as prescribed in AR 710–2. Develop a plan prior to the start of the location survey. This plan will contain the cutoff, starting, and completion dates mutually agreed upon by the warehousing, inventory, and stock control activities.

(3) Prepare DA Form 2000–3 (Installation Inventory Count Card) during manual operations or the SAAS generated Inventory Control Record List during automated operations to verify the location of stock on hand. Identify each DODIC, NSN, lot number, and CC. Give a blank DA Form 2000–3 or SAAS generated Inventory Count Sheet to the inventory team to record items not in designated locations. For control purposes, assign SNs to all DA Form 2000–3s, and the SAAS-generated Inventory Count Sheet will be assigned a document number via SAAS, including blank forms given to the inventory team. For locations using other approved accountability systems, use the inventory sheets provided by that system.

(4) Properly conducted location surveys identify the following errors on accountable records:

(a) A recorded balance but no recorded location.

(b) A recorded balance but stocks not at the recorded location.

(c) An unrecorded location and unrecorded balance of stocks.

(d) Identification of storage practices that require corrective action.

f. Sample inventories. Sample inventories are not permitted.

g. Annual inventory schedule. Each ASP will publish an annual inventory schedule that should be posted in TAMIS.

h. Recorded results. Record results of inventories on the stock accounting records within 24 hours after completion of the inventory.

i. Pre-inventory procedures. Make the following preparations for taking the inventory:

(1) *Schedule.* Schedule specific dates for the inventory.

(2) *Notification.* Notify supported units of the date(s), type of inventory, and the types of transactions that are authorized for processing during the inventory.

(3) *DA Form 2000–3, Standard Army Ammunition System-generated inventory control sheet or inventory control sheets generated by other approved accountability system.* Inventory count cards or sheets are usually preprinted. If they are not, the stock control section manually prepares a count card for each item by NSN, DODIC, lot number, location, and CC. Assign each card a sequential SN starting with 0001. Prepare additional, serially numbered blank count cards for the inventory of unrecorded assets. Use count cards to record the amount of a particular item of ammunition is on hand.

(a) The inventory control listing for the accountable officer includes the count card SNs, item nomenclatures, DODICs, lot numbers, CCs, locations, and recorded balances.

(b) The inventory control listing for the inventory supervisor has the same information as the listing for the accountable officer except that the unit prices and recorded balances are omitted.

j. Inventory procedures.

(1) Inventory teams comprised of two personnel, a counter and recorder, make the count and record the balance for each item on the applicable DA Form 2000–3, the SAAS-generated inventory count sheet or other inventory sheets generated by approved accountability systems. Members of the team sign, date, and return the forms to the inventory supervisor. Maintain strict control over all inventory count sheets and ensure that each count card is signed for by SN or document number. All applicable data must be annotated on the inventory count sheet, that is, no palette, package per palette, quantity per package, or count quantity.

(2) The inventory supervisor checks the SN of the count sheets on the control listing, ensures the forms are complete, ensures that all forms out for count are returned, and (after the initial count is completed) gives the count sheet and control listing to the accountable officer.

(3) The accountable officer checks the SNs of the count sheet against the control listing, identifying any discrepancies of an overage or shortage and annotating the dollar value if applicable.

(4) When the overage or shortage value for a count sheet is $1,000 or less, the accountable officer may accept the balance on the count card as correct for stock record purposes without a recount. This option applies only to nonsensitive or pilferable items as defined in AR 190–11 and is indicated on the AMDF. When this option is used, post the new balance to the stock records directly from the count card. Use the document number assigned to the control listing. When an overage or shortage is more than $1,000 dollars or is a sensitive or pilferable item, the accountable officer prepares a new count card and inventory control listing for the item using the same inventory document number and count card SN—but using the next sequence count number—and has the item recounted by an inventory team different from the team that made the original count. Recount the item until one of the following occurs:

(a) The recount quantity agrees with the recorded quantity.

(b) The recount quantity agrees with the original count.

(c) Two counts agree.

(d) The overage or shortage value is $1,000 or less and the item is not sensitive or pilferable.

k. Discrepancies.

(1) *Security or law enforcement reporting.*

(a) Report all discrepancies meeting the requirements of AR 190–11.

(b) Report any loss suspected of being by theft through security or law enforcement channels immediately.

(c) Report recovery of any munition or explosive item meeting the requirements of 13–21j(4) through security or law enforcement channels.

(2) *Inventory adjustment reporting.* All adjustments will be recorded on a DA Form 444 (Inventory Adjustment Report (IAR)). Make adjustments as administrative adjustments and inventory adjustments. Administrative adjustments are adjustments that involve no net gain or loss and can essentially be attributed to clerical or operational error (errors in CC, lot number, warehouse location, or SN). Inventory adjustments are adjustments necessary due to actual gain or loss of stocks based on DODIC quantity by SP. The dollar value for the account will be calculated on the first day of the fiscal year. This dollar value will be used throughout the year on all IARs.

(a) Prepare DA Form 444 (Inventory Adjustment Report (IAR)) for an AAR. Show the complete DODIC or NSN of the item and the lot number in the Stock Number column. Show the loss first, then immediately below it, show the gain. If the loss and gain are due to a warehouse change (for example, wrong magazine), write "WHS" for each item on the right side of the stock number column opposite the lot number. The AARs are not reflected against the dollar values for the year. Use the document number from the inventory to post the AAR to the stock records.

(b) Prepare DA Form 444 (Inventory Adjustment Report (IAR)) per DA Pam 710–2–2 for an IAR. Show the complete DODIC or NSN of the item and the lot number in the Stock Number column.

(c) Process IARs for review and approval based on the total dollar value of adjustments prescribed in AR 710–2.

(d) The approval authority for the IAR will either approve the IAR, return it to the ASP for more research, recommend and appoint a survey officer per AR 735–5, or recommend and appoint an investigation per AR 15–6. If more research is indicated, the ASP has an additional 15 days to conduct the research.

l. Inventory results. Post inventory results to the lot-locator records, DODIC master records, magazine data card, and SN records, if required, after the preparation of the AAR and/or IAR.

m. Filing inventory documentation. File all DA Form 2000–3s, the inventory count sheet, and the inventory control list together. Maintain a copy of the IAR in a suspense file until the approved copy is returned. File the accepted IAR with the AAR in the inventory adjustment file.

n. Causative research. The SRO must conduct causative research for inventory discrepancies involving sensitive items and for adjustments over $500 in extended line item value, when the SRO suspect's negligence was the cause and when directed by the approving authority. Causative research is an internal investigation done by the SRO to find what caused a specific inventory adjustment. Results of the research must document the reason for the adjustment or conclude that the cause could not be found.

(1) When negligence is determined to be the cause or for adjustments in which cause could not be found, the IAR will be supported by action taken under AR 15–6 or AR 735–5.

(2) When an IAR is returned by the approving authority for further research, complete the research within 15 days unless the approving authority grants an extension. The approving authority may grant extensions of up to 30 days.

13–22. Posting corrections to stock records

a. Manual. When making a correction before subsequent postings occur, draw a single line through the incorrect entry and make the correct entry on the line immediately following. When there are postings between the incorrect posting and the next available line, make a correction entry but do not draw a line through the incorrect entry or make erasures or alterations to quantities posted on ammunition stock records. The following instructions apply to corrections and changes to the stock records.

(1) *Corrections that do not change balances on hand.* When a gain or loss posting was made in the wrong column but the balance on hand is correct, draw a line through the incorrect part of the entry and make the correction in the proper column.

(2) *Corrections that change balances on hand.* When a correction requires a change in the recorded balance, make a corrected entry on the next available line. Make the new entry for the amount of increase or decrease if needed to correct the quantities shown in the balance on hand and the CC and location columns. Enter the original document number and date the correction is made on the corrected-entry line. Write "corr" in an available space on the correction line and in an available space on the line that has the error. Enter the applicable SAAS transaction code (posting error plus (PEP) or posting error minus (PEM)) in the appropriate transaction code gain or loss column. Post the amount of increase or decrease to the applicable gain or loss column.

(3) *Error in posting.* When an error is made while posting a document number or SN, draw a line through the incorrect entry and enter the correct one on the next available line.

(4) *Documents not posted.* When a document that has not been posted is found, make the required entries on the stock records at once unless an inventory was posted in the interim. A solid red line below the entry and the abbreviation INV printed in the DODAAC column indicates an inventory posting. If an inventory was posted, limit the posting of the found document(s) to the date, document number(s), and organization. Carry the current balance forward and write "omitted" in the transaction code column. Attach a statement to the documents explaining the failure to post it earlier, the date posted, and the initials of the person posting. File this statement with other documents supporting the transaction.

(5) *Entry on the wrong lot locator, serial number, and/or Department of Defense identification code master record.* When an entry was made to the wrong stock record, adjust as follows:

(a) If the error is found while posting or before any other entries are made on the affected stock record, draw a single line through the incorrect entry and the remaining unused space on that line, then post the entry to the correct stock record.

(b) If subsequent postings were made on the lot-locator and DODIC master records, use a reversal posting to adjust the stock record. Write "rev" in an available space on the error line. Enter the document number from the error line on the next available line. In the gain or loss columns, as appropriate, enter the amount of increase or decrease required to correct the balance on hand. Attach a statement to the supporting documents explaining the reason for the reversal.

b. Automated. When posting errors occur because a DODIC or lot was adjusted more or less than was originally intended due to recording errors or types of packaging, take the following actions:

(1) If the error is discovered before the customer leaves the ASP, make corrections to DA Form 3151–R and DA Form 581 and have the SRO (or designated representative) and unit representative initial the corrections. Ensure the corrections include at least the NSN, lot number, DODIC, CC, warehouse location, and quantity actually issued.

(2) If the error is discovered after the customer has left the ASP, verify the amount actually issued by contacting the customer and/or conducting a special inventory. Post the quantity shown on the original transaction document to the stock records. When it is verified that the error occurred against a specific document, a posting error transaction can be posted. Once posted, print screen a copy of the posting error transaction. Prepare a memorandum for record explaining the reason for the error. The original SSA voucher number must also be included. Post the PEP or PEM and record the SSA voucher number on the memorandum. File one copy of the memorandum with the original voucher and another copy of the print screen in the proper sequence in the completed voucher file.

(3) Regarding a catalog data change, post DODIC, NSN, and unit of issue changes from DA Form 4508 or other change document. Multiple corrections should be posted one right after the other. Place all SSA-generated voucher numbers generated by SAAS on the DA Form 4508. Place a copy in the completed voucher file to support each SSA voucher number. Only one original document number, usually from surveillance, is required for the transaction.

Chapter 14
Demilitarization

14–1. Overview

a. This chapter prescribes responsibilities and procedures for authorizing, accomplishing, and reporting demilitarization of energetic class V materiel, including conventional ammunition, components, bulk propellants, bulk explosives, large rocket motors, and tactical guided missiles. This chapter does not provide guidance for the demilitarization of surety chemical, binary chemical, or nuclear weapon materiel or ammunition.

b. This chapter applies to all AMC MSCs, demilitarization activities, and other installations and activities that plan, program, or execute authorized functions related to the demilitarization of energetic class V materiel. This chapter applies to other services and Army commands when they interface with the JMC or the AMCOM demilitarization programs through the SMCA.

c. This chapter provides policy guidance to manage class V items residing in the Resource Recovery and Disposition Account/B5A (RRDA/B5A) and other materiel within the Joint Services requiring demilitarization. The RRDA/B5A is centrally managed with accountability residing with JMC and custodial records at the storing installation. The purpose of the RRDA/B5A is to provide oversight over demilitarization assets to the headquarters and to assure proper maintenance of accountable records.

d. The DODI 5160.68 outlines the policies and responsibilities of the SMCA as well as all stakeholder organizations that apply to the demilitarization and disposal of conventional ammunition. This includes assignment of the SMCA to accomplish the required RDT&E, planning, programming, budgeting, and funding of the demilitarization of all items that are accepted into the RRDA/B5A.

Note. See the instruction for the SMCA, military Service, and USSOCOM customers to jointly develop and distribute joint conventional ammunition policies and procedures through the Joint Ordnance Commanders Group at https://www.us.army.mil/suite/page/631349.

14–2. Delegation of demilitarization authority

a. Within the Army, the Program Executive Office, Ammunition, been delegated the role of the SMCA.

b. The Office of the PM for Demilitarization, under the PDJS, Program Executive Office, Ammunition, was established in December 2002 to provide a single focus and acquisition management of the DOD conventional ammunition demilitarization program. The Army acquisition executive, acting as the SMCA, delegated authority to the PM for Demilitarization for demilitarization of all conventional ammunition, including tactical missiles and large rocket motors, including components of the conventional ammunition items, tactical missiles, and large rocket motors. The organizations are colocated at Picatinny Arsenal, NJ.

c. The demilitarization community is comprised of the operational stakeholders responsible for the demilitarization portion of acquisition life-cycle management and the execution of conventional ammunition demilitarization. The demilitarization community is a multi-Service, multi-organizational, multifunctional, and diverse business enterprise committed to meeting our customer's expectations and requirements for demilitarization of the conventional ammunition stockpile.

d. The PM for demilitarization, JMC, AMCOM, and the RDECOM are principal parties to the demilitarization community's operations. RDECOM is represented by the ARDEC and the AMRDEC. Representatives from each of the military services also participate as required. The PM for demilitarization provides strategic-level management and guidance for the dispersed organizations that perform the mission. A formal memorandum of understanding defines the working relationships among the community's principal parties and the operational actions are defined by the demilitarization strategic plan.

14–3. Demilitarization execution

a. In collaboration with the PM for demilitarization, JMC, for conventional ammunition, and AMCOM, for Army tactical missiles, will produce a demilitarization business plan annually. The demilitarization enterprise will develop an annual business plan and submit it to the PM for demilitarization for approval. The plans will cover the current year, budget year, plus the 5 years of POM period. These plans will be completed no later than 15 January of each FY for the Presi-

dent's budget preparation cycle. Installation workload forecasting and budgeting are also a responsibility of the demilitarization enterprise and are approved by the PM for demilitarization annually.

b. The technology team leader and the PDJS Business Management Office develops an analysis, which identifies a baseline plan consisting of current FY accomplishments and future plans (FY plus one and FY plus two). The base is developed through reviewing requirements and each organization in the enterprise is requested to provide input as necessary. The estimates will be reviewed, amended (as necessary) and concurred by the PM for demilitarization.

c. Demilitarization execution prioritization is assigned by JMC for conventional ammunition, and by AMCOM for Army tactical missiles according to the following established guidelines:

(1) *Priority 1—explosive safety hazard.* Ammunition and Army tactical missile items that are an imminent explosive safety hazard will be demilitarized immediately or as soon as possible as authorized by the DOD Ammunition Rule Implementation Policy, 1 July 1998.

(2) *Priority 2—security concerns.* Ammunition and Army tactical missiles stored in the RRDA/B5A that contain security issues are to be demilitarized after all ammunition items with explosive safety hazard concerns have been processed and eliminated. Small quantities requiring less than 300 labor hours per undertaking are authorized under the installation's current miscellaneous service order.

(3) *Priority 3—routine items.* Ammunition and Army tactical missile items stored in RRDA/B5A that do not meet the requirements for priority 1 or 2 and have an approved technology for disposition are classified as routine items. The routine items are entered into the demilitarization optimizer to build an optimized demilitarization schedule based upon projected funding and current Army policies. Installations will submit cost estimates and proposals for demilitarization of conventional ammunition to HQ JMC (AMSOS–SND) and cost estimates and proposals for demilitarization of Army tactical missiles to HQ AMCOM (AMSAM–DSA–WO), for tactical missiles. HQ JMC and HQ AMCOM will review the proposals to ensure they are valid and executable.

(4) *Priority 4—ammunition and Army tactical missile items requiring new technology regarding demilitarization technology program baseline agreements.* Contract between program executor of research and development and the PM for demilitarization with concurrence for support from the applicable delegations of authority. The demilitarization technology program baseline agreement provides the scope and objective(s) of the technology program and defines acceptable threshold and objective parameters for cost, schedule, and performance over the life of the project (through transition to the production and deployment phase).

d. The annual Demilitarization Technology Program scoring meeting addresses project proposals submitted in response to strategic goals, capability gaps and specific requirements. The scoring team consists of core members from the demilitarization executive team. The project proposals are reviewed individually and evaluated collectively; the merits and shortcomings are discussed in an open forum amongst the scoring team, and proposals are individually scored against predetermined criteria. The scored projects are developed into a 1–N list. This prioritized list is presented to the core members of the demilitarization executive team and approved by the PM for demilitarization.

14–4. Resource, recovery, and recycling program

a. Section 353, The 2007 John Warner National Defense Authorization Act, Public Law 109–364, authorized the Secretary of the Army to carry out a program to sell recyclable ammunition materials from the demilitarization of conventional military ammunition without regard to Chapter 5 of Title 40 and to use the proceeds for reclamation, recycling, and reuse (R3) of conventional military ammunition, including research and development activities and equipment purchased for such purposes.

b. Delegation authority flows down to the PM for demilitarization and utilizes scrap sales from six GOGO depots. R3 program proceeds are split 60 percent to the PM for demilitarization and 40 percent to the individual depot; they can be used for additional demilitarization, minor facility and depot infrastructure upgrades, and R3 process improvements.

Chapter 15
Other Customer Support

15–1. Support to other services

a. The Army provides ammunition management support to other Services and programs in both a common-Service and cross-Service manner. For conventional ammunition, the Army, as the SMCA, executes the mission as outlined in Department of Defense Directive (DODD) 5160.65 and performs the DOD conventional ammunition mission functions as defined in DODI 5160.68.

b. The specific mission functions of the SMCA span all service components; it includes but is not limited to RDT&E, Production Base, Acquisition, Maintenance, Demilitarization and Disposal, Quality Assurance, Technical Data and Configuration Management Implementing Regulations and Assessment, and Security Assistance. The SMCA continually

assesses performance, customer expectations, and lessons learned to keep pace with the changing business environment and advances in technology.

15–2. Support to other Government agencies

When other Government agencies request ammunition from or through the SMCA, a formal price and availability (P&A) request is required to initiate the process.

a. The customer enters the P&A request into the Planning, Budget, and Execution System directly. Do not use P&As for Army and other U.S. Service base or OCO funding that is included in current year funding or future budget requests.

b. For that P&A request, routed throughout, JMC will state---

(1) Where the ammunition will be sourced from (either from Army stock or new procurement).

(2) How much the requested quantity will cost.

(3) When funds are required to meet customer's RDDs.

(4) Production schedules (if a new procurement).

(5) Final instructions on the funding procedures.

c. If the agency wishes to proceed with procuring the ammunition, it will send JMC a funded MIPR through the Planning, Budget, and Execution System. The MIPR will undergo a similar process as the P&A request to accept the MIPR and return it to the customer.

d. The MIPR must contain---

(1) Requested quantity.

(2) Requisition number.

(3) Shipping instructions.

(4) Funded line of account complete with billing information.

e. Enter P&A and MIPR requests from customers with a .mil email address directly into the system for automated routing. A customer without a .mil address cannot directly access the system, so JMC will enter the P&A and MIPR into the system on their behalf to route as described.

15–3. Security assistance programs

a. Security assistance programs of ammunition may support weapons system sales or foreign training support, or they may be stand-alone ammunition sales. Security assistance programs and FMS provide a source for other nations to acquire equipment and ammunition for their national defense.

b. These programs provide the basis for international mutual support and can be an effective element of U.S. foreign policy implementation. AR 12–1 details guidance on ammunition security assistance including: eligibility, required notifications, authorities, direct commercial sales, operational T&E, denial of requests, and policy exceptions.

c. Extensive planning is required to execute ammunition security assistance program cases. Planning considerations must include: case development, review, analysis and approval, availability and sourcing, distribution, security, transportation and safety.

15–4. Acquisition and cross-service agreements

a. An acquisition and cross-service agreement (ACSA) is an international agreement entered into under the authority of Sections 2341 or 2342, Title 10, United States Code that authorizes the acquisition and reciprocal provision of logistics support, supplies, or services (LSSS). An ACSA is also called a mutual logistics support agreement; it allows the interchange of LSSS between U.S. Armed Forces and the military forces of certain nations or international organizations as outlined in Chairman of the Joint Chiefs of Staff Instruction 2300.01D and DOD 7000.14–R.

b. There are two distinct ACSA authorities: acquisition-only and cross-servicing.

(1) *Acquisition-only authority.* In situations where no cross-servicing agreements exist, an acquisition-only authority may be established either through a contract using the authority of the Federal Acquisition Regulation or through an international agreement that relies on the authority of 10 USC 2341.

(2) *Cross-Servicing authority.* Section 2342 of Title 10 of USC authorizes establishing cross-servicing agreements under which the United States may transfer LSSS to the military services of a foreign country on a reciprocal or reimbursable basis.

c. Except as authorized under public law, some prohibited LSSS ammunition items include, but are not limited to--

(1) Weapon systems.

(2) Guided missiles.

(3) Naval mines.

(4) Torpedoes.

(5) Guidance kits for bombs or other ammunition.

(6) Nuclear ammunition and associated items.

(7) Chemical ammunition.

d. COCOMs and ASCCs will—

(1) Ensure an agreement exists between the countries.

(2) Ensure the ACSA/Mutual Logistics Order request is utilized and processed through the Automated Tracking and Reporting System.

(3) Ensure the requested ammunition are neither prohibited and/or affect readiness.

(4) Ensure the receiving officials from coalition forces sign and date the form.

(5) Ensure the accuracy, completeness of the manual request, and guarantee that all four signatures are annotated on the request.

(6) Maintain complete and accurate records of ammunition issued to coalition forces and notify DCS, G–4 of such issues.

(7) Establish procedures to ensure issues of ammunition using ACSA authorities are entered into the Global Automated Tracking and Reporting System for invoicing and payment requirements.

(8) Establish procedures to ensure issues of ammunition using ACSA authorities are submitted to Defense Finance and Accounting Service—Rome for reimbursement.

(9) Establish procedures to ensure issues of ammunition using lift and sustain authorities are submitted to DOD for reimbursement.

15–5. Foreign military sales

a. AR 12–1 establishes responsibilities and procedures among Army organizations conducting the security assistance and cooperation mission under FMS. The Defense Security Cooperation Agency Manual 5105.38–M establishes procedures for the DOD to conduct its security assistance and cooperation mission. The eligibility of a country or international organization to purchase defense articles and services is published by the Defense Security Cooperation Agency, http://www.samm.dsca.mil.

b. The United States and/or DOD must protect and control items the DOD identifies as sensitive AA&E sold to a foreign nation under the FMS program until possession is transferred to the recipient country at the SPOE or APOE.

c. The Defense Security Assistance Management System holds the actual case and its specific parameters. Once a sales order has been issued from the case, it will enter LMP for logistics processing (sales and delivery orders). Ammunition assets reserved for FMS customers not yet funded will be located in WARS under purpose code N.

d. Organizations are not authorized to give other nations ammunition without the proper coordination and approval with HQDA.

15–6. Cross stratification

The Army conducts an ammunition stratification process annually to the review aggregate requirements against worldwide assets postures using the TAMR as the basis as directed by DODM 4140.01. This ensures the Army has the right quantity and type of ammunition to execute training and testing to meet wartime requirements without buying unnecessary ammunition. To better inform this process, JMC will review the demilitarized stockpile quarterly, so any serviceable suitable stocks are pulled out and used as required to maintain readiness.

Appendix A

References

Section I

Required Publications

AR 700–13
Worldwide Ammunition Logistics/Explosives Safety Review and Technical Assistance Program (Cited in para 1–4*s*(2).)

AR 700–20
Ammunition Peculiar Equipment (Cited in para 7–14*c*(4).)

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read a related publication to understand this publication. DOD publications are available at www.dtic.mil/whs/directives and AMC publications are available at http://www.amc.army.mil/amc/publications.html.

AR 5–13
Total Army Ammunition Requirements and Prioritization System

AR 12–1
Security Assistance, Training, and Export Policy

AR 15–6
Procedures for Administrative Investigations and Boards of Officers

AR 25–30
The Army Publishing Program

AR 25–400–2
The Army Records Information Management System (ARIMS)

AR 50–6
Chemical Surety

AR 70–1
Army Acquisition Policy

AR 70–41
International Cooperative Research, Development, and Acquisition

AR 70–57
Military-Civilian Technology Transfer

AR 71–9
Warfighting Capabilities Determination

AR 73–1
Test and Evaluation Policy

AR 75–1
Malfunctions Involving Ammunition and Explosives

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

AR 190–51
Security of Unclassified Army Property (Sensitive and Nonsensitive)

AR 380–5
Department of the Army Information Security Program

AR 380–86
Classification of Former Chemical Warfare, Chemical and Biological Defense, and Nuclear, Biological, and Chemical Contamination Survivability Information

AR 385–10
The Army Safety Program

AR 385–63
Range Safety

AR 525–30
Army Strategic Readiness

AR 700–19
U.S. Army Ammunition Reporting System

AR 700–90
Army Industrial Base Process

AR 700–142
Type Classification, Materiel Release, Fielding, and Transfer

AR 702–6
Ammunition Stockpile Reliability Program

AR 702–7–1
Reporting of Product Quality Deficiencies within the U.S. Army

AR 702–12
Quality Assurance Specialist (Ammunition Surveillance) Program

AR 710–1
Centralized Inventory Management of the Army Supply System

AR 710–2
Supply Policy below the National Level

AR 710–3
Asset and Transaction Reporting System

AR 725–50
Requisitioning, Receipt, and Issue System

AR 735–5
Property Accountability Policies

AR 740–1
Storage and Supply Activity Operations

AR 740–3
Stock Readiness

AR 740–26
Physical Inventory Control

AR 750–1
Maintenance of Supplies and Equipment: Army Materiel Maintenance Concepts and Policies with changes.

AR 750–43
Test, Measurement, and Diagnostic Equipment (Including Prognostic Equipment and Test/Measurement Equipment) Equipment Calibration

Chairman of the Joint Chiefs of Staff Instruction 2300.01D
International Agreements

DA Pam 25–30
Consolidated Index of Army Publications and Blank Forms

DA Pam 73–1
Test and Evaluation in Support of Systems Acquisition

DA Pam 75–5
List of Storage and Outloading Drawings for Ammunition

DA Pam 350–38
Standards in Training Commission

DA Pam 385–30
Risk Management

DA Pam 385–40
Army Accident Investigations and Reporting

DA Pam 385–63
Range Safety

DA Pam 385–64
Ammunition and Explosives Safety Standards

DA Pam 700–16
The Army Ammunition Management System

DA Pam 700–142
Instructions for Type Classification, Materiel Release, Fielding and Transfer

DA Pam 710–2–2
Supply Support Activity Supply System: Manual Procedures

DA Pam 738–751
Functional Users Manual for the Army Maintenance Management System—Aviation

DA Pam 742–1
Ammunition Surveillance Procedures

DA Pam 750–8
The Army Maintenance Management System (TAMMS) Users Manual

Defense Acquisition Guidebook
(Available at https://dag.dau.mil/pages/default.aspx.)

DODD 5160.65
Single Manager for Conventional Ammunition (SMCA)

DODI 3000.04
DOD Ammunition Requirements Process (MRP)

DODI 5160.68
Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and United States Special Operations Command (USSOCOM)

DODM 4140.26, Volume 6
DOD Integrated Material Management (IMM) for Consumable Items: Supply Support Requests (SSRs)

DODM 5100.76
Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)

DODM 6055.09–STD
DOD Ammunition and Explosives Safety Standards

DTR Part II
Cargo Movement; Chapter 204, Paragraph C, Regulatory Requirements, C5a–c

Federal Facilities Compliance Act (FFCA) 1992
Section 107, Ammunition

FM 3–34.214
Explosives and Demolitions

Joint Hazard Classification System
(Available at https://www3.dac.army.mil)

Joint Publication 1–02
Department of Defense Dictionary of Military and Associated Terms

MIL–STD 129R
Department of Defense Standard Practice: Military Marking for Shipment and Storage

MIL–STD 882E
Department of Defense Standard Practice: System Safety

MIL–STD 1167C
Ammunition Data Card

NAVSUP P801/TWO24–AA–ORD–010
Ammunition—Unserviceable, Suspended, and Limited Use

SB 742–1410–92–009
Ammunition Surveillance Procedure for Guided Missile Intercept—MIM–104, MIM–104A, MIM–104C, and Guided Missile Intercept-Aerial Trainer, XM37 (Patriot and Defense Guided Missile System)

SB 755–1
Disposition of Used Ammunition Packing Material and Certain Specified Ammunition Components

TB 9–1300–385
Ammunition Suspended or Restricted

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

Title 49 CFR
Transportation

TM 43–0001–47
Army Equipment Data Sheets: Ammunition Peculiar Equipment

U.S. Army Technical Center for Explosives Safety (USATCES)
Interim Hazard Classification (Available from https://www3.dac.army.mil)

10 USC 2474
Centers of Industrial and Technical Excellence: designation; public-private partnerships

10 USC 2535
Defense Industrial Reserve

10 USC 4551–4555
The Armament Retooling and Manufacturing Support Act of 1992

15 USC 2601
Toxic Substances Control Act

42 USC 82
Hazardous and Solid Waste Amendments of 1984

42 USC 6901
Resource Conservation and Recovery Act

42 USC 9601
Comprehensive Environmental Response, Compensation and Liability Act of 1980

42 USC 11001
Emergency Planning and Community Right-to-Know Act of 1986

Yellow Book
Hazard Classification of Military Explosives and Ammunition

Section III

Prescribed Forms

Unless otherwise indicated DA forms are available on the Army Publishing Directorate (APD) website: http://armypubs.army.mil.

DA Form 4508
Ammunition Transfer Record (Prescribed in para 13–4*b*(2))

Section IV

Referenced Forms

Unless otherwise indicated DA forms are available on the Army Publishing Directorate (APD) website: http://armypubs.army.mil. DD forms are available on the Office of the Secretary of Defense website: http://www.dtic.mil/whs/directives/forms/index.htm. SFs are available on the U.S. General Services Administration (GSA) website: http://www.gsa.gov/portal/forms/type/sf.

DA Form 444
Inventory Adjustment Report (IAR)

DA Form 543
Request for Records

DA Form 581
Request for Issue and Turn-in of Ammunition

DA Form 581–1
Request for Issue and Turn-in of Ammunition Continuation Sheet

DA Form 1298
Due Out Record

DA Form 1575
Request for/or Notification of Regrading Action

DA Form 1687
Notice of Delegation of Authority—Receipt for Supplies

DA Form 2000–3
Installation Inventory Count Card

DA Form 2028
Recommended Changes to Publications and Blank Forms

DA Form 2062
Hand Receipt/Annex Number

DA Form 2064
Document Register for Supply Actions

DA Form 2203
Demolition Reconnaissance Record, available through normal supply channel

DA Form 2401
Organization Control Record for Equipment

DA Form 2407
Maintenance Request, available through normal supply channel

DA Form 2407–1
Maintenance Request Continuation Sheet, available through normal supply channel

DA Form 2408–9
Equipment Control Record

DA Form 2415
Ammunition Condition Report

DA Form 3020–R
Magazine Data Card

DA Form 3022–R
Army Depot Surveillance Record

DA Form 3120
Missile Firing Data Report (Hawk & PATRIOT)

DA Form 3151–R
Ammunition Stores Slip

DA Form 3474
Missile Firing Data Report (Javelin)

DA Form 3662
Longbow Hellfire Missile Firing Data Report

DA Form 4949
Administrative Adjustment Report (AAR)

DA Form 4999
Due In Record

DA Form 5203
DODIC Master/Lot Locator Record

DA Form 5515
Training Ammunition Control Document

DA Form 5515–1
Training Ammunition Control Document Continuation Sheet

DA Form 5582–R
ATACMS Missile/MLRS Practice Rocket Firing Data Report (Report ___ of ___ for This Mission)

DA Form 5583
Missile Firing Data Report (Hellfire)

DA Form 5692–R
Ammunition Consumption Certificate

DA Form 5811
Certificate—Lost or Damaged, Class 5 Ammunition Items

DA Form 7212
Missile Firing Data Report (Stinger)

DA Form 7213–R
Missile Firing Data Report (Dragon & TOW)

DD Form 250
Material Inspection and Receiving Report

DD Form 626
Motor Vehicle Inspection (Transporting Hazardous Materials)

DD Form 1348
DOD Single Line Item Requisition System Document (Manual)

DD Form 1348–1A
Issue Release/Receipt Document

DD Form 1348–2
Issue Release/Receipt Document with Address Label

DD Form 1384
Transportation Control and Movement Document

DD Form 1575
Suspended Tag—Materiel, available through normal supply channel

DD Form 1576
Test/Modification Tag—Materiel, available through normal supply channel

DD Form 1577
Unserviceable (Condemned) Tag—Materiel, available through normal supply channel

DD Form 1650
Ammunition Data Card

DD Form 2890
DOD Multimodal Dangerous Goods Declaration

SF 364
Report of Discrepancy (ROD)

SF 368
Product Quality Deficiency Report (PQDR)

Appendix B

Management Information Systems

B–1. Army ammunition management information systems

Management information systems that support Army ammunition management include:

a. WARS.

b. Conventional Ammunition Readiness Evaluation System (CARES).

c. SAAS.

d. TAMIS.

B–2. Worldwide Ammunition Report System

a. WARS is a logistics management information system used by ammunition managers throughout the Army at all management echelons. The system consists of the following four subsystem modules:

(1) Requirements and assets.

(2) Maintenance, renovation, and demilitarization.

(3) Serviceability.

(4) Readiness assessment.

b. The focus of the system is the DA Ammunition Management Information Data Bank operated by the Army Armament Materiel Readiness Command. That databank, with some exceptions, is the source of the WARS reports. The exceptions are reports executed on a manual basis, such as the Allocation Report and the Toxic Chemical Ammunition Report. The WARS databank receives feeder reports from a series of standard systems, including:

(1) LMP.

(2) SAAS MOD.

(3) GCSS–A.

(4) FORSCOM/TRADOC feeder systems (WARS).

c. The following are outputs of the modules indicated and their frequency:

(1) *Part 1. Worldwide Ammunition Requirements and Assets Reports*

(a) Monthly—M

(b) Quarterly—Q

(c) Tonnage or cost data—Q

(d) Maintenance and packaging materiel—Q

(e) Toxic chemical agents—S/A

(f) Dummy drill and inert—A

(g) Allocations—S/A

(h) Training authorization and expenditure—Q

(2) *Part II. Worldwide Ammunition Maintenance Reports*

(a) Renovation, packaging, and preservation—M

(b) Demilitarization and disposal—M

(3) *Part III. Worldwide Ammunition Serviceability Report* (inspection and lot number).

(a) DODIC, NSN, lot number by location—Q

(b) DODIC, NSN, lot number consolidated report—Q

(c) DODIC, NSN, lot number suspensions and restrictions—Q

(d) Analysis of unserviceable assets by CC, NSN, and lot number—Q

(e) Ammunition condition and tonnage report by DODIC and location—Q

(4) *Part IV. Worldwide Ammunition Readiness Assessment Report*—Q

B–3. Conventional Ammunition Readiness Evaluation System

a. The purpose of CARES is to access conventional ammunition readiness by timing increment from M–day to M+180 days in three situations:

(1) 180 days of combat support in Europe.

(2) 180 days of combat support in the Pacific (Korea).

(3) A worst-case combination of B–3a(1) and B–3a(2).

b. CARES uses existing data bases including WARS for assets D–rate computations (based on AR 11–11) for combat requirements. CARES then assesses readiness for each item of ammunition (by DODAC based on days of supply to the requirement based on the following criteria (see AR 720–1):

(1) C1 if stock availability to meet requirement is 90 percent or greater.

(2) C2 if 80 percent to less than 90 percent.

(3) C3 if 65 percent to less than 80 percent.

(4) C4 if less than 65 percent. CARES summary data can also be displayed by categories—for example, small caliber, mortar, tank, artillery—as required.

c. The following are outputs of CARES:

(1) Part I—displays assets by timeframe stratified to a requirement expressed in seven periods—M–day to M+15, M+15 to M+30, and 30–day increment through M+180.

(2) Part II—displays by DODAC the days and percent short to 180–day requirement and projected get-well date.

(3) Readiness condition—that is, C1, C2, C3, or C4 by DODAC.

B–4. Standard Army Ammunition System

a. *Background.* SAAS MOD is a multilevel system providing ammunition-management functionality from brigade through theater level for the operational Army. The operational architects of SAAS MOD are—

(1) SAAS–MMC operates at theater sustainment command levels in the distributions management center (DMC) and sustainment brigade DMC. It maintains asset visibility of ammunition within the theater area of operations and requisitions ammunition from NICPs.

(2) SAAS–ASP is the system of record for retail-level accountability at ammunition support activities, including ASPs, corps storage areas, and theater storage areas.

(3) SAAS–ATHP operate in the brigade support battalion distribution company ATHP to support forces in the brigade combat team area of operations providing accountability, receipt, storage, and issue capabilities.

b. *System description.* SAAS MOD is managed by product Lead Logistics Information System's Logistics Program Executive Office Enterprise Information Office and is sustained by Communication—Electronics Command's Software Engineering Center Enterprise Information Systems Directorate with a system identification of L6F.

(1) SAAS MOD consists of host-client platforms operating a common software application. It operates on commercial-off-the-shelf personal computers.

(2) SAAS MOD incorporates use of in-transit visibility through use of RFID technologies.

(3) SAAS MOD interfaces with the Army G–3 TAMIS and the WARS.

(4) SAAS ammunition data from WARS is used by NLAC and Logistics Information Warehouse for national level ammunition visibility.

B–5. Training Ammunition Management Information System

a. *Background.* TAMIS is a management system which provides ammunition usage information on which the commander can base decisions. The system provides the commander with the opportunity to influence the development of ammunition authorization, so it complements the training of the command, allows flexibility in adjusting authorizations to fit changing circumstances or environments, and enables complete control over authorizations to the subordinate elements. Under this system, the commander has incentives and the flexibility to conserve expensive ammunition in meeting his training goals.

b. *Total Army Ammunition Authorization Allocation Conference.* The TA4C is attended by senior Army representatives from the ARSTAF and major commands, meets annually to review authorized training ammunition resources, requirements, and management and to authorize training ammunition resources to major Army commands and the National Guard Bureau for the next FY. Major commands and ARNG will sub-authorize resources to elements of their commands and the ARNG.

c. *Operation.* Units will report expenditures of ammunition, including expenditures of ammunition used in testing throughout the year. Because the system has the facility to constantly audit a commander's use of resources through maintaining a status of credits and debits, the information (maintained within the TAMIS database) will be the foundation for the commander to adjust the ammunition authorized for the command provided: the total dollar value of the authorization is not exceeded, the change is supportable by the stockpile, and the change is not prohibited or restricted by command or ARNG policy.

Appendix C

Determining War Reserve (R-Rating) and Training Supply Ratings (S-Rating)

C–1. Purpose

The MRR provides senior Army leadership with a tool to gauge ammunition readiness. The following procedures are used to calculate ammunition ratings in support of the MRR.

C–2. Assets

Assets are worldwide, less WRSA, and include serviceable assets (CCs A, B, C, and D except for CC D assets at test locations). CC N (emergency use only) assets are also included for certain items as directed by the DCS, G–4 ammunition director. Stocks with a restriction code of B01 or otherwise designated or restricted for training use only (TUO) are not included in the serviceable assets totals. TUO assets are recorded in the Training Restricted column.

C–3. Requirements

a. Requirements are WR and annual training. For items with a WR requirement (WR or training standard or dual-use items) the critical WR requirement is also used.

b. For a training-unique item or a training standard or dual-use item, the training pipeline provides inventory in motion to support training continuity. It is currently defined as 150 days, or 41 percent of annual training.

c. A test requirement is also in place for many items. This is looked at after the WR and training requirements. It is rated on an all-or-none basis. If there are enough assets left to cover the test requirement and the training pipeline has been covered, then the test requirement can be completely covered.

C–4. Calculation of S-Rating for individual items

a. *War reserve items.* Only the serviceable assets (less TUO assets and CC D assets at RDT&E sites) are measured against the WR requirement and critical WR requirement. The S-rating for individual items or DODICs are as follows:

(1) S1—Serviceable assets meet the full WR requirement.

(2) S2—Serviceable assets do not meet the full WR requirement but do meet the critical WR requirement.

(3) S3—Serviceable assets do not meet either the WR or critical WR requirements.

b. *Training unique items.* The balance of the serviceable assets (after subtraction of the critical WR requirement) plus the TUO assets are compared to the training-pipeline requirement. The training pipeline is based on the total annual training requirement with the full pipeline set at 150 days or 41 percent of the annual requirement (150 days is 41 percent of the 365 days in a normal year.). The second level of the pipeline is 120 days or 33 percent. The S-rating for training-unique items is determined as follows:

(1) S1–TUO and balance of serviceable assets are greater than or equal to 150 days or 41 percent (training pipeline based on the annual training requirement).

(2) S2–TUO and balance of serviceable assets are less than 150 days or 41 percent but greater than or equal to 120 days or 33 percent.

(3) S3–TUO and balance of serviceable assets are less than 120 days or 33 percent.

c. *Assets pertaining to the S-rating.* The assets available in a depot are also taken into account for the training S-rating. If the total serviceable assets (including training-restricted assets) in depot are less than 90 days (25 percent) of the annual CONUS training requirement, then the rating is dropped one level. For example, an item may have more than 150 days of the training requirement available in worldwide serviceable assets and TUO stock and would, therefore, be rated an S1. However, there are only enough serviceable and TUO assets in depot to cover 50 days of the CONUS training requirement. The rating for that item would then become S2.

d. *Training-unique items as war reserve requirement.* Some training-unique items may also have a WR requirement. This WR requirement is established to cover mobilization training requirements conducted in preparation for deployment or during deployment. The serviceable assets are used to establish the rating for this requirement. The ratings for this WR requirement are established in the same manner as the dual-use items described in C–4e.

e. *Dual-use or training standard items.* Two requirements must be covered for these items as they generally have both a WR and annual training requirement. These items therefore receive an S-rating for both of these requirements. The worse of the two ratings is used as the overall S-rating for each DODIC. Calculating the S-rating for dual use items is a three-step process:

(1) The initial WR rating is determined by subtracting the critical WR requirement from the serviceable assets (excluding any TUO assets.) If the serviceable inventory can meet the critical WR requirement, then the WR S-rating is no less than S2, if not then it is S3.

(2) If the critical WR is met, the remaining serviceable assets plus any TUO assets are used to calculate the training S-rating using the training methodology as described in paragraph C–4*d* for training-unique items. Use the TUO assets first to cover training requirements, then use the serviceable assets if needed.

(3) If the full 150-day pipeline is covered and there is a serviceable-asset balance leftover, then the remaining balance of the serviceable assets is compared to the balance of the WR requirement left after subtracting the critical WR quantity. If there are sufficient serviceable assets left to cover the balance of the WR requirement, then the WR rating is increased from S2 to S1.

f. About ratings. Because of the breakout of the TUO assets from the serviceable assets balance, a dual-use item may have a training rating that is better that its WR rating.

C–5. Summary of the current ratings methodology

a. Apply worldwide serviceable assets (CC = A, B, C, D) to the critical WR requirement. TUO stocks and CC D stocks at RDT&E sites are excluded.

b. Apply TUO assets plus the remainder of the worldwide serviceable assets after calculation of the critical WR rating to the training pipeline requirement.

c. Apply the balance of the worldwide serviceable assets after training calculations to the balance of the WR requirement.

Note. The Restriction Code B01 and other TUO assets are only used for training requirements. These TUO assets are used first when calculating the training rating. The serviceable assets balance is added when necessary.

C–6. Calculation of S-ratings for item subgroups

a. Individual items are combined by category into groups which receive an overall rating based on the ratings of the items within the group.

b. In many cases, there are smaller combinations of items beneath the group called subgroups. These subgroups are combined due to the ability to use one item instead of another in the subgroup. These subgroups receive their own ratings which are then combined to establish the group rating. The assets and requirements for the DODICs within the subgroups are summed and then the methodologies identified in paragraph C–4 are used to find the rating for that subgroup.

c. The rating methodology used will depend on the makeup of the subgroup. There are four possible configurations:

(1) All DODICs in the subgroup are WR items. In this case, the WR methodology detailed in paragraph C–4 is used to find the subgroup rating.

(2) The DODICs are a combination of WR and training standard and dual-use items. In this case, the training standard and dual-use methodology in paragraph C–4 is used. The ratings methodology identified in paragraph C–4 which separates the TUO assets, is applied to this subgroup rating calculation.

(3) All DODICs are training-unique items. In this case, the training-unique methodology in paragraph C–4 is used to find the subgroup rating.

(4) The DODICs are a combination of training-unique and training-standard items. In this case, the training standard and dual-use methodology in paragraph C–4 is used to find the subgroup rating. As mentioned in paragraph C–4, the TUO assets are only used for training-requirements ratings.

C–7. Calculation of S-ratings for item groups

a. In some groups all DODICs are rolled into subgroups. In other groups, there are no subgroups and DODICs are treated separately, and in still others there is a combination of subgroups and separate DODICs. A weighted mean calculation is used to roll the DODIC and/or subgroup ratings into an overall group rating. The weighted mean gives each DODIC or subgroup a weight or importance, and this determines how much its rating affects the overall group rating.

b. To find the weights, the requirements are summed for all the DODICs in a group. Each subgroup and separate DODIC gets a weight based on its percentage of the total group requirement. For separate DODICs: weight equals DODIC requirement, divided by the total group requirement. For subgroups: weight equals total subgroup requirement, divided by the total group requirement.

c. This percentage or weight is then multiplied by the DODIC or subgroup rating. These values are summed and divided to get an average group rating. This average is then compared to the criteria in table C–1 to determine the rating.

Table C–1 S-rating criteria	
S1	1.00–1.20
S2	1.21–2.20
S0813	2.21–3.0

C–8. Serviceability and quality R-rating methodology

a. R-ratings recognize that not all serviceable assets are equal and, therefore, consider three factors: CCs, periodic inspections, and reliability. Anything with a CC less than A has the potential to reduce mission flexibility. R-ratings are lowered based on the percentage of stock in less than CC A. Stocks with overdue periodic inspections cannot be shipped. R-ratings are lowered by 10 percent, an estimate of unserviceability based on ASRP historical data, in instances where inspections are overdue. An item can be serviceable yet have poor reliability. Functional reliability is determined as a factor in ASRP testing. Using these three considerations, R-rating assessments are made for individual items with the following formulas:

(1) R1 = [(percent CC A) – (0.1) (percent uninspected)] · (reliability) ≥ 90 percent

(2) R2 = [(percent CC A through D) – (0.1) (percent uninspected)] · (reliability) ≥ 65 percent

(3) R3 = [(percent CC A through D) – (0.1) (percent uninspected)] · (reliability) < 65 percent

b. Ratings are defined as follows:

(1) R1—No significant quality issue; indicates most of the stockpile is in CC a (full mission flexibility).

(2) R2—Quality issue; portion of the stockpile is unserviceable or restricted (could result in isolated to moderate reduction in mission flexibility).

(3) R3—Numerous quality issues; indicates much of the stockpile unserviceable (could result in significant reductions in mission flexibility).

C–9. Calculation of R-ratings for item groups

a. In some groups all DODICs are rolled into subgroups. In other groups there are no subgroups and DODICs are treated separately, and in still others there is a combination of subgroups and separate DODICs. A weighted mean calculation is used to roll the DODIC and/or subgroup ratings into an overall group rating. The weighted mean gives each DODIC or subgroup a weight or importance, and this determines how much its rating affects the overall group rating.

b. To find the weights, the assets are summed for all the DODICs in a group. Each subgroup and separate DODIC gets a weight based on its percentage of the total group. For separate DODICs: weight equals DODIC assets, divided by total group assets. For subgroups: weight equals total subgroup assets, divided by total group assets.

c. This percentage or weight is then multiplied by the DODIC or subgroup rating. These values are summed and divided to get an average group rating. This average is then compared to the criteria in table C–2 for the criteria) to determine the rating.

Table C–2 R-ratings criteria	
R1	1.54 or less
R2	1.55–2.44
R3	2.45–3.00

C–10. Calculation of R-ratings for family

a. Each group is part of a family. The family rating is based on the ratings of the groups it includes. Each family also gets a WR and training rating.

b. To find the WR rating for each family, find the average R-ratings for each group in the family. Then count the number of R1, R2, and R3 ratings for these groups as well. The family WR rating is based on the criteria in table C–3.

Table C–3
War reserve rating criteria

R	50% of group ratings	Average of group ratings
1	R1	1.54 or less
2	R2 or better	1.55 to 2.44
3	R3 or better	2.45 to 3.00

Appendix D

Missile Firing Data Reports

D–1. Procedures for completing DA Form 3474 (Missile Firing Data Report (JAVELIN))

a. Complete DA Form 3474 (Missile Firing Data Report (JAVELIN)) for each Javelin missile firing or attempt to fire for troop training, annual service practice, demonstration, and life-cycle testing, including acceptance, product improvement, and surveillance.

b. The Javelin form is designed to provide most information by simply writing in or marking the appropriate block for the desired information.

c. Document any failure experienced during Javelin firings fully in sections 21 and 22 at the bottom of the form. (It may be necessary to use the back of the form to fully explain the incident.)

d. Instructions for completing DA Form 3474:

(1) *Missile information.* Enter the missile SN, lot number, DODIC, and NSN in the blanks provided. Each blank should contain a number or letter when this section is complete.

(2) *Battery coolant unit.* Enter the BCU SN and lot number in the lines provided.

(3) *Section 3.* Self-explanatory.

(4) *Section 4.* Self-explanatory.

(5) *Software version.* Enter the software version currently installed in the command launch unit (CLU).

(6) *Section 6.* Self-explanatory.

(7) *Section 7.* Self-explanatory.

(8) *Section 8.* Enter the time (military), month, day, and year that the missile was fired. Each block should be filled when this section is complete.

(9) *Gunner experience.* Enter the number of missiles that the gunner has fired previous to this firing or check the no gunner block if fired remotely.

(10) *Warhead type.* Check the live block for a heat round, the inert block for a practice round, or the time block for a round containing a telemetry section instead of a warhead. Only one block should be checked in this section.

(11) *Gunner position.* Check the box that best describes the gunner's position at the time of the firing. Only one block should be checked in this section.

(12) *Conditions at time of launch.* There are four columns in this section. Check the appropriate box under the headings obscurants, light conditions, and type of illumination (for night firings only). Under the column labeled other, fill in the blanks for wind in miles per hour (MPH) and temperature in degrees Fahrenheit.

(13) *Purpose of firing.* Check the appropriate block.

(14) *Acquisition mode.* Check the appropriate block(s) that describe(s) the mode(s) of the CLU at the time of acquisition. More than one block may be checked in this section.

(15) *Command launch unit elapsed time meter readings.* Record the elapsed time meter readings prior to the firing and after the firing.

(16) *Target information.* There are four columns in this section. The target type column is self-explanatory. Target temperature is the condition of the target and may require more than one block to be checked. The temperature blank (at the bottom of the target temperature column) is the temperature of the target. Target aspect is the view of the target as presented the gunner with 0 and 360 and looking at the target from the front; 90 would be looking at the left side of the target from the driver's perspective, and 270 would be looking at the right side of the target from the driver's perspective. The other target is self-explanatory.

(17) *Firing results.* A miss means the missile did not hit the target that the gunner locked on. Misfire means that the gunner pulled the fire trigger and nothing happened. A hang fire means that the gunner pulled the trigger and the restraint pin was activated, but the missile did not leave the tube. An abort is self-explanatory. If the missile hit the locked-on target, check the hit block and complete the information under that block.

(18) *Warhead function.* Section 18 is self-explanatory.

(19) *Command launch unit checkout.* This section refers to the self-test results at pre- and postflight times of the CLU.

(20) *Command launch unit and missile built-in test indicator.* List any built-in test (BIT) icons that illuminated during the test.

(21) *Misses and failures.* As stated, this section is only for misses and failures. As much information as possible should be checked as well as a description of the incident should be given in section 22.

(22) *Explanation.* This section is for misses or erratic flights. Describe the incident in as much detail as possible with the data immediately available.

(23) *Date.* This is the date that the firing report was completed.
(24) *Section 24.* Self-explanatory.
(25) *Section 25.* Self-explanatory.
(26) *Section 26.* Self-explanatory.

D–2. Completing DA Form 7213–R (Missile Firing Data Report (Dragon and Tube-Launched, Optically Tracked, Wire-Guided) (Report Control System AMC 224)

a. The form is designed so that most blocks need only be checked in the appropriate category or blanks filled in with the required data. All numbers should have the last digit in the extreme right position and should be rounded off to the nearest whole number. This form and all requested data are unclassified.

b. Instructions for completing DA Form 7213–R (Missile Firing Data Report (Dragon and TOW)):

(1) *Mail completed report to this address.*

(2) *Unit mailing address.* Enter the complete address of the firing unit. For tactical units, this should be the company. For other organizations, it should be the office conducting the test.

(3) *Missile information.*

(a) Missile serial number. Enter the missile SN as shown on the missile container marking.

(b) Missile lot number. Enter the missile lot number as shown on the missile container marking.

(c) National stock number. Enter the NSN as shown on the missile container marking.

(4) *Warhead type.* Mark the type of warhead. If the type of warhead is not listed, write in the appropriate type.

(5) *Mount.* Mark the appropriate mount. If the type of mount is not listed, write in the appropriate nomenclature.

(6) *Firing agency.* Mark the appropriate block. If the agency conducting the firing is not listed, write in the agency name.

(7) *Location (post) where fired.* Enter the name of the installation or location where the firing was conducted.

(8) *Purpose of firing.* Mark the purpose of the firing or enter the name of the test program.

(9) *Time of missile firing (military time).* Use local military time and use numbers for the date. For example, July 4, 2017, should be entered as 07 04 17.

(10) *Light conditions.* Mark the appropriate block for light conditions.

(11) *Temperature.* Mark the appropriate block and enter the temperature at the time of launch.

(12) *Weather.* Mark the appropriate block.

(13) *Gunner experience.* If a gunner has previously fired missiles, enter the number of missiles fired, excluding missiles reported as fired on this firing data report. If this is the first firing, mark no previous missiles. If there was no gunner (firing from fixed launcher), mark no gunner.

(14) *Target type.* Mark the appropriate type of target. If the target is approximately the size of the standard target, then mark standard stationary target or standard moving target. For example, a target that is 8-feet by 8-feet can be marked as a standard stationary target.

(15) *Target direction.* If the target is not moving, mark stationary. If the target is moving, mark the direction of the movement.

(16) *Target speed in miles per hour.* If the target is moving, enter the approximate speed in MPH.

(17) *Range to target (meters).* Enter the distance from the launcher to the target in meters.

(18) *Target hit.* Mark yes or no. Ricochet hits should be marked no.

(19) *Impact point from center of target (inches).* If the missile hit the target, note the distance from the target center. However, if range conditions prevent determining this information, mark not determined.

(20) *Warhead functioned.* Mark the appropriate block.

(21) *Range to impact point (miss only).* If a miss or failure occurs, enter the estimated distance (meters) from launcher to the point where the missile first hit the ground.

(22) *Cause of miss.* Mark the block that most nearly describes why this missile did not hit the target. If other is marked, specify the cause.

(23) *Sequence of events.* Answers to the questions concerning events that should have occurred during the firing will assist personnel in analyzing failures. If possible, mark whether they did or did not occur. If it could not be observed whether these events occurred or not, mark unknown.

(24) *Remarks, unusual missile flight or unusual behavior in any part of the system.* Any comments that would assist personnel in determining why a missile did not hit the target should be entered. Make the description as complete as possible, including observations concerning equipment discrepancies noted after the flight.

(25) *Date.* Enter the date of the report.

(26) *Gunner's name (type or print).* Enter the gunner's name.

(27) *Officer in charge (type or print).* Enter the name of the individual submitting the report.

(28) *Defense switched network or commercial number.* Enter the defense switched network (DSN) number or commercial telephone number.

D–3. Procedure for completing DA Form 3120 (Missile Firing Data Report (Phased Array Tracking Radar Intercept of Target) (Report Control System AMC 224))

a. DA Form 3120 (Missile Firing Data Report (Hawk & Patriot)) is designed so that most questions can be answered with one word, a number, or a check mark in a box. A sketch or diagram, should accompany the report to explain incidents that cannot be easily described or identified. If an item cannot be positively determined, it should be explained in item 34. When information is unknown or not available, enter unknown in the appropriate block.

b. Note linear and velocity measurements in meters, kilometers, and meters-per-second.

c. The completed form, when filled in, will be classified as confidential.

d. Instructions for completing DA Form 3120:

(1) Mail completed report to this address.

(2) Enter complete address for unit conducting the missile firing.

(3) Enter the appropriate unit designation.

(4) Identify missile fired by type.

(5) Enter missile SN and system/mission number.

(6) Check the appropriate box.

(7) Enter time and date of missile firing.

(8) Make appropriate entry.

(a) Enter the order of firing in the round and salvo blocks (for example, first round—enter 1 in round, second salvo—enter 2 in salvo).

(b) Enter the section that did the firing in the block.

(c) Check this block for one missile fired at one moving target in an engagement. If this block is checked, round and salvo blocks will be left empty.

(d) Check block if firing was deliberate. Leave block empty if autonomous.

(9) Self-explanatory.

(10) If the scoring and analysis unit cannot determine that the missile was successful or unsuccessful, nor can an evaluation of telemetry data or observation of target interception or destruction be determined, write unknown and explain in item 34.

(11) Only R, the radial miss distance, applies. Enter the value obtained from telemetry or other source in meters. If the miss distance is not known, enter unknown.

(12) Section 12 is self-explanatory.

(13) Section 13 is self-explanatory.

(14) Section 14 is self-explanatory.

(15) Enter the time of flight (from launch to burst) to the nearest tenth of a second.

(16) Enter the type of warhead or specify if other than live warhead.

(17) Check the type of burst. Types of burst are defined as follows:

(a) Normal bursts result from a signal reflected from the target.

(b) Self-destruct bursts are produced by built-in feature.

(c) Command destruct bursts are caused by manual command.

(d) Ground impact bursts are caused by impact with the ground.

(e) Special bursts or simulated bursts are produced for research and development purposes.

(f) Premature-destruct bursts occur before missile comes within range of the target.

(g) No burst need and explanation for failure in item 34.

(18) Give both intercept speed and maximum speed for PATRIOT in meters per second.

(19) Record target altitude above the battery at intercept in kilometers.

(20) Record range at intercept.

(21) Record the type of target—

(a) Description. Propeller, turbojet, ramjet, missile or helicopter, towed dome, or simulated target (indicate simulator used, surface, or space point).

(b) Type. Actual (A), offset (O), simulator (S).

(c) Nomenclature. Record if applicable.

(d) Augmentation. Note when used.

(e) Size. Record target size in square meters when simulator is used.

(22) Check the type of course the target was flying at intercept. If applicable, write in whether the target was ascending, descending, or pop-up.

(23) Section 23 is self-explanatory.

(24) Give target data in appropriate units.

(25) Give target data in appropriate units.

(26) Give target data in appropriate units.

(27) If the missile does not reach the intercept point, is lost, or if the flight termination is not observable, enter the last known missile data in appropriate units.

(28) Record the reason for firing, for example, short notice annual practice, unit activation, or training.

(29) Enter the type of telemetry system used, if applicable.

(30) Enter the temperature at the time of firing and describe the weather conditions, such as clear, light, or heavy, rain, snow, sleet, fog, or wind.

(31) Enter classification authority.

(32) Enter declassification date.

(33) Any items requiring further comment should be explained here. Number the comment to correspond to the applicable item. Any unusual performance should be reported. Reasons for an unsuccessful firing should be given as well as reasons for aborting a missile after firing.

(34) Appropriate remarks as required, based on information provided in item 34.

(35) Section 35 is self-explanatory.

(36) Section 36 is self-explanatory.

D–4. Procedure for completing DA Form 7212 (Missile Firing Data Report (Stinger) (Report Control System AMC 224)

a. This form is designed so that most questions may be answered with one word, a number, or a checked box.

b. Fully document any failure experienced during stinger firings in the remarks section at the bottom of the form.

c. The completed form and all requested data are unclassified.

d. Instructions for completing DA Form 7212 (Missile Firing Data Report (Stinger)):

(1) Enter the name of individual completing the form.

(2) Enter the organization firing the missile.

(3) Enter the gunner's name.

(4) Enter date of missile firing attempt.

(5) Enter time of firing attempt.

(6) Enter missile serial number.

(7) Enter lot number of the missile.

(8) Enter the serial number of the grip stock.

(9) Enter the serial number and lot number of the BCU.

(10) Enter a check in the appropriate block for the location of the missile firing attempt. If the missile firing was attempted at a site other than those listed, enter the site name on the other line.

(11) Check the appropriate block for the type of target.

(12) Check the appropriate block for the type of launch platform

(13) Check the appropriate block indicating if the grip stock functioned

(14) Check the appropriate block for the firing analysis.

(15) Check the appropriate block describing the analysis of the warhead function.

(16) Check the block that appropriately describes the weather conditions at the time the firing was attempted.

(17) Enter remarks in the case of grip stock or BCU malfunction or if the missile flight was unusual or a target miss occurred.

(18) Enter the name of the officer in charge and sign the form

(19) Enter date the form was signed and the phone number of the individual completing the form, including DSN prefix and commercial number.

D–5. Procedure for completing the Multiple Launch Rocket System Practice Rocket Firing Data Report (Report ___ of ___ for this Mission) MLRS/GMLRS Firing Data Report

a. The completed DA Form 5582–R (ATACMS Missile/MLRS Practice Rocket Firing Data Report (Report__of__for this Mission)) is unclassified.

b. For each rocket pod (RP) and firing mission, complete one report. Data is required for each rocket firing attempt, whether the attempt results in an actual firing or not. It is significantly important to complete section accurately since data collected determines a successful firing attempt or establishes possible cause of failure.

c. Instructions for completing the MLRS/GMLRS Firing Data Report:

(1) Enter identification and contact information of unit attempting to fire (Provide as much as possible).

(2) Enter the date when the rocket firing/attempt took place (month/day/year).

(3) Enter the time (military) when the rocket firing/attempt took place.

(4) Check block that best describes agency attempting to fire. If other, explain.

(5) Check block and provide information that best describes unit attempting to fire.

(6) Check block that best describes reason firing/attempt was made. If other, explain.

(7) Check block that best describes the mode of firing. If ripple, enter interval which these were preset.

(8) Enter the location and launch elevation at which the rocket firing/attempt was made (general UNCLASSIFIED information only).

(9) Enter the ambient temperature (°C or °F) at the firing location and any block that best describes the weather conditions when the rocket firing/attempt was made.

(10) Check block that best describes wind velocity when the rocket firing/attempt was made.

(11) Check block of launch system used when rocket firing/attempt was made.

(12) Enter launcher serial number.

(13) Check the correct block of rocket variant being fired.

(14) Enter RP serial number and lot number.

Note. For each RP fired/attempted, a separate MFDR should be completed.

(15) Only mark position of rocket(s) fired or attempting to fire. If a M270A1 launch system is used, check block that indicates where RP is loaded on launch system (Left of Right).

Note. For each RP fired/attempt, a separate MFDR should be completed.

(16) Check block that best describes target when rocket firing/attempt was made. If other, explain.

(17) Enter the distance (range) from launch location to target in meters.

(18) For Basic or Extended Range enter the fuze set time which is preset.

(19) Firing Sequence: Indicate the sequence in which missiles will be fired.

(20) Launcher Failed: Check Y if the launcher failed to fire but check N if there is no indication of a launcher failure.

(21) Number of Attempts: Enter the number of attempts in firing the specified missile, no matter if an actual firing took place.

(22) Rocket Fire: Check Y if rocket fired and launched from system but check N if triggered and nothing happened (Misfire or Hang fire).

(23) Passed Prelaunch BIT: Check Y if rocket passed prelaunch BIT but check N if failed.

(24) Normal Flight: Check Y if flight was considered normal with no anomalies but check N if not.

(25) Warhead Detonated/Dispersed: Check Y if warhead detonated or dispersed bomblets but check N if not.

(26) Impact Target: Check Y if rocket impact target but check N if it did not. If it did not impact target describe missed target results.

(27) Missed Target Results: Describe the missed target results by identifying if rocket failed to reach target distance (short), exceeded target distance (long), if offset was to the right or left of target, and an estimate distance from target.

(28) Space provided for recording significant details of each failed firing attempt, including launcher, rocket, or RP failures. Any comments that would assist personnel in determining why a rocket did not hit the target should be entered.

(29) Print name of the individual submitting the report, grade or name of evaluating team, and include DSN number or commercial telephone number

(30) Review report for accuracy and sign.

D–6. Procedure for completing DA Form 5582–R Army Tactical Missile Systems (ATACMS Missile Firing Data Report)

a. The completed DA Form 5582–R is unclassified.

b. For each firing mission, complete 1 report.

c. Instructions for completing DA Form 5582–R:

(1) n/a

(2) Enter the firing agency attempting the firing.

(3) Enter the mission date and time.

(4) Enter the name of the unit attempting the firing.
(5) Check the block that best indicates the firing category. If other, explain.
(6) Enter in the location at which the missile firing/attempt was made (general UNCLASSFIED information only).
(7) Check the block that most appropriately describes the weather; enter the ambient temperature at the firing location and check the block to indicate if the temperature is recorded as Celsius or Fahrenheit.
(8) Enter the wind velocity in MPH.
(9) Enter the launcher serial number; check the appropriate box to indicate launch platform.
(10) Check the appropriate missile type/variant.
(11) Enter the missile serial number, lot number, and DODIC.
(12) Check the appropriate type of target. If other, please list.
(13) Check the appropriate prelaunch BIT.
(14) Enter the BIT indicator code(s).
(15) Enter the software version currently installed in the launcher platform.
(16) Check the appropriate launch status.
(17) Check the appropriate box that describes the impact of the missile. If the "missed target" block is checked, explain in block 26. (For example, the missile over flies the target, impacting 5,000 meters from the launcher, and to the right of the target).
(18) Check the yes if the missile flight was normal; check no if the missile flight was unusual or a target miss occurred. If no, explain in block 26.
(19) Enter the time of flight (from launch to impact) to the nearest 1/10 second.
(20) Check the type of burst. Types of burst are defined as follows:
(a) Ground impact. Burst caused by impact with the ground.
(b) Aerial burst.
(c) None. Explain failure to burst in item 26.
(21) Check the appropriate target condition post-mission.
(22) Check the appropriate dispersion mode (Block I and Block IA only).
(23) Enter the missile's altitude at time of height of burst in meters (Block I and Block IA only).
(24) Enter the distance from the launcher to the target in kilometers.
(25) Check the appropriate block that indicates the fuze setting.
(26) Provide details of an unusual missile flight or unusual behavior in any part of the system. Any comments that would assist personnel in determining why a missile did not hit the target should be entered. Make the description as complete as possible, including any observations concerning equipment discrepancies noted after the flight.
(27) Enter any additional remarks.
(28) Enter the name and grade/rank of the individual submitting the report.
(29) Enter the DSN number or commercial telephone number of the individual submitting the report. (See table D–1 for event descriptions.)

Table D–1
Event description for Army Tactical Missile System and Multiple Launch Rocket System

Phase	Success	Failure	No-test
Army Tactical Missile System			
Prelaunch	Missile achieves first motion	Prelaunch test failure or no motion after firing attempt	Prelaunch failure, accidents, deliberate abuse
Launch and flight	Missile follows prescribed trajectory to dispense, and warhead event	Missile failed to follow trajectory, did not arrive at programmed destination, or no warhead event occurred	Prelaunch failure, accidents, deliberate abuse
Multiple Launch Rocket System			
Preflight	Rocket leaves the launcher on firing attempt	Rocket does not launch on fire attempt and the failure is caused by the rocket or pod	Rocket does not launch on the fire attempt and the failure was caused by launcher malfunction
Flight	Rocket trajectory appears to be correct in azimuth, range, and height	Rocket trajectory is obviously out of azimuth, range, or height	There was a preflight failure or no-test

Table D–1
Event description for Army Tactical Missile System and Multiple Launch Rocket System—Continued

Phase	Success	Failure	No-test
Fuse	Smoke, simulation warhead event is observed	Smoke is not observed	There was a preflight failure or no-test
Warhead	Same as indication for fuse success and impact is not monolithic	Same indication as for fuse, but impact is monolithic	There was a preflight failure, no-test, or fuse failure

D–7. Procedure for completing DA Form 5583 (Missile Firing Data Report (Hellfire))

a. The completed DA Form 5583 and all requested data are unclassified.

b. Most of the blocks on the form are self-explanatory. Make entries in all blocks. Blocks which are not applicable or the information is unknown should be notated as such. The items listed in paragraph D–6*c* are listed for further clarification.

c. Instructions for completing DA Form 5583 (Missile Firing Data Report (Hellfire)):

(1) Enter in the location at which the missile firing or attempt was made.

(2) Enter the date when the missile firing or attempt took place in month/day/year format.

(3) Enter the serial number of the missile. The serial number should be a 6 or 7 digit numeric entry.

(4) Enter the lot number of the missile. The lot number should be 13 or 14 alphanumeric digits. The first three digits should be alpha character. The next consecutive two digits (fourth and fifth) should be numeric characters. The sixth digit should be an alpha character

(5) Enter the type or model of the missile (that is, air to ground missile (AGM)–114C, AGM–114F).

(6) Check the block that indicates the launch platform used. If it is not listed, use the other field to designate the appropriate platform.

(7) Enter the ACFT tail number. If there are dashes in the ACFT tail number, enter it without dashes.

(8) Enter UAS platform firing, enter the ground control station (GCS) serial number.

(9) Enter the call sign for the ACFT.

(10) Enter the UIC for the firing unit.

(11) Enter the name of the unit attempting the firing.

(12) Enter the serial number of the missile launcher. If there are dashes in the serial number, enter it without dashes.

(13) Check the block that indicates the position of the missile on the launcher when the firing attempt was made.

(14) Enter the numbers that indicate the position of additional missiles loaded when missile were fired.

(15) Fields noted with an asterisk should only be completed if the missiles is equipped with a health monitoring unit (HMU) and the missile data was recorded prior to the missiles being uploaded onto the aircraft. If the missile is equipped with HMU, enter the total number of hours displayed on the HMU indicating how many hours the missile has been carried on wing while the aircraft earned flight hours. HMU will display “Captive Carry” or “V” Hours.

(16) If the missile is equipped with an HMU, enter the number of hours the HMU says the missile’s seeker section was powered on.

(17) Enter the percentage of battery life remaining on the HMU.

(18) If the missile is equipped with HMU, enter the temperature the HMU says the missile was exposed to. Check the box to indicate whether the temperature was a pass (green light) or fail (red light) as displayed on the HMU.

(19) If the missile is equipped with an HMU, enter the value displayed on the HF HMU for relative humidity (%). Entry should be a whole number (no decimals).

(20) Enter the value displayed on HMU for drop shock. Check the box whether the temperature was a pass (green light) or fail (red light) as displayed on the HMU. It is the responsibility of the pilot and/or gunner to fill out this section.

(21) Enter any maintenance-related events for the missile or launcher related to the firing event.

(22) Enter in the firing agency attempting the firing.

(23) Check the block that best describes why the firing attempt was made. If other, explain.

(24) Check the appropriate block for the wind velocity and list the vector. The directional vector should be submitted in degrees. If information for wind speed is only available in knots, the following conversions can be used: (0–5 MPH = 0–4.3 knots; 5–10 MPH = 4.3–8.7 knots; 10–15 MPH = 8.7–13.0 knots; 15–20 MPH = 13.0–17.4 knots; 20–30 MPH = 17.4–26.0; over 30 MPH = over 26.1 knots)

(25) Check the block that most appropriately describes the weather.

(26) Enter the ambient temperature at the firing location and check the block to indicate if the temperature is recorded as Celsius or Fahrenheit.

(27) Enter warhead delay ("R" variants only) for the delay type used.

(28) Enter the laser code used for the firing. This value must be four numeric characters

(29) Indicate whether visible obscurants were natural or induced. If no obscurants were observed write "none" in the Other field.

(30) Check the block indicating whether the missile CCM switch was in the up or down position.

(31) Enter the number of previous missile firings the gunner has made.

(32) Check the block that indicates the appropriate designator mode used.

(33) If a remote designator was used, enter the designator offset in degrees. The remote designator offset is the number of degrees (between 0 and 60) in the angle between the gun target line and the remote designator to target line. If the remote designator platform was an aircraft, enter the associated tail number. Enter the remote designator ACFT call sign. Enter in the distance from the designator to the target in kilometers.

(34) The target offset angle is the difference between the ACFT azimuth reference line (gun target line) and the designating system (laser target line). It can be read directly from the sighting system pointing angle (potentially indicated by (^) open caret or triangle) relative to the lubber line (for example, Target Acquisition Designation System (TADS) tracking target 5 degrees to the right of the lubber line, then one would enter 5 right).

(35) Select the box that represents the type of launch for this firing attempt. If the launch mission was a rapid or ripple firing, submit a separate firing report for each missile fired.

(36) Check the block for the appropriate firing mode used.

(37) Enter the lock on after launch (LOAL) delay time in seconds after missile separation.

(38) Select the appropriate target category and enter in the speed if moving is selected. The speed must be entered in MPH.

(39) Check the block for target type used. If other, enter target type.

(40) Enter in the approximate target size, for example, 8 feet by 8 feet.

(41) Enter the distance to target from launch platform in kilometers.

(42) Select which fuze delay was used, if applicable.

(43) Select the type of designator used. If other, explain.

(44) Check the tracking method used.

(45) Check the block for boresight used.

(46) Check the block for type of target acquisition sensor used.

(47) Check the block that indicates if backscatter avoidance techniques are used

(48) Enter the ACFT altitude in feet above ground level.

(49) Enter the speed of the ACFT in knots.

(50) Check block indicating if the prelaunch BIT indicated a pass, failure, or was not preformed.

(51) Check block indication if a cockpit/payload video is available of the missile launch, flight, and target impact.

(52) Check the block to indicate if the missile launched or not.

(53) Check the appropriate box that describes the impact of the missile. If the "missed target" block is checked, complete all appropriate subcategories. (For example, if the missile over flies the target, impacting 5,000 meters from the launcher, to the right of the target, the long and right blocks would be checked, and the "Estimated Range From Launcher to Impact Point" would be 5 kilometers.) If the "Hit Target" block is checked and the "Range from Launch Platform to Target" block is populated, then the "Estimated Range from Launcher to Impact" block should be left blank.

(54) Check the appropriate block indicating if the warhead detonated or not.

(55) If the target was missed, check the block that most accurately describes why.

(56) If the target was missed, describe flight below, especially missile behavior. Describe any maintenance related events for the missile or launcher related to the firing event. This block must be filled out in the case of a target miss for any reason. Provide as much information as possible, using the reverse side of the form if necessary.

(57) In the From field: Enter the complete mailing address for the unit attempting to fire the missile.

(58) At the bottom of the form, enter in the name and grade of the gunner and pilot as well as a DSN phone number and the date this form was filled out. The DSN phone number must be in the format XXX–XXXX.

D–8. Procedure for completing DA Form 3662 (Longbow Hellfire Missile Firing Data Report)

a. The completed DA Form 3662 (Longbow Hellfire Missile Firing Data Report) and all requested data are unclassified.

b. Most of the blocks on the form are self-explanatory. Entries should be made in all blocks. Blocks which are not applicable or the information is unknown should be notated as such.

c. To complete DA Form 3662, in the From block, write the complete address, including the zip code, for the unit attempting the missile firing.

(1) Enter in the location where the missile firing or attempt occurred.

(2) Enter the date when the missile firing/attempt took place in month/day/year format (MM/DD/YYYY).

(3) Enter the serial number of the missile. The serial number should be a 6 digit numeric entry

(4) Enter the lot number of the missile. The lot number should be 13 or 14 alphanumeric digits. The first three digits should be alpha character. The next consecutive two digits (fourth and fifth) should be numeric characters. The sixth digit should be an alpha character.

(5) Check the block for the launch platform. If it is not listed, use the "other" field to designate the appropriate platform.

(6) Enter the ACFT tail number. If there are dashes in the ACFT tail number, enter it without dashes.

(7) Enter the call sign for the ACFT.

(8) Enter the UIC for the firing unit.

(9) Enter the name of the unit attempting the firing.

(10) Enter the SN of the missile launcher. If there are dashes in the serial number, enter it without dashes.

(11) This block is used to describe the installation where the missile is uploaded for the firing attempt. Check the block that indicates the position of the missile on the launcher when the firing attempt was made.

(12) If the missile is equipped with an HMU, enter the total number of hours displayed on the HMU indicating how many hours the missile has been carried on wing while the aircraft has earned flight hours. HMU will display "Captive Carry" or "V" Hours.

(13) If the missile is equipped with an HMU, enter the number of hours the HMU says the missile's seeker section was powered on.

(14) If the missile is equipped with an HF HMU, enter the percentage of battery life remaining on the HMU.

(15) Enter the temperature the HMU says the missile was exposed to. Check the box to indicate whether the temperature was a pass (green light) or fail (red light) as displayed on the HMU.

(16) If the missile is equipped with an HMU, enter the value displayed on HMU for drop shock. Check the box whether the temperature was a pass (green light) or fail (red light) as displayed on the HMU.

(17) Enter any maintenance related events for the missile or launcher related to the firing event.

(18) Enter in the firing agency attempting the firing. (For example, U.S. Army, U.S. National Guard, U.S. Army Reserve, U.S. Navy, U.S. Marines, and so forth.)

(19) Check the block that best describes why the firing attempt was made. If other, explain.

(20) Check the appropriate block for the wind velocity and list the directional vector. The directional vector should be submitted in degrees. If information for wind speed is only available in knots, the following conversions can be used: 0–5 MPH = 0–4.3 knots; 5–10 MPH = 4.3–8.7 knots; 10–15 MPH = 8.7–13.0 knots; 15–20 MPH = 13.0–17.4 knots; 20–30 MPH = 17.4–26.0; over 30 MPH = over 26.1 knots.

(21) Check the block that most appropriately describes the weather at the time of firing.

(22) Enter the ambient temperature at the firing location and check the block to indicate if the temperature is recorded as Celsius or Fahrenheit. This entry must be a numerical value.

(23) Indicate whether visible obscurants were natural or induced. If no obscurants were observed, write "none" in the other field.

(24) Enter the number of previous LONGBOW missile firings the gunner has made.

(25) Check the appropriate block for Target Handover: TADS, Internet data modem (IDM), Integrated Helmet and Display Sight System (IHADDS), fire control radar (FCR), radio frequency handover (RFHO).

(26) If the missile was fired using an IDM handover, enter in the ACFT tail number, the ACFT call sign, the source range to target (in kilometers), and the position confidence number.

(27) The target offset angle is the difference between the ACFT azimuth reference line (gun target line) and the designating system (Laser target line). It can be read directly from the sighting system pointing angle (potentially indicated by (^) open caret or triangle) relative to the lubber line (for example, TADS tracking target 5 degrees to the right of the lubber line, then you would enter 5 right).

(28) Check block for the appropriate firing mode used.

(29) Enter the LOAL delay time in seconds after missile separation.

(30) Select the appropriate target category and enter in the speed if moving is selected. The speed must be entered in MPH.

(31) Check block for target type used. If other, enter target type.

(32) Enter distance to target from launch platform in kilometers.

(33) Check tracking method.

(34) Check block for bore-sight used.

(35) Enter the ACFT altitude.

(36) Enter the speed of the ACFT in knots.

(37) Check the box to indicate if cockpit video is available.

(38) Check the block indicating if the prelaunch power on BIT indicated a pass or failure.

(39) Check the block indicating if the prelaunch manual initiated BIT indicated a pass, failure, or was not preformed.

(40) Check the block indicating if the prelaunch continual BIT indicated a pass or failure.

(41) Check the block to indicate if the missile launched or not.

(42) Check the appropriate box indicating the impact of the missile. If the "missed target" block is checked, complete all appropriate subcategories. (For example, if the missile over flies the target, impacting 5,000 meters from the launcher, to the right of the target, the long and right blocks would be checked, and the "Estimated Range From Launcher to Impact Point" would be 5 kilometers.) If the "Hit Target" block is checked and the "Range from Launch Platform to Target" block is populated, then the "Estimated Range from Launcher to Impact" block should be left blank.

(43) Check the appropriate block indicating if the warhead detonated.

(44) If the target was missed, check the block that most accurately describes why.

(45) If the target was missed, describe flight below, especially missile behavior. This block must be filled out in the case of a target miss for any reason. Provide as much information as possible, using the reverse side of the form if necessary.

(46) In the From field, enter the complete mailing address for the unit attempting to fire the missile.

(47) At the bottom of the form, write in the name and grade of the gunner and pilot as wells as a DSN phone number and the date this form was filled out.

D–9. Procedures for completing Firing Data Report (Excalibur)

a. The completed report and all requested data are unclassified.

b. One firing data report will be completed for each Excalibur fired.

c. The form is designed so that appropriate blocks are checked or blanks filled in with the required data. All numeric data should be filled in with the last digit in the right most position.

d. If an item cannot be positively determined, mark the other block and fill in the appropriate answer in the space provided; if additional space is needed, continue on the back of the form.

e. Once completed, send the form to Department of the Army, Office of the Product Manager—Excalibur, Building 172, Buffington Road, Picatinny Arsenal, NJ 07825, or email it to picapmexcaliburwebpoc@us.army.mil. It can also be mailed to Joint Operations Center, Attention: 155 mm Inventory Manager, Building 350, Rock Island, IL 61299–6000 or email it to jmc-g3-ammo@ladc-rock4.army.smil.mil and USARMY Pentagon HQDA, DCS, G–4, Mailbox Ammunition; usarmy.pentagon.hqda-dcs-g-4.mbx.ammunition@mail.mil.

f. To complete the Excalibur MFDR.

(1) Enter the firing unit. Check the box that indicates the firing agency. If the other block is checked, explain.

(2) Enter the location from which the firing unit was firing the Excalibur projectile. Do not include the firing unit's actual grid locations; use general, unclassified information only.

(3) Enter the Excalibur SN located in front of the projectile, under the lot number.

(4) Enter the Excalibur lot number located in front of the projectile, under the DODIC.

(5) Enter the mission date and time.

(6) Check the block that best indicates the firing category. If Other, explain.

(7) Check the block that best indicates the gunners experience with firing an Excalibur projectile.

(8) Enter the ambient temperature and check the block to indicate if the temperature is recorded as Celsius or Fahrenheit.

(9) Check the appropriate block for the wind velocity in MPH and indicate the wind vector relative to the gun-target line.

(10) Check the block that most appropriately describes the weather.

(11) Check the block that indicates the fuze setting (point detonating, height of burst, HOB; delay).

(12) Check the block that indicates the Modular Artillery Charge System (MACS) charge and indicate the zone that was being fired upon.

(13) Enter the range from gun to target in kilometers.

(14) Enter the range from gun to ballistic impact point (BIP) in kilometers.

(15) Enter the BIP deflection from gun-target line in kilometers.

(16) Enter the gun quadrant elevation in miles.

(17) Check the block that most appropriately describes the target description. If Other, explain.

(18) Enter the approximate target size in meters.

(19) Check the block that describes the target grid refinement. If Other, explain. (precision strike suite—SOF).

(20) Check the block that best explains the packaging of the round, such as: was projectile in original package, original seal, container damaged, color of the humidity indicator and Remote Readiness, Asset Prognostic/Diagnosis System (RRAPDS). (The RRAPDS is a small sensor device installed on random containers to record environmental conditions experienced over its storage life.)

(21) Check the block that indicates the status of the round. If it failed physical inspection, explain.

(22) Check the block that indicates if this round was a part of a multiple round mission. If yes, enter the SN of the other rounds and fill out a separate form for each Excalibur round fired.

(23) Enter the number of fuze sets on this round.

(24) Check the block that indicates how the round impacted on the target.

(25) Check the block that indicates:

(a) The distance that the round missed the target by.

(b) In which direction was the miss offset.

(26) Check the block that indicates if the round was observed to have flown to the BIP.

(27) Check the block that indicates if the round was unobserved.

(28) Enter any anomalies with the mission or firing.

(29) Enter your name and grade.

(30) Enter your DSN phone number.

(31) Enter your email.

(32) Enter the date.

D–10. Procedures for submitting an Excalibur firing data report

a. As directed by AR 700–19, commanders of active, reserve, and ARNG components; field commanders of active, reserve, and ARNG components; and commanders of Army test agencies establish procedures and submit firing reports for each Excalibur artillery round firing attempted. Where local procedures are applicable, the LAR or QASAS may provide assistance in the preparation of the reports.

b. Submit the original, completed firing data report as instructed in chapter 10

c. In the case of a class A, B, or C malfunction (see AR 75–1) during any particular firing attempt, the firing agency will add pertinent information to the firing report.

d. Submit firing reports as soon as possible after the event. Although completed reports may be held for consolidation during a training exercise, reports should be submitted no later than five working days after the conclusion of the exercise.

Appendix E

Causative Research Inventory Checklist for Ammunition

E–1. Checklist

Use the following checklist when conducting a causative research inventory.

a. Identify all documents which relate directly to the variance (receipts, issues, shipments, and adjustments).

b. Use the last inventory as a starting point for the process, if applicable.

c. Build a temporary research file for each item.

d. Compare the documents to actual postings to see if posting errors exist.

e. Check the status on receipts and shipments to determine if the actions were completed but not posted.

f. Locate all magazine data cards (DA Form 3020–R) on file and in use at storage locations. DA Form 3020–R is prescribed by AR 710–2.

g. Compare magazine data cards with lot-locator records, and write down any discrepancies for later investigation.

h. Determine at what point the actual administrative error possibly occurred.

i. Document the circumstance that caused the variance.

j. When a document posting error is discovered, determine if there is a corrected posting. If there is not, make the necessary posting correction.

k. After making all corrections, determine the need for a DA Form 444 (Inventory Adjustment Report (IAR)) and, if required, initiate the report.

l. Document the procedure used to resolve the error. Make changes in the operating procedures to prevent the recurrence

m. Causative research will be completed within 30 calendar days following completion of the inventory. Causative research ends when the cause of the variance has been determined or no specific cause can be identified.

Appendix F

Salvage and Residue Listing

F–1. Background

Salvage and residue items are generated when ammunition items are expended. Table F–1 lists some ammunition items by DODIC and NSN stocked at and issued from the ASP. Contact the ASP from which the ammunition was issued to get information about any DODIC or NSN received that is not listed. Ammunition that do not have residual contents after consumption will require DA Form 5692–R.

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Metal container						
Box, ammunition M2A1	8140–00–960–1699	WY91	M2A1 Container for various DODICS	7553296	$5.99	X
Container, ammunition PA108 assembly	8140–01–252–4290	ZZWS	PA108 Container for various DODICS	9396178	$7.50	X
Box, ammunition M19A1	8140–00–828–2938	WY89	M19A1 Container for various DODICS	7553315	$3.88	X
Shipping & storage container M458	8140–00–739–0233	HX02	M548 Container for various DODICS	7258943	16.17	X
Shipping & storage container PA125	8140–01–347–8121	ZYAO	PA125 Container for linked 25 mm	12576143	$41.76	X
Shipping & storage container PA592	8140–01–083–9229	ZZVK	PA592 Container f/30 mm	10542565	$15.00	X
Shipping & storage container PA120	8140–01–316–9143	ZZVV	PA120 Container f/40 mm	12564414	$22.26	X
Shipping & storage container PA70	8140–00–090–1101	BX25	PA70 Container f/7.62 mm linked & 60 mm	9252724	$2.30	X
Container, ammunition PA124 f/60 mm mortar	8140–01–935–4466	ZZ86	PA124 Container f/60 mm	9354466	$24.50	X
Container, ammunition PA154 f/6120m mortar	8140–01–380–5857	ZZ54	PA154 Container f/120 mm	12577569	$37.00	X
Container, ammunition PA156 f/81 mm mortar	8140–01–354–4996	ZZXT	PA156 Container f/81 mm	12944511	$30.00	X
Container, ammunition PA157 f/81 mm mortar	8140–01–354–0766	ZZXU	PA157 Container f/C870&C871	12944510	$33.00	X
Container, ammunition PA103 prop charge	8140–01–204–4329	ZZWJ	PA103 f/prop charge	9349398	$24.00	X
Container, metal prop charge PA37A1	8140–00–262–9365	ZZHD	PA37A1 container f/prop charge	9234357	$7.00	X
Container, metal prop charge M14A2	8140–00–859–8017	DX43	M14A2 f/prop charge D540	8880528	$7.00	X
Container, metal prop charge M13A2	8140–00–864–3221	DX42	M13A2 f/prop charge D541	8880527	$5.24	X
Container, ammunition	8140–01–294–6392	ZZYV	PA113 f/K042 &	9390404	$50.00	X

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Metal PA113			K045			
Container, ammunition PA150	8140–01–451–7538	NB01	2.75 fastpack 78.45 inches	12937865	$150.00	X
Container, ammunition PA151	8140–01–451–7537	ZZ75	2.75 fastpack 70.70 inches	12937865	$150.00	X
Container, metal f/SMAW–D	8140–01–948–4079	ZY17	SMAW–D HA08		$38.00	
Container, prop charge	8140–01–490–2443	ZA12	f/MACS DA12			
Container, prop charge	8140–01–490–2453	ZA13	Container, prop f/MACS DA13			
Missile container						
Container, Hellfire, 84 inches	8140–01–415–9067	ZZ78	Hellfire PV29 & PU55	13401167	$350.00	X
Container, Hellfire, 76 inches	8140–01–159–7487	CW86	Hellfire PA79, PD68, PV30, WF15 & WF96	13155079	$350.00	X
Javelin container, green steel	8140–01–424–2248	ZZ34	Javelin container, green steel	13303300–29	$400.00	X
Javelin container, black plastic	8140–01–475–7995	ZY69	Javelin container, black plastic	13303015–009	$400.00	X
120 mm packaging						
Container, ammunition PA116 f/120 mm	8140–01–301–7706	ZZVY	PA116 F/120 mm	9386831	$7.20	X
C787/C784 HEAT–MP–T; M830 complete assembly	8140–01–228–7917	ZZUB	Complete drawing assembly	938633	$60.00	X
Container, ammunition	8140–01–301–7706	ZZVY	PA116 F/120 mm	9386831	$7.20	X
Nose cushion	8140–01–343–1964	ZZXX	Nose cushion	9390375	$3.00	X
Projectile support	8140–01–341–6324	ZZYD	Projectile support	9390377–1	$2.80	X
Sleeve & strap	8140–01–346–3429	ZZYE	Sleeve & strap	12561228–1	$8.00	X
Base cushion	8140–01–341–8653	ZZWD	Base cushion	12597644	$1.50	X
Clipboard filler	8140–01–380–2436	ZZZ4	Clipboard filler	12551617	$0.50	X
Cushion spacer	8140–01–345–4293	ZZXY	Cushion spacer	12631091	$0.50	X
C791 HEAT–MP–T M830A1/CA05 HEAT–MP–T M908	8140–01–336–8305	ZZVZ	Complete drawing assembly	12912369	$60.00	X
Container, ammunition	8140–01–301–7706	ZZVY	PA116 F/120 mm	9386831	$7.20	X

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Yoke assembly	8140–01–129–1233	ZZZ5	Yoke assembly	12912337	$3.00	X
Nose cushion	8140–01–384–9222	ZYAK	Nose cushion	12912344	$1.50	X
Projectile support	8140–01–384–9350	ZYAH	Projectile support	12912343	$7.00	X
Sleeve & strap	8140–01–384–4681	ZZ87	Sleeve & Strap	12527493	$5.00	X
Wire-bound box						
Crate, shipping and storage	8140–01–359–1594	ZZZ0	Holds x2 PA106 containers	12590218	$4.14	X
Box assembly (box wire bound, filler, end separator)	8140–00–078–8969	NX69		9395772	$2.37	X
Box packing (box wire bound, filler, end separator)	8140–00–891–6322	AX05	A131, A151, AA05	5581378	$6.75	X
Box packing (box wire bound, filler, end separator)	8140–00–825–1362	ZZVU	40 mm	8835104	$12.00	X
Box, wire bound packing ammunition	8140–00–864–3194	ZY68	Artillery type or rocket fuzes	8861213	$1.44	X
Box, wire bound packing ammunition	8140–00–857–2893	AX03	A059		$6.90	X
End board f/wire bound box	8140–00–220–5190	AX09	A131, A151, AA05		$1.25	X
End board f/wire bound box	8140–00–837–3034	ZZ84	A064		$1.25	X
Box, wire bound boxes, ammunition M2A1			Holds x2 M2A1 containers (various NSN)	7553347	$10.00	
Bix, wire bound w/o ends	8140–01–296–0853	ZZ83	Artillery type or rockets	12960853	$8.40	X
End f/wire bound box artillery type or rocket	8140–01–296–0854	ZZ85	Artillery type or rockets	12960853	$1.25	X
Box, wooden	8140–01–112–4646	ZY17	120 mm		$12.80	X
Fiber container						
Fiber container	8140–00–828–2972	GX17	f/G881	8800493	$0.11	X
Carton assembly	8140–00–828–7422	ZAAE	f/100 round linked 7.62	10534024	$0.05	X
Fiber container PA69	8140–00–090–1098	BX24	f/60 mm mortar B627	9278202	$0.25	X
Fiber container PA73	8140–01–339–6877	ZZXM	f/60 mm mortar B630 & B643	9280110	$1.86	X

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Fiber container PA78	8140–01–307–1737	ZZDU	f/60 mm mortar B642 &B646	9293287	$4.65	X
Fiber container PA164	8140–01–299–2901	ZY12	f/60 mm mortar M720A1 & M768	12992901	$4.65	X
Fiber container PA114	8140–01–477–9630	ZY13	f/81 mm mortar M816, M819 & M853A1	9354333	$4.89	X
Fiber container M252A5	8140–00–426–0959	ZAHP	f/81 mm Mortar C276	9230175	$2.09	X
Fiber container PA55	8140–00–410–8331	ZCBB	f/105 mm C445, C449, C545, C462 & C473	9271050	$3.09	X
Fiber container PA153	8140–01–380–1507	FKA6	F/120 mm CA30, CA04, CA07, C370, C824, & C823	12577509	$8.90	X
Fiber container f/smoke grenade	8140–01–124–7600	ZZPC	f/G900, G930, G940, G945, G950, G955 & G962	C13–9–119	$0.29	X
Fiber container f/2.75	8140–01–316–1240	ZZYW	f/2.75, H116 & H164	9335611	$4.00	X
Fiber container f/105 mm	8140–00–351–7904	CX42	f/105 mm C445, C449, C454, C462 & C473	7549073	$3.36	X
Fiber container PA162 M819 & M816	8140–01–505–7653	ZY14	f/81 mm C870 & C871	12993641	$4.85	X
Pallet						
Pallet, material handling wood	3990–00–090–0611	ZZPA	35 inches by 45.5 inches		$48.50	X
Pallet, material handling wood	3990–00–935–7826	ZZWW	40 inches by 48 inches		$48.50	X
Pallet, material handling wood	3990–01–093–6848	ZZPB	42 inches by 53 inches		$48.50	X
Pallet, projectile	8140–00–162–2003	ZCBC	155 mm top & bottom		$20.02	X
Base, pallet	8140–01–337–4661	ZZYR	155 mm metal	12914620	$30.00	X
Cover, platter	8140–01–336–5154	ZZYQ	155 mm metal	12914624	$40.00	X
Base assembly	8140–01–160–0231	ZZRH	155 mm bottom for HE	9370062	$6.18	X
Cover assembly	8140–01–160–0230	DX41	155 mm top for HE	9370061	$6.13	X
Inter packing material						
Support top	8140–00–153–7347	ZZBE	Artillery and rocket fuzes	9232149	$0.38	X

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Support bottom	8140–00–153–7345	ZZBF	Artillery and rocket fuzes	9232148	$0.46	X
Channel, edge guard	8140–01–327–0556	ZY15	Packing M592 cans B118 & B129	12902723	$0.75	X
Fiberboard wide filler	8140–01–257–7573	ZY20	Filler for sod of PA154 container	12577573	$1.30	
Fiberboard, narrow filler	8140–01–257–7574	ZY22	Filler between fillers in PA154 container	12577574	$0.50	
End plate plywood	8140–01–257–7571	ZT23	End plate plywood	12577571	$1.75	
Cardboard fuze protector	8140–01–247–7379	ZZPD	f/G940, G945, G950, G955, G963, G982	B13–9–118	$0.10	
Support assembly	8140–01–295–3235	ZY24	F/81mm mortar packed in a PA156 container	12953257		
Support, propelling charge	8140–01–297–7198	ZY25	f/81mm M375 series	12977198		
Carton point protector	8140–01–299–1889-	ZZZN	Carton for 5.56mm 30 rounds	11744234	$0.05	X
Ring support	8140–01–299–2902	ZY27	f/60 mm mortar	12992901		
Filler fiberboard	8140–01–299–2903	ZY28	Round fiberboard w/fiberboard ring			
Pad, cushion	8140–01–299–2904	ZY29	Round felt sisk f/81mm fiber container			
Fiberboard primer protector	8140–01–299–2905	ZZY31	1½-inch by 1½-inch fiberboard			
Support, plastic f/cartridge 40 mm	1310–00–077–2151		f/B546, B568, & B577	8835106		
Filler fiberboard f/30 mm						
Barrier material						
Grease proofed	8135–00–233–3871 8135–00–282–0565	ZY44	ML–PRF–121G 36 inches by 200 inches			
Grease proofed	8135–00–224–8885	ZY44	ML–B–121 36 inches by 200 inches			
Grease proofed	8135–00–292–9717	ZY44	ML–PRF–121 36 inches by 100 inches			
Cushion material, packaging	8135–00–397–2583	ZY45				

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Cushion material, packaging, 60-inch by 48-inch by ½-inch thick	8135–00–180–5922	ZY45	Type 2, Class 1, grade A foam		$103.00	
Bubble wrap packaging, 500-inch by 48-inch by 25-inch thick	8135–00–057–3607	ZY48	Pink bubble wrap static dissipative		$350.00	
Bubble wrap packaging, 24-inch by 250-inch big bubbles	8135–00–926–8991	ZY48	Cushioning material ULINE P/N S308		$186.00	
Bubble wrap packaging, 24-inch by 750-inch small bubbles	8135–01–023–5675	ZY48	Cushioning material ULINE P/N S306			
Bubble wrap packaging,48 inches by 250 inches by 2 inches	8135–01–235–8057	ZY48	Bubble wrap		$95.00	
Corrugated wrap 72 inches by 250 inches			Cushioning material ULINE P/N S–1478		$75.00	
Foam roll 500-inch by 48-inch by ⅛-inch thick			Cushioning material, ULINE P/N S–1983		$125.00	
Plastic sheet	8135–00–584–0610	ZY49	Plastic sheet 8 inches by 100 inches	L–P–378	$22.88	
Desiccant						
Desiccant, activated	6850–00–264–6572	ZY58	16 Unit	879079–1		X
Desiccant, activated	6850–00–264–6571	ZY58	8 Unit	879079–2		X
Desiccant, activated	6850–00–264–6574	ZY58	4 Unit	879079–3		X
Desiccant, activated	6850–00–264–6573	ZY58	2 Unit	879079–4		X
Desiccant, activated	6850–00–264–6562	ZY58	1 Unit	879079–5		X
Desiccant, activated	6850–00–264–6568	ZY58	½ unit	879079–6		X
Desiccant, activated	6850–00–264–6561	ZY58	1/3 unit	879079–7		X
Desiccant, activated	6850–00–264–6564	ZY58	1/6 unit	879079–8		X
Signal flare						
PA142 container	8140–01–341–5202	ZZZS	f/L314, L311, L312 & L324	12900003		X
Cardboard divider	8135–00–144–9856	ZZIK	f/signal flare can		$1.00	X
Cover PA142 GS	8140–01–290–0021	ZY62	M125A1 (1370–L314)	12900002–1		

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Cover PA142 RP	8140–01–290–0022	ZY62	M126A1 (1370–L311)	12900002–2		
Cover PA142 WP	8140–01–290–0023	ZY62	M127A1 (1370–L312)	12900002–3		
Cover PA142 SG	8140–01–290–0024	ZY62	M128A1 (1370–L324)	12900002–4		
Cover PA142 SR	8140–01–290–0025	ZY62	M129A1 (1370–L323)	12900002–5		
Cover PA142 RS	8140–01–290–0026	ZY62	M158 (1370–L306)	12900002–6		
Cover PA142 WS	8140–01–290–0027	ZY62	M159 (1370–L307)	12900002–7		
Cover PA142 GP	8140–01–290–0028	ZY62	M195 (1370–L305)	12900002–8		
Label pressure sensitive						
Label pressure sensitive	8140–00–290–0051	ZY63	M125A1 (1370–L314)	12900002–1		
Label pressure sensitive	8140–00–290–0052	ZY63	M126A1 (1370–L311)	12900002–2		
Label pressure sensitive	8140–00–290–0053	ZY63	M127A1 (1370–L312)	12900002–3		
Label pressure sensitive	8140–00–290–0054	ZY63	M128A1 (1370–L324)	12900002–4		
Label pressure sensitive	8140–00–290–0055	ZY63	M129A1 (1370–L323)	12900002–5		
Label pressure sensitive	8140–00–290–0056	ZY63	M158 (1370–L306)	12900002–6		
Label pressure sensitive	8140–00–290–0057	ZY63	M159 (1370–L307)	12900002–7		
Label pressure sensitive	8140–00–290–0058	ZY63	M195 (1370–L305)	12900002–8		
Miscellaneous						
Bandoleer, M8	1305–00–604–7499	A320				
Bandoleer, 200 pound magazine	1305–01–131–5209	A316				
Bandoleer, M4	1305–00–965–0834	ZZXL				
Ammunition magazine assembly	1310–01–057–0040	ZZUW				
Clip	1305–00–121–0877	A061				
Link	1305–00–203–4232	A641				
Link	1305–01–145–4721	B061				
Link	1305–00–752–7815	B060				

Table F–1
Salvage and residue listing

Type of material	National stock number	Department of Defense identification code	Purpose	Part number	Cost	Confirmed Joint Ammunition Command
Link	1305–01–194–5729	B073				
Link	1305–01–108–7894	B095				
Plug	1320–01–220–2166	DX45				
Strip	1395–01–324–8203	ZZV0				
Grommet, rotating band	8140–01–051–9953	DX16				
Cover rotating band	8140–01–384–9344	ZZ82				
Grommet, rotating band	8140–01–051–9951	ZZGT				
Grommet, rotating band	8140–01–063–7681	ZZLX				
Shield/restraint band	1340–01–271–3440	HW03				
Shield end	1340–01–271–3441	HW04				
Packing stop	8140–01–933–5615	ZY32				
Sheet plastic for mortars	8140–01–931–7920	ZY33				
Support gate	8140–01–948–4116	ZY43				
Deflector	1440–01–504–7006					

F–2. Formatting

Format the information as follows:

a. *Department of Defense identification code.* The DODIC.

b. *National stock number or nomenclature.* There are several NSN or nomenclature entries for each DODIC. The first entry is the live ammunition item; the entries that follow are the residue items generated when the ammunition is consumed. In some cases, such as DODIC C449, a single component may have several NSNs. In this case, all applicable NSNs are listed under the DODIC.

c. *Unit pack.* The quantity of items in the DODIC.

d. *Reconciliation.*

(1) The using unit must turn in all residue for reconciliation purposes. If the residue and live ammunition turn-in quantity is less than the quantity of the ammunition issued, the unit commander or civilian equivalent will initiate DA Form 5811 and forward the form to the first lieutenant colonel (rank and grade of O5), or the civilian equivalent, in the chain of command for appropriate action and completion. The completed form will accompany the unit's turn-in documents for reconciliation and retention by the ASP.

(2) For items with no entry in the Reconciliation column, ACOM commanders will establish policies and procedures for recovery, turn in, and disposal.

(3) The Conventional Ammunition Packaging and Unit Load Data Index is at https://mhp.redstone.army.mil/mhpmain.aspx.

F–3. Salvage and residue listings

The Missile Detection and Alarm System salvage and residue listings are:

a. FSC 1305, ammunition through 30 mm (small arms).

b. FSC 1310, ammunition over 30 mm but less than 75 mm.

c. FSC 1315, 75 mm through 125 mm ammunition.
d. FSC 1320, ammunition over 125 mm.
e. FSC 1330, grenades.
f. FSC 1340, rockets and rocket ammunition.
g. FSC 1345, land mines.
h. FSC 1365, military chemical agents.
i. FSC 1370, pyrotechnics.
j. FSC 1375, demolition material.
k. FSC 1390, fuzes.
l. FSC 1400, series missiles.

F–4. Codes

The following codes apply to the reconciliation columns (see tables F–2 through F–12 for FSC codes):

a. R—residue to be returned to ASP.

b. S—for each deep well fuse expended, the supplementary charge removed from the projectile will be returned to the ASP.

c. T—requires additional documentation when used during training

Table F–2
FSC 1305, ammunition through 30 millimeter (small arms)

DoD ID code	NSN/Noun	Unit pack	Reconciliation
A010	1305–00–028–5035; Ctg 10-gauge blank NSN; Case, ctg, fired 10-gauge shotgun NSN; Box, wooden	500 500 1	
A011	1305–00–892–4254; Ctg 12-gauge shotgun, buckshot M19 NSN; Case ctg, fired 12-gauge shotgun 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends f/M2A1 box.	240 240 2 1	
A014	1305–00–301–1706; Ctg 12-gauge shotgun, buckshot M19 NSN; Case ctg, fired 12-gauge shotgun, buckshot 8140–00–960– 1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box.	500 500 2 1	
A017	1305–00–146–1187; Ctg, 12-gauge shotgun, plastic core no.9 chilled shot NSN; Case ctg, fired, 12-gauge shotgun NSN; wooden box 1305–00–146–1187; Ctg, 12-gauge shotgun, plastic core no.9 chilled shot NSN; Case ctg, fired, 12-gauge shotgun 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–928–4485; Ctg, 12-gauge shotgun, plastic core no. 9 chilled shot NSN; Case ctg, fired, 12-gauge shotgun NSN; wooden box	375 375 1 240 240 2 1 500 500 1	
A068	1305–00–914–4719; Ctg 5.56 mm tracer, M196 NSN; Case ctg, fired brass, 5.56 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–965–0832; Ctg 5.56 mm tracer, M196 NSN; Case ctg, fired brass, 5.56 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	1640 1640 2 1 1640 1640 2 1	
A071	1305–00–926–3930; Ctg, 5.56 mm ball, M193 NSN; Case ctg, fired brass 5.56 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 1305–00–005–8006; Clip, 10-round, F/5.56 mm ctg	1680 1680 2 1 1680	

Table F–2
FSC 1305, ammunition through 30 millimeter (small arms)—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–01–255–6276; Clip, 10-round, F/5.56 mm ctg 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	2 1 1680 2 1	
A080	1305–00–182–3217; Ctg, 5.56 mm blank, M200 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–005–8005; Ctg, 5.56 mm blank, M200 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–764–8436; Ctg, 5.56 mm blank, M200 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–926–9302; Ctg, 5.56 mm blank, M200 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	2280 2280 2 1 2280 2280 2 1 2280 2280 2 1	
A086	1305–00–305–0890; Ctg, cal .22 ball, long rifle NSN; Case ctg, fired brass, cal .22	5000 5000	
A091	1305–00–049–5398; Com Ctg, cal .22 ball, long rifle, match grade NSN; Case ctg, com fired brass, cal .22	Commercial pack Commercial pack	
A093	1305–00–600–5118; Com Ctg, cal .22 ball, long rifle, match grade NSN; Case ctg, com fired brass, cal .22	Commercial pack Commercial pack	
A111	1305–00–752–8087; Ctg, 7.62 mm blank, M82 NSN, Case ctg, fired brass, 7.62 mm 1305–00–752–B060; Link, ctg, metallic belt, 7.62 mm, M13 1305–00–079–3579–A315; Bandoleer, M4, f/7.62 mm ctg 8140–00–828–2938–ZAAC; Box, metal, M19A1 8140–00–891–6322–ZAAD; Box, wire bound, w/ends, f/M19A1 box	800 800 800 8 4 1	
A112	1305–00–990–5594; Ctg, 7.62 mm, blank, M82 NSN; Case ctg, fired brass, 7.62 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	1200 1200 2 1	
A124	1305–00–882–5678; Ctg, 7.62 mm, tracer, M62 NSN; Case ctg, fired brass, 7.62 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	920 920 2 1	
A130	1305–00–914–4675; Ctg, 7.62 mm ball, M80 NSN; Case ctg, fired brass, 7.62 mm 1305–00–914–7912–A160; Filler, magazine, f/7.62 mm, 5-round clip 1305–00–052–4336; Filler, magazine, f/7.62 mm, 5-round clip 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	840 840 168 14 2 1	
A131	1305–00–143–7163; Ctg, 7.62 mm linked 4.B–M80, 1.TR–M62 NSN; Case ctg, fired brass, 7.62 mm 1305–00–752–7815–B060; Link, ctg, metallic belt, 7.62 mm, M13 1305–00–079–3579–A315; Bandoleer, M4, f/7.62 mm ctg 8140–00–960–1699–ZAAA; Box, metal, M2A18140–00–078–8969–ZAAB;	600 600 600 6 2	

Table F–2
FSC 1305, ammunition through 30 millimeter (small arms)—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	Box, wire bound, w/ends, f/M2A1 box	1	
A136	1305–00–064–2896; Ctg, 7.62 mm, M118 NSN; Case ctg, fired brass, 7.62 mm 8140–00–960–1699–ZAAA; Box, metal, M2A18140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	920 920 2 1	
A140	1305–00–926–4017; Ctg, 7.62 mm, tracer, M62 NSN; Case ctg, fired brass, 7.62 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	920 920 2 1	
A143	1305–00–892–2330; Ctg, 7.62 mm ball, linked NSN; Case ctg, fired brass, 7.62 mm 1305–00–752–7815–B060; Link, ctg, metallic belt, 7.62 mm, M13 1305–00–079–3579–A315; Bandoleer, M4, f/7.62 mm ctg 8140–00–828–2938–ZAAC; Box, metal, M19A1 8140–00–891–6322–ZAAD; Box, wire bound, w/ends, f/M19A1 box	800 800 800 8 4 1	
A146	1305–00–892–2335; Ctg, 7.62 mm, M62 linked NSN; Case ctg, fired brass, 7.62 mm 1305–00–752–7815–B060; Link, ctg, metallic belt, 7.62 mm, M13 1305–00–079–3579–A315; Bandoleer, M4, f/7.62 mm ctg 8140–00–828–2938–ZAAC; Box, metal, M19A1 8140–00–891–6322–ZAAD; Box, wire bound, w/ends, f/M19A1 box	800 800 800 8 4 1	
A165	1305–00–926–3942; Ctg, 7.62 mm linked 4.B–M80, 1.TR–M62 NSN; Case ctg, fired brass, 7.62 mm 1305–00–752–7815–B060; Link, ctg, metallic belt, 7.62 mm, M13 8140–00–739–0233–ZAAH; Box, metal, M548	1500 1500 1500 1	
A212	1305–00–028–6535; Ctg, cal .30 ball, M2 NSN; Case ctg, fired brass, cal .30 NSN; Can, metal, M21 NSN; Box, wooden, M23 1305–00–096–3150; Ctg, cal .30 ball, M2 NSN; Case ctg, fired brass, cal .30 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	1500 1500 2 1 800 800 2 1	
A365	1305–00–915–8573; Ctg, 14.5 mm trainer, M181 NSN; Case ctg, fired brass 9098295; Box, wooden	500 500 1	
A366	1305–00–915–8588; Ctg, 14.5 mm trainer, M182 NSN; Case ctg, fired alum, 14.5 mm 9098295; Box, wooden	500 500 1	
A367	1305–00–915–8593; Ctg, 14.5 mm trainer, M183 NSN; Case ctg, fired alum, 14.5 mm 9098293; Box, wooden	500 500 1	
A400	1305–00–322–6391; Ctg, cal .38 special ball, M41 NSN; Case ctg, fired brass, cal .38 8140–00–960–1699- ZAAA; Box, metal, M2A1 8140–00–078–896–ZAAB; Box, wire bound, w/ends, /M2A1 box	2400 2400 2 1	
A404	1305–00–301–1691; com Ctg, cal .38 special ball NSN; Case ctg, fired brass, cal .38	2000 2000	
A475	1305–00–301–1685; Ctg, cal .45 ball, M1911	2000	

Table F–2
FSC 1305, ammunition through 30 millimeter (small arms)—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	NSN; Case ctg, fired brass, cal .45 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	2000 2 1	
A482	1305–00–892–4230; Com Ctg, cal .45 ball, 185 grain, wadcutter NSN; Case ctg, Com fired brass	commercial pack commercial pack	
A483	1305–00–892–2526; Ctg, cal .45 ball, M1911, match grade NSN; Case ctg, fired brass, cal.45 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	2000 2000 2 1	
A520	1305–00–764–8386; Ctg, cal .50 linked, 4.B–M33, 1.TR–M17 NSN; Case ctg, fired brass, cal .50 1305–00–257–1091–A647; Link, ctg, metallic belt, cal .50 M15A2 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	170 170 170 2 1	
A527	1305–00–028–6309; Ctg, cal .50 AP, M2 linked NSN; Case ctg, fired brass, cal .50 NSN; Box, metal, M2 NSA; Box, wire bound, w/ends, f/M2 box	210 210 2 1	
A530	1305–00–028–6562; Ctg, cal .50 linked, 4.AP–M2, 1.TR–M17 NSN; Case ctg, fired brass, cal .50 1305–00–096–3178–A640; Link, ctg, metallic belt, cal .50 M2 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	200 200 200 2 1	
A557	1305–00–028–6583; Ctg, cal .50 linked, 4 B–M33, 1.TR–M17 NSN; Case ctg, fired brass, cal .50 1305–00–935–2048–A641; Link, ctg, metallic belt, cal .50 M9 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box 1305–00–028–6587; Ctg, cal .50 linked, 4 B–M33, 1.TR–M17 NSN; Case ctg, fired brass, cal .50 1305–00–935–2048–A641; Link, ctg, metallic belt, cal .50 M9 8140–00–960–1699–ZAAA; Box, metal, M2A1 NSN; Box, wooden, M23 1305–00–028–6587; Ctg, cal .50 linked, 4.B–M33, 1.TR–M17 NSN; Case ctg, fired brass, cal .50 1305–00–935–2048–A641; Link, ctg, metallic belt, cal .50 M9 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	200 200 200 2 1 210 210 210 2 1 200 200 200 2 1	
A559	1305–00–028–6379; Ctg, cal .50 blank M1, linked NSN; Case ctg, fired brass, cal .50 1305–00–935–2048–A641; Link, ctg, metallic belt, cal .50 M2 NSN; Box, wooden, metal lnd, M1917 1305–00–028–6380; Ctg, cal .50 blank M1, linked NSN; Case ctg, fired brass, cal .50 1305–00–096–317–A640; Link, ct, metallic belt cal .50 M2 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	450 450 450 1 200 200 200 2 1	
A573	1305–00–028–6610; Ctg, cal .50 tracer M17, linked NSN; Case ctg, fired brass, cal .50 1305–00–096–3178–A640; Link, ctg, metallic belt, cal .50 M2 8140–00–960–1699–ZAAA; Box, metal, M2A1	210 210 210 2	

Table F–2
FSC 1305, ammunition through 30 millimeter (small arms)—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	1	
A574	1305–00–554–6745; Ctg, cal .50 spotter-tracer, M48A1 NSN; Case ctg, fired brass, cal .50 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	220 220 2 1	
A589	1305–00–689–4709; Ctg, cal .50 linked, 4.API–M8, 1.API.T–M8 NSN; Case ctg, fired brass, cal .50 1305–00–257–4709–A647; Link, ctg, metallic belt, cal .50 M15A2 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	170 170 170 2 1	
A593	1305–00–689–4752; Ctg, cal .50 linked, 4.AP–M2, 1.TR–M1NSN; Case ctg, fired brass, cal .50 1305–00–257–4709–A647; Link, ctg, metallic belt, cal .50 M15A2 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	170 170 170 2 1	
A652	1305–00–522–3701; Ctg, 20 mm, TP–T, M220 linked NSN; Case ctg, fired brass, 20 mm 1305–00–965–0853–B083; Link, ctg, 20 mm, M14A1 8140–00–739–0233–ZAAH; Box, metal, M548	100 100 100 1	
A653	1305–00–143–7034; Ctg, 20 mm linked, 4.HEI–M56A3, 1.TP.T–M220 NSN; Case ctg, fired brass, 20 mm 1305–00–965–0853–B083; Link, ctg, 20 mm, M14A1 8140–00–739–0233–ZAAH; Box, metal, M548	100 100 100 1	
A680	1305–00–334–5920; Ctg, sub caliber, 22mm practice, M744 NSN; Case ctg, fired, 22 mm	100 100	R
A681	1305–00–334–5922; Ctg, sub caliber, 22 mm practice, M745 NSN; Case ctg, fired, 22 mm	100 100	R
A682	1305–00–334–5934; Ctg, sub caliber, 22 mm practice, M746 NSN; Case ctg, fired, 22 mm	100 100	R
A683	1305–00–334–5935; Ctg, sub caliber, 22 mm practice, M747 NSN; Case ctg, fired, 22 mm	100 100	R

Table F–3
FSC 1310, ammunition over 30 millimeter but less than 75 millimeter

DoD ID code	NSN/Noun	Unit pack	Reconciliation
B470	1310–00–143–8863; Ctg, 40 mm-HE, w/fuze, PD, M533, linked NSN; Case ctg, fired, 40 mm M169 1310–00–052–1460; Link, ctg, M16A1 8140–00–425–0748; Box, wire bound	50 50 50 1	R
B480	1310–00–180–9359; Ctg, 40 mm, practice, M385 linked NSN; Case ctg, fired, 40 mm M169 1310–00–052–1460; Link, ctg, M16A1 8140–00–425–0748; Box, wire bound	50 50 50 1	R
B504	1310–00–541–6148; Ctg, 40 mm green star, M661 NSN; Case ctg, fired, 40 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	44 44 2 1	R

Table F–3
FSC 1310, ammunition over 30 millimeter but less than 75 millimeter—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
B505	1310–00–541–6149; Ctg, 40 mm red star, M662 NSN; Case ctg, fired, 40 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	44 44 2 1	R
B506	1310–00–541–6150; Ctg, 40 mm red smoke, M713 NSN; Case ctg, fired, 40 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	44 44 2 1	R
B508	1310–00–541–6152; Ctg, 40 mm green smoke, M715, NSN; Case ctg, fired, 40 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1, 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	44 44 2 1	R
B509	1310–00–541–6153; Ctg, 40 mm yellow smoke, M716 NSN; Case ctg, fired, 40 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	44 44 2 1	R
B534	1310–00–406–4643; Ctg, 40 mm AP NSN; Case ctg, fired, 40 mm, XM199 8140–00–089–8673; Box, wire bound 1310–00–828–2926; Bandoleer, f/plastic support 6-rd	144 144 1 12	R
B535	1310–00–159–3198; Ctg, 40 mm white star, parachute, M583A1 NSN; Case ctg, fired, 40 mm, M195 8140–00–162–2005; Box, metal, M2A1 8140–00–184–8259; Box, wire bound	44 44 2 1	R
B537	1310–00–935–9229; Ctg, 40 mm chemical agent, Cs, M674 8140–00–200–4260; Box, wooden NSN; Bandoleer, cloth, 4 rd, D122–3–116 NSN; Launcher, adapter, plastic NSN; Barrel, ctg NSN; Cap, firing assembly 8140–00–828–2938–ZAAC; Box, metal, M19A1 1310–00–999–3455; Ctg, 40 mm chemical agent, CS E24 8140–00–200–4260; Box, wooden NSN; Bandoleer, cloth, 4 rd, D122–3–116 NSN; Launcher, adapter, plastic NSN; Barrel, ctg NSN; Cap, firing assembly	32 1 10 32 32 32 4 40 1 10 40 40 40	
B538	1310–00–935–9230; Ctg, 40 mm red smoke, XM 675 8140–00–200–4260; Box, wooden 8140–00–828–2938–ZAAC; Box, metal, M19A1 NSN; Bandoleer, cloth, 4 rd, D122–3–116 NSN; Launcher, adapter, plastic NSN; Barrel, ctg NSN; Cap, firing assembly	32 1 4 8 32 32 32	
B546	1310–00–992–0451; Ctg, 40 mm HE, XM433E1 NSN; Case ctg, fired, 40 mm, XM118 8140–00–089–8673; Box, wire bound NSN; Bandoleer w/built-in support	72 72 1 12	R
B567	1310–00–849–2083; Ctg, 40 mm CS, XM651E2 NSN; Box, wooden NSN; Case ctg, fired, 40 mm,	24 1 24	 R

Table F–3
FSC 1310, ammunition over 30 millimeter but less than 75 millimeter—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
B568	1310–00–724–8081; Ctg, 40 mm HE, M406 w/fuze, PD, M551 NSN; Case ctg, fired, 40 mm 8140–00–089–8673; Box, wire bound 1310–00–828–2926; Bandoleer, f/plastic support 6-rd 1310–00–077–2151; Support plastic f/bandoleer	72 72 1 12 24	R R
B571	1310–00–976–0907; Ctg, 40 mm HE, M383E1, linked NSN; Case ctg, fired, 40 mm NSN; Link, ctg NSN; Box, wire bound	50 50 50 1	 R
B576	1305–00–994–7441; Ctg, 40 mm practice, M385, linked NSN; Case ctg, fired, 40 mm 8140–00–089–8670; Box, wooden NSN; Link, M16	50 50 1	 R
B577	1310–00–965–0738; Ctg, 40 mm practice, M407E3, w/fuze PD, M551 NSN; Case ctg, fired, 40 mm, M118, 8844610 8140–00–089–8673; Box, wire bound 8140–00–089–8671; Box, fiberboard 1310–00–828–2926; Bandoleer, f/plastic support 6-rd 1310–00–077–2151; Support plastic f/bandoleer	72 72	R R
B627	1310–00–143–7056; Ctg, 60 mm illum M83A3 8140–00–009–0032; Box, wooden	9 1	
B630	1310–00–935–9129; Ctg, 60 mm smoke, WP, M302A1 8140–00–890–7592; Box, wooden	9 1	
B632	1310–00–935–9130; Ctg, 60 mm HE, M49A4 8140–00–828–3068; Box, wooden	12 1	
B642	1310–01–022–7680; Ctg, 60 mm XM720 8140–00–090–1102; Box, wire bound 8140–00–090–1101–ZZMD; Box, metal, PA70 8140–00–929–3286; Cnt, Fbr, PA78	16 1 2 16	

Table F–4
FSC 1315, 75 millimeter through 125 millimeter ammunition

DoD ID code	NSN/Noun	Unit pack	Reconciliation
C025	1315–00–892–4951; Ctg, 75 mm blank, M337A1E1 NSN; Ctg case, fired, 74 mm M9A1 8140–00–827–6234; Box, wooden	15 15 1	 R
C226	1315–00–143–7048; Ctg, 81 mm illum, M301A3 8140–00–495–0468; Box, wooden, f/jungle pack 8140–00–862–3172; Stop, packing	3 1 2	
C230	1315–00–540–8499; Ctg, 81 mm smoke, WP, M57 8140–00–432–2190; Box, wooden 8140–00–862–3172; Stop, packing	2 1 2	

Table F–4
FSC 1315, 75 millimeter through 125 millimeter ammunition—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
C236	1315–00–935–6033; Ctg, 81 mm HE, M374 1315–00–835–6013; Ctg, 81 mm HE, M374 8140–00–827–6333; Box, wooden 8140–00–862–3172; Stop, packing 1315–00–821–6608; Plug, closing	3 3 1 2 3	
C243	1315–00–028–4954; Ctg, ignition, M3 NSN; Case ctg, ignition, fired NSN; Box, wooden	500 500 1	 R
C256	1315–00–498–6407; Ctg, 81 mm HE, M374A2 8140–00–827–6333; Box, wooden 8140–00–862–3172; Stop, packing	3 1 3	
C256	1315–00–935–1931; Ctg, 81 mm HE, M374A2 8140–00–827–6333; Box, wooden 8140–00–862–3172; Stop, packing	3 1 3	
C256	1315–00–935–6032; Ctg, 81 mm HE, M374 8140–00–827–6333; Box, wooden 8140–00–862–3172; Stop, packing	3 1 3	
C276	1315–00–498–6406; Ctg, 81 mm smoke, WP, M375A2 1315–00–935–6076; Ctg, 81 mm smoke, WP, M375 8140–00–827–6333; Box, wooden 8140–00–862–3172; Stop, packing	3 3 1 3	
C282	1315–00–068–8472; Ctg, 90 mm HEAT, M371A1 1315–00–892–4307; Ctg, 90 mm HEAT, M371A1 NSN; Case Ctg, fired, 90 mm, M112, 8595496 8140–00–859–8015; Box, wooden	2 2 2 1	 R
C410	1315–00–926–9243; Ctg, 90 mm canister, XM590E1 NSN; Case ctg, fired, 90 mm, M112, 8595496 8140–00–089–8670; Box, wooden	6 6 1	 R
C440	1315–00–028–5033; Ctg, 105mm blank, M395 NSN; Case ctg, fired, 105 mm NSN; Box, wooden NSN; Container, fiber M34A1	10 10 1 10	 R
C445	1315–00–028–4857; Ctg, 105 mm HE, M1 1315–00–028–4861; Ctg, 105 mm HE, M1 1395–00–077–2128; Case ctg, fired steel, 105 mm, M14B4, spiral wrapped 1320–00–824–0811; Supplementary charge 8140–00–859–8016; Box, wooden 1315–00–077–2185; Plug, closing, plastic NSN; Stop, packing NSN; Container, fiber	2 2 2 1 2 2	R
C449	1315–00–028–5531; Ctg, 105 mm illum, M314A2E1 1395–00–824–4503; Case ctg, fired, 105 mm (brass) 1395–00–077–2129; Case ctg, fired, 105 mm M14B1 (solid	2 2 	 R R

Table F–4
FSC 1315, 75 millimeter through 125 millimeter ammunition—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	steel)	2	
	1395–00–077–2131; Case ctg, fired, 105 mm M14B2 (5-piece spiral-wrapped steel)	2	
	1395–00–077–2138; Case ctg, fired, 105 mm M14B4 (3-piece spiral-wrapped steel)	1	
	8140–00–859–8016; Box, wooden		
	NSN; Stop, packing	2	
	NSN; Container, fiber	2	
C452	1315–00–028–4839; Ctg, 105 mm smoke, HC, BE, M84 or M84B1	2	R
	NSN; Case ctg, fired, 105 mm	2	
	8140–00–859–8016; Box, wooden	1	
	NSN; Stop, packing	2	
	NSN; Container, fiber	2	
C452	1315–00–028–4840; Ctg, 105 mm smoke, HC, BE, M84 or M84B1	2	R
	NSN; Case ctg, fired, 105 mm	2	
	8140–00–859–8016; Box, wooden	1	
	NSN; Stop, packing	2	
	NSN; Container, fiber	2	
C455	1315–00–028–4793; Ctg, 105 mm yellow smoke, BE, M84 or M84B1	2	R
	1395–00–824–4503; Case ctg, fired, 105 mm (brass)	2	R
	1395–00–077–2129; Case ctg, fired, 105 mm M14B1 (solid steel)	2	
	1395–00–077–2131; Case ctg, fired, 105 mm M14B2 (5-piece spiral-wrapped steel)	1	
	1395–00–077–2138; Case ctg, fired, 105 mm M14B4 (3-piece spiral-wrapped steel)	2	
	8140–00–859–8016; Box, wooden	2	
	NSN; Stop, packing		
	NSN; Container, fiber	2	
	8140–00–862–3226; Cup, protector f/container, fiber		
C455	1315–00–028–4848; Ctg, 105 mm yellow smoke, BE, M84 or M84B1	2	R
	1395–00–824–4503; Case ctg, fired, 105 mm (brass)	2	R
	1395–00–077–2129; Case ctg, fired, 105 mm M14B1 (solid steel)	2	
	1395–00–077–2131; Case ctg, fired, 105 mm M14B2 (5-piece spiral-wrapped steel)	2	
	1395–00–077–2138; Case ctg, fired, 105 mm M14B4 (3-piece spiral-wrapped steel)	1	
	8140–00–859–8016; Box, wooden	2	
	NSN; Stop, packing	2	
	NSN; Container, fiber	2	
	8140–00–862–3226; Cup, protector f/container, fiber	2	
C455	1315–00–301–1782; Ctg, 105 mm yellow smoke, BE, M84 or M84B1	2	R
	1395–00–824–4503; Case ctg, fired, 105 mm (brass)		
	1395–00–077–2129; Case ctg, fired, 105 mm M14B1 (solid steel)	2	R
	1395–00–077–2131; Case ctg, fired, 105 mm M14B2 (5-piece	2	

Table F–4
FSC 1315, 75 millimeter through 125 millimeter ammunition—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	spiral-wrapped steel) 1395–00–077–2138; Case ctg, fired, 105 mm M14B3 (3-piece spiral-wrapped steel) 8140–00–859–8016; Box, wooden NSN; Stop, packing NSN; Container, fiber 8140–00–862–3226; Cup, protector f/container, fiber	 2 1 2 2 2	
C503	1315–00–159–3201; Ctg, 105 mm, TP–T, M393A1 1395–00–862–3218; Case ctg, fired, 105 mm, M150B1 8140–00–857–2938; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C508	1315–00–926–3989; Ctg, 105 mm HEAT–T, M456E3 1395–00–070–1020; Case ctg, fired, 105 mm, M148B1 8140–00–857–2994; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C510	1315–00–989–1167; Ctg, 105 mm TP–T, M467 1395–00–862–3218; Case ctg, fired, 105 mm, M150B1 8140–00–857–2938; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C511	1315–00–965–0713; Ctg, 105 mm TP–T, M490 1395–00–070–1020; Case ctg, fired, 105 mm, M148A1 8140–00–857–2994; Box, wooden NSN; Container, fiber	2 2 1 2	R
C512	1315–00–901–4921; Ctg, 105 mm WP–T, M416 1395–00–862–3218; Case ctg, fired, 105 mm, M150B1 8140–00–857–2938; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C513	1315–00–935–9178; Ctg, 105 mm antipersonnel, XM546 1395–00–824–4503; Case ctg, fired, 105 mm (brass) 1395–00–077–2129; Case ctg, fired, 105 mm M14B1 (solid steel) 1395–00–077–2138; Case ctg, fired, 105 mm M14B4 (3-piece spiral-wrapped steel) 8140–00–089–8537; Box, wooden NSN; Stop, packing NSN; Container, fiber	2 2 2 1 2 2	 R
C518	1315–00–728–0704; Ctg, 105 mm HEP–T, M393A3 1395–00–862–3218; Case ctg, fired, 105 mm, M150B1 8140–00–857–2938; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C519	1315–00–935–6154; Ctg, 105 mm antipersonnel, XM494E2 1395–00–862–3218; Case ctg, fired, 105 mm, M150B1 8140–00–857–2938; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C520	1315–01–032–6127; Ctg, 105 mm TPDA–T, M724A1 1395–00–861–2096; Case ctg, fired, 105 mm, M115B1 NSN; Box, wooden NSN; Container, fiber	2 2 1 2	 R
C699	1315–00–007–4882; Ctg, 4.2 in HE, M329A2 NSN; Box, wooden, 9276780 ZZLW 8140–00–051–1608; Container, fiber, PA46	2 1 2	

Table F–4
FSC 1315, 75 millimeter through 125 millimeter ammunition—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	NSN; Plug, closing	2	
C705	1315–00–935–9140; Ctg, 4.2-in HE, M329A1 w/o fuze 8140–00–861–2091; Box, wooden 1315–00–821–6608; Plug, closing, metal NSN; Stop, packing NSN; Disc, metal f/fiber container NSN; Container, extension 1315–00–828–0792; Holder, propellant 1315–00–828–7475; Pin, f/obturating mechanism NSN; Container, fiber	2 2 1 2 2 2 2 2 2	
C706	1315–00–935–9212; Ctg, 4.2-in illum, M335A2 8140–00–861–2091; Box, wooden 1315–00–821–6608; Plug, closing, metal NSN; Stop, packing NSN; Disc, metal f/fiber container NSN; Container, extension 1315–00–828–0792; Holder, propellant 1315–00–828–7475; Pin, f/obturating mechanism NSN; Container, fiber	2 1 2 2 2 2 2 2 2	
C708	1315–00–926–1935; Ctg, 4.2-in WP, M328A1 8140–00–866–6534; Box, wooden NSN; Stop, packing NSN; Disc, metal f/fiber container NSN; Container, extension 1315–00–828–7475; Pin, f/obturating mechanism NSN; Container, fiber	2 1 2 2 2 2 2 1	
C995	1340–01–245–4950; Rocket, AT–4, 84 mm, HE, M136	T	T

Table F–5
FSC 1320, ammunition over 125 millimeter

DoD ID code	NSN/Noun	Unit pack	Reconciliation
D505	1320–00–935–2091; Projectile, 155 mm, illum, M485A2 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 8 8	
D506	1320–00–926–9276; Projectile, 155 mm, smoke HC BE, M116E2 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 8 8	
D540	1320–00–935–1922; Charge, propelling, 155 mm, M3A1 8140–00–859–8017; Container, metal, M14 w/cover 5330–00–857–2941; Gasket for container, metal, M14 w/cover 1320–00–028–4879; Charge, propelling, 155 mm, M4A1 8140–00–864–3221; Container, metal, M13 w/cover	2 1 1 2 1	
D541	1320–00–935–1923; Charge, propelling, 155 mm, M4A2 1320–00–420–5135; Gasket for container, metal, M13	1 1	

	w/cover 8140–00–864–3221; Container, metal, M13 w/cover	 1	
D544	1320–00–420–5135; Gasket for container, metal, M13 w/cover 1320–00–529–7331; Projectile, 155 mm HE, M107 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 1 8 8	
D547	1320–00–529–7343; Projectile, 155 mm, smoke, green, M116 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 8 1	
D548	1320–00–734–1100; Projectile, 155 mm, smoke HC BE, M116E1 1320–00–529–7342; Projectile, 155 mm, smoke HC BE, M116 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 8 1 8 8 8	
D549	1320–00–905–3655; Projectile, 155 mm, smoke BE, M116E1 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 8 1 1	
D550	1320–00–782–5828; Projectile, 155 mm, smoke WP, M110E1 1320–00–529–7339; Projectile, 155 mm, smoke WP, M110 1320–00–935–9143; Projectile, 155 mm, smoke WP, M110A1 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 8 8 8 1 8 8	
D551	1320–00–905–3656; Projectile, 155 mm, smoke BE, M116E1 8140–00–127–3033; Pallet assembly (top and bottom) 8140–00–425–0756; Grommet, type I (plastic) 8140–00–837–3044; Grommet, metal NSN; Plug, lifting	8 1 8 8 8	
D570	1320–00–555–5126; Ctg, 165 mm HEP, M123A1 NSN; Case ctg, fired, M104 8140–00–827–6245; Box, wooden 1320–00–926–4072; Ctg, 165 mm, TP XM623 NSN; Case ctg, fired 8140–00–827–6345–ZZHN; Box, wooden 1320–00–628–7741; Charge, propelling, T94 (M80) for 8-in M2 8140–00–827–0510; Container, M18-series w/cover NSN; Gasket 8880558–3 for container, M18-series	1 1 1 1 1 1 1 1	
D590	1320–00–555–5126; Ctg, 165 mm HEP, M123A1 NSN; Case ctg, fired, M104 8140–00–827–6245; Box, wooden 1320–00–926–4072; Ctg, 165 mm, TP XM623 NSN; Case ctg, fired 8140–00–827–6345–ZZHN; Box, wooden 1320–00–628–7741; Charge, propelling, T94 (M80) for	1 1 1 1 1 1	

	8-in M2 8140–00–827–0510; Container, M18-series w/cover NSN; Gasket 8880558–3 for container, M18-series	1 1 1	
DA12	1320–01454–4603; Charge (MACS) Propelling M231, 155 Millimeter	1	
DA13	1320–01–457–4063; Charge (MACS) Propelling M232, 155 Millimeter	1	

Table F–6
FSC 1330, grenades

DoD ID code	NSN/Noun	Unit pack	Reconciliation
G839	1330–00–892–4106; Ctg, grenade, rifle, 7.62 mm, NATO M64 NSN; Case ctg, fired brass, 7.62 mm 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–078–8969–ZAAB; Box, wire bound, w/ends, f/M2A1 box	580 580 2 1	
G878	1330–00–168–5502; Fuze, hand grenade, practice, SM228 NSN; Pull ring, grenade w/safety pin NSN; Safety lever NSN; Body fuze, hand grenade, expended NSN; Box, wooden	360 360 360 1	
G881	1330–00–133–8244; Grenade, hand, fragmentation, XM67 NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–828–2961; Box, wooden	30 30 30 1	T
G900	1330–00–219–8557; Grenade, hand, INCND, AN–M14 NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	T
G911	1330–00–194–2768; Grenade, hand, offensive, MK3A2 NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–152–0009; Box, wooden	20 20 20 1	T
G922	1330–00–477–6704; Grenade, hand, CS, XM47E1 NSN; Pull ring, grenade w/safety pin NSN; Safety lever NSN; Box, wooden	4 4 4 1	
G924	1330–00–645–6211; Grenade, hand, riot, CS1, ABC–M25A2 NSN; Pull ring, grenade w/safety pin NSN; Safety lever NSN; Box, wooden NSN; Can, metal	50 50 50 1 50	
G930	1330–00–219–8511; Grenade, smoke, HC, ABC, AN–M8 NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–245–9022; Box, wooden	16 16 16 1	
G937	1330–00–676–2671; Grenade, hand and rifle, smoke, WP, ABC, M34 NSN; Pull ring, grenade w/safety pin NSN; Safety lever NSN; Box, wooden 8140–00–089–8563; Can, metal	16 16 16 1	

Table F–6
FSC 1330, grenades—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
G940	1330–00–289–6851; Grenade, hand, M18, green smoke NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	
G945	1330–00–289–6854; Grenade, hand, M18, yellow smoke NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	
G950	1330–00–289–6852; Grenade, hand, M18, red smoke NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	
G955	1330–00–289–6853; Grenade, hand, M18, violet smoke NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	
G963	1330–00–965–0802; Grenade, hand, riot control agent ABC–M7A3 NSN; Pull ring, grenade w/safety pin NSN; Safety lever 8140–00–345–9022; Box, wooden	16 16 16 1	

Table F–7
FSC 1340, rockets and rocket ammunition

DoD ID code	NSN/Noun	Unit pack	Reconciliation
H584	1340–01–211–3595; Rocket, AT–4, 84 mm, HE, M136	1	T
H108	1340–01–149–0918; RP, MLRS, 298 mm, Practice	1	T
H185	1340–01–370–9666; RP, MLRS, 298 mm 1340–01–484–9001 RP, MLRS, 298 mm	1 1	T T
H110	1340–00–132–0482; Rocket, incendiary, 66 mm, M74 NSN; Box, two-piece polystyrene foam NSN; Clip, rocket NSN; Clip, support assembly	8 1 4 4	T
H490	1340–00–143–6889; Rocket, HE, 2.75-in NSN; Box, plywood NSN; Container, fiber 8140–00–038–9276; Fin, protector NSN; Stop, packing	25 1 25 25 25	
H557	1340–00–021–4491; Rocket, HE, 66 mm, AT, M72A2 1340–25–116–2520;Rocket, LAW, 66 mm M72A3 8140–00–431–3443; Box, wire bound 8140–00–040–773?; Box, cardboard 8140–00–426–0993; Saddle, front 8140–00–425–0770; Saddle, rear 1055–00–143–7062; Strap assy for carton NSN; Launcher, rocket, M72A2, expended	15 1 1 3 3 3 3 15	T T R R

Table F–7
FSC 1340, rockets and rocket ammunition—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	NSN: Primer Block Expended	15	
H708	1340–00–143–6911; Rocket, practice, 35 mm, sub caliber NSN; Box, wire bound NSN; Box, carton, fiberboard NSN; Clip, safety NSN: Primer Block Expended	90 1 3 90 90	T R
H828	1340–00–159–3308; Rocket, practice, 2.75-in 8140–00–159–3319; Box, wooden NSN; Container, fiber NSN; Stop, packing 8140–00–038–9276; Fin, protector	4 1 4 4 4	

Table F–8
FSC 1345, land mines

DoD ID code	NSN/Noun	Unit pack	Reconciliation
K002	1345–00–028–5105; Activator, antitank mine, practice, M1 NSN; Box, wooden NSN; Container, metal	180 1 180	
K010	1345–00–690–7338; Burster, incendiary, M4 NSN; Box, wooden	20 1	T
K051	1345–00–028–5130; Fuze, mine, AT, practice, M604 NSN; Box, wooden NSN; Container, metal	180 1 180	
K092	1345–00–028–5131; Mine, antipersonnel, M16 8140–00–831–0094; Box, wooden NSN; Container, metal 1345–00–077–2142; Wrench, fuze, M25	4 1 4 1	T
K121	1345–00–028–5108; Mine, antipersonnel, NM, M14, or M14A1 8140–00–144–9827; Box, wooden NSN; Safety clip 1345–00–073–5161; Wrench M22	90 1 90 6	T
K143	1345–00–710–6946; Mine, antipersonnel M18A1 8140–00–828–7421; Box, wooden NSN; Bandoleer, M7 NSN; Test set, M40 NSN; Firing device, M57	6 1 6 1 6	T
K146	1345–00–678–9822; Mine Apers, M26	18	T
K180	1345–00–028–5118; Mine, antitank, heavy, M15 8140–00–827–6315; Box, wooden NSN; Wrench, arming, M20, 7548279 NSN; Safety fork for fuze, mine NSN; Container, metal for fuze, mine NSN; Container, metal for activator, M1	1 1 1 1 1 1	T
K181	1345–00–729–4263; Mine, antitank, HE, heavy, M21 NSN; Box, wire bound, 8830860 NSN; Wrench, arming, M26, 8831380	4 1 2	T
K250	1345–00–348–8646; Mine, AT, M19 1345–00–849–9768; Mine AT, M19	2 4	T T

Table F–9
FSC 1365, military chemical agents

DoD ID code	NSN/Noun	Unit pack	Reconciliation
K765	1365–00–690–8656; Riot control agent, ABC, CS capsule NSN; Box, wooden NSN; Can, metal	As required As required As required	
K768	1365–00–926–1914; Chemical agent, CS–1 NSN; Box, wooden	40 lb 1	
K866	1365–00–598–5207; Smoke pot, M5, ground type NSN; Box, wooden NSN; Container, metal	1 1 1	 R
K867	1365–00–598–5207; Smoke pot, M4A2, floating type NSN; Box, wooden NSN; Container, metal	1 1 1	 R

Table F–10
FSC 1370, pyrotechnics

DoD ID code	NSN/Noun	Unit pack	Reconciliation
L116	1370–00–921–6172; Signal Kit, Personnel Distress, Red, XM185 NSN: Box, wooden	200 1	
L117	1370–00–926–9387; Signal kit, 200 Personnel Distress, XM186 NSN: Box, wooden	200 1	
L278	1370–00–921–6118; Signal, illum, ground, red NSN; Box, wooden	1,250 1	
L279	1370–00–921–6119; Signal, illum, ground, white NSN; Box, wooden	1,250 1	
L280	1370–00–921–6120; Signal, illum, ground, green NSN; Box, wooden	1,250 1	
L305	1370–00–182–3408; Signal, illum, ground, M195, green star NSN; Box,	36 1	
L306	1370–00–756–2591; Signal, illum, ground, M185, red star NSN; Box, wooden	36 1	
L307	1370–00–756–2588; Signal, illum, ground, M159, white star NSN; Box, wooden	36 1	
L310	1370–00–965–0864; Signal, illum, ground series, M19 NSN; Box, wooden	30 1	
L311	1370–00–629–2336; Signal, illum, ground, M126A1, red star 8140–00–089–8629; Box, wooden NSN; Container, metal, M492, 7548414 NSN; Tube, signal, expended	36 1 36	
L312	1370–00–753–1859; Signal, illum, ground, M127A1, white star 8140–00–089–8629; Box, wooden NSN; Container, metal, M492, 7548414 NSN; Tube, signal	36 1 36	
L314	1370–00–629–2335; Signal, illum, ground, M125A1, green star 8140–00–089–8629; Box, wooden NSN; Container, metal, M492, 7548414 NSN; Tube, signal,	36 1 36	

Table F–10
FSC 1370, pyrotechnics—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	expended		
L324	1370–00–301–1131; Signal, smoke, ground, M128A1, parachute 8140–00–089–8629; Box, wooden NSN; Container, metal, M492, 7548414 NSN; Tube, signal, expended	36 1 36	
L340	1370–00–926–1931; Signal, smoke, ground, white, M166 8140–00–145–0054; Box, wooden	240 1	
L341	1370–00–926–1930; Signal, smoke, ground, green, M167 8140–00–145–0054; Box, wooden	240 1	
L342	1370–00–926–1933; Signal, smoke, ground, red, M168 8140–00–145–0054; Box, wooden	240 1	
L343	1370–00–926–1932; Signal, smoke, ground, yellow, XM169 8140–00–145–0054; Box, wooden	240 1	
L366	1370–00–028–6007; Simulator, projectile, air burst, M74 or M74A1 NSN; Box, wooden	80 1	
L367	1370–01–085–2601; Cartridge, practice, tank simulator NSN; Box, wooden	150 1	
L495	1370–00–752–8060; Flare, surface, trip, M49A1/M49A2 NSN; Box, wooden 1370–00–828–7494; Mounting bracket assembly	32	
L508	1370–00–096–3135; Flare, surface, trip, M49A1/M49A2 NSN; Box, wooden 1370–00–828–7494; Mounting bracket assembly	40	
L592	1370–00–198–2566; TOW missile blast simulator NSN; Box, wooden	1200 1	
L596	1370–00–028–5112; Flare, surface, trip, M49A1/M49A2 NSN; Box, wooden 1370–00–828–7494; Mounting bracket assembly 1370–00–028–5518; Simulator, flash, artillery, M110 NSN; Box wooden 76–1–12650	30	
L596	1370–00–935–1969; Flare, surface, trip, M49A1/M49A2 NSN; Box, wooden 1370–00–828–7494; Mounting bracket assembly 1370–00–028–5518; Simulator, flash, artillery, M110 NSN; Box wooden 76–1–12650	30	
L598	1370–00–028–5256; Simulator, booby trap, flash, M117 NSN; Box, wooden, 8799713 150	150	
L599	1370–00–028–5257; Simulator, booby trap, illum, M118 NSN; Box, wooden, 8799717 150	150	
L600	1370–00–028–5255; Simulator, booby trap, whistling, M119 NSN; Box, wooden, 8799717 150	150	
L601	1370–00–752–8124; Simulator,	150	

Table F–10
FSC 1370, pyrotechnics—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	hand grenade, M116A1 NSN; Box, wooden 150		
L602	1370–01–128–0418; Simulator, flash, artillery, 50 mm, M21 NSN; Box, wooden 162	162	
L605	1370–00–474–0270; Simulator, atomic explosion, M142 NSN; drum, 55 gal, w/lid and lid ring NSN; Cable, electric, 150 ft.	1	

Table F–11
FSC 1375, demolition material

DoD ID code	NSN/Noun	Unit pack	Reconciliation
M023	1375–00–724–7040; Charge, demolition, block, comp C–4 M112 8140–00–089–8599; Box, wooden	30 1	T
M024	1375–00–728–5941; CHG, Demo Blk, 2lb PETN	20	T
M026	1375–00–028–5247; Demolition kit, Bangalore torpedo, M1A1 8140–00–857–2975; Box, wooden	1 1	T
M028	1375–00–926–1948; Demolition kit, Bangalore torpedo, M1A2 8140–00–857–2975; Box, wooden	1 1	T
M030	1375–00–926–9394; Charge, demolition, block 1/4-lb TNT 8140–00–828–2942; Box, wooden	192 1	T
M031	1375–00–028–5140; CHG, Demo Blk, 1/2lb TNT 1375–00–926–9316; CHG, Demo Blk, 1/2lb TNT	100 96	T T
M032	1375–00–028–5142; Charge, demolition, block 1-lb TNT 1375–00–935–6139; Charge, demolition, block 1-lb TNT 8140–00–089–8602; Box, wooden	48 48 1	T T
M035	1375–00–028–5133; CHG, Demo Blk,M1, 2.5lb tetrytol 1375–00–028–5239; CHG, Demo Blk, M1, 1.25 tetrytol 1375–00–028–5240; CHG, Demo Blk, M1, 1.66lb tetrytol	8 8 6	T T T
M036	1375–00–028–5135; CHG, Demo Blk, M2, 2.5lb Tetra nitrate	16	T
M039	1375–00–028–5145; Charge, demolition, block 40-lb cra-tering 1375–00–028–5146; Charge, demolition, block 40-lb 8140–00–828–2900; Box, wooden	1 1 1	T T
M060	1375–00–926–4108; CHG Demo roll, M186, 25lb, COMP H–6	3	T
M126	1375–00–073–5166; CAP, Blast, Electric # 8, 4th Delay	900	T
M127	1375–00–077–2218; CAP, Blast, Electric # 8, 4th Delay	900	T
M130	1375–00–756–1865; Cap, blasting, electric 8140–00–089–8603; Box, wooden	900 1	T
M131	1375–00–756–1864; Cap, blasting, nonelectric, M7 1375–00–370–3519; Cap, blasting, nonelectric, M7	3600 500	T

Table F–11
FSC 1375, demolition material—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	8140–00–089–8605; Box, wooden	1	T
M241	1375–00–028–5171; Destructor, explosive, universal, M10 8140–00–089–8608; Box, wooden	50 1	T
M308	1375–00–958–1048; Ctg, Delay 20 sec	1	T
M327	1375–00–699–5236; Coupling base, firing device, w/primer, M27 NSN; Box, wooden, 8826665	400 1	T
M420	1375–00–028–5237; Charge, demolition, shaped, 15-lb, M2A3 8140–00–089–8610; Box, wooden	3 1	T
M421	1375–00–028–5241; Charge, demolition, shaped, 40-lb, M3 1375–00–088–6691; Charge, demolition, shaped, 40-lb, M3E2 8140–00–827–6343; Box, wooden	1 1 1	T T
M445	1375–00–752–7745; Demolition kit, projected charge, M1 NSN; Box, wooden, 8797610	1 1	T
M448	1375–00–729–4375; DET, Perc, M2A1 8 sec delay	200	T
M450	1375–00–729–4378; Detonator, percussion, M1A2 NSN; Box, wooden, 8825213	200 1	T
M456	1375–00–204–0851; Cord, detonating, reinforced, water-proof 1375–00–180–9356; Cord, detonating, reinforced, water-proof 8140–00–089–8613; Box, wooden NSN; Spool	3000 3000 1 3	T T
M500	1375–00–060–0855; Cutter Reef Line 2 sec	80	T
M540	1375–00–028–5173; DET kit, concussion, M1	50	T
M591	1375–00–724–9613; Dynamite Military M1	100	T
M605	1375–00–293–8132; DOC DEST, INCND, M3, 20lb w/ign 1375–00–529–8004; DOC DEST, INCND, M3, 19lb w/ign 1375–00–542–0090; DOC DEST, INCND, M3, 20lb w/o	1 1 1	T T T
M615	1375–00–602–2213; IGN INCND, Doc Dest, M25	80	T
M619	1375–00–028–5195; FRNG DEV, Demo, M1, 12–32 delay	120	T
M619	1375–00–813–7154; FRNG DEV, Demo, M1, 12–32 delay	450	T
M619	1375–00–828–4441; FRNG DEV, Demo, M1, 12–32 delay	300	T
M626	1375–00–028–5180; Firing device, demolition, M1A1 8140–00–089–8621; Box, wooden NSN; Expended firing device	250 1 200	T
M627	1375–00–028–5192; Firing device, demolition, M5 8140–00–089–8618; Box, wooden NSN; Expended firing device	200 1 200	T
M629	1375–00–028–5189; Firing device, demolition, M3 8140–00–089–8620; Box, wooden	200 1	T

Table F–11
FSC 1375, demolition material—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	NSN; Expended firing device	200	
M630	1375–00–580–1392; Firing device, demolition, pull type, M1 8140–00–089–8623; Box, wooden NSN; Expended firing device	200 1 200	T
M670	1375–00–028–5151; Fuze, blasting, time 8140–00–089–8612; Box, wooden NSN; Can, metal	4000 1 8	T
M757	1375–00–926–3985; Charge, assembly, demolition 8140–00–089–8614; Box, wooden NSN; Case, carrying M185	2 1 2	T
M766	1375–00–691–1671; Igniter, time blasting fuze, M2 8140–00–827–6262; Box, wooden NSN; Expended igniter	300 1 300	T
M810	1375–00–028–5202; Primer, percussion, cap 8140–00–089–8616; Box, wooden	5000 1	T
M632	1375–00–093–0116; FRNG DEV, Demo, M1, Press-rel	50	T
M965	1375–00–148–7159; CHG, Demo, Cratering, M180	1	T
ML03	1375–00–040–1526; FRNG DEV, Demo, M142	56	T
ML03	1375–01–570–1835; FRNG DEV, Demo, M142	56	T

Table F–12
FSC 1390, fuzes

DoD ID code	NSN/Noun	Unit pack	Reconciliation
N248	1390–00–993–5691; Fuze, mechanical, time, M565 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 1 2 1 1	
N276	1390–00–935–6140; Fuze, mechanical, time and super quick, M501A1 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 1 2 1 1	
N278	1390–00–889–2044; Fuze, mechanical, time and super quick, M564 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 1 2 1 1	
N282	1390–00–814–3422; Fuze, MTSQ, M548 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 1 2 1 1	
N285	1390–00–805–0692; Fuze, MTSQ, M577 8140–00–864–3194; Box, wire bound	16 1	

Table F–12
FSC 1390, fuzes—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	2 1 1	
N335	1390–00–892–4302; Fuze, MTSQ, M557 1390–00–187–5392; Fuze, MTSQ, M557 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 16 1 2 1 1	
N402	1390–00–764–9124; Fuze, fuze proximity 8140–00–864–3194; Box, wire bound 8140–00–960–1699–ZAAA; Box, metal, M2A1 8140–00–855–5981; Top, support, plastic 8140–00–153–7345; Bottom support	16 1 2 1 1	S
N463	1390–00–182–3132; Fuze, proximity, M728 NSN; Box, wire bound NSN; Box, metal, PA 19	16 1 2	S
N464	1390–01–020–0096; Fuze, proximity, M732 NSN; Box, wire bound NSN; Box, metal, PA 19	16 1 2	S
N523	1390–00–892–4202; Primer, percussion, M82 NSN; Box, wooden NSN; Case ctg, fired brass	500 1 500	

Table F–13
FSC 1400 series, missiles

DoD ID code	NSN/Noun	Unit pack	Reconciliation
PA66	1410–00–087–1521; GM, TOW missile, SURF/ATK, BGM–71A	1	
PB18	1410–00–087–1527; GM TOW missile, TP, BTM–71A	1	
PB82	1410–00–987–9432; GM, AT, AGM–22B (SS–11) (NGB	1	
PB91	1410–01–007–2507; GM, TOW missile, SURF/ATK, BGM–71A–1	1	
PB94	1410–01–139–1512; GM TOW missile, SURF/ATK, BGM–71A–2	1	
PB95	1410–01–007–2508; GM, TOW missile, TP, BTM–71–A–1	1	
PB96	1410–01–137–9976; GM, TOW missile, TP, BTM–71A–2	1	
PB97	1410–01–181–6032; GM, TOE, SURF/ATK, BGM–71A–3	1	
PB99	1410–01–180–6791; GM, TOW missile, TP, BTM–71A–3	1	
PE03	1410–01–257–6493; GM, TOW missile,	1	

Table F–13
FSC 1400 series, missiles—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	SURF/ATK, BGM–71A–2A		
PE04	1410–01–257–7584; GM, TOW missile, SURF/ATK, BGM–71A–3A	1	
PE63	1410–01–257–6494; GM, TOW missile, TP, BTM–71A–2A	1	
PE64	1410–01–257–7585; GM, TOW missile, TP, BTM–71A–3A	1	
PL39	1427–01–416–3183; GM, Stinger	1	T
PL41	1427–01–416–3184; GM, Stinger	1	T
PL42	1427–01–416–3186; GM, Subsys, Stinger	1	T
PL55	1427–01–457–8083; Guided Missile and Launching Assy, Stinger	1	T
PL56	1427–01–457–8108; Guided Missile and Launcher Assy, Stinger	1	T
PL57	1427–01–457–8112; Guided Missile and Launcher; Stinger	1	T
PL58	1427–01–457–8116; Guided Missile and Launcher, Stinger	1	T
PL64	1427–01–475–8172; Guided Missile and Launcher Assy, Javelin	1	T
PL65	1427–01–480–8516; Guided Missile and Launcher Assy, ATACMS	1	
PL81	1427–00–000–0195; Guided Missile and Launcher Assy, ATACMS 1427–01–386–3113; Guided Missile and Launcher Assy, ATACMS 1427–01–274–3904; Guided Missile and Launcher Assy, ATACMS	1 1 1	
PL85	1427–01–119–7620; Guided Missile, Stinger	1	T
PL86	1427–01–325–3159; Guided Missile, Stinger 1427–01–356–7047; Guided Missile, Stinger	1 1	T T
PL87	1427–01–325–3160; Guided Missile, Stinger	1	T
PL88	1427–01–325–3161; Guided Missile, Stinger	1	T
PL89	1427–01–325–3158; Guided Missile, Stinger	1	T
PL90	1427–01–0249967; Guided Missile, Stinger	1	T
PL91	1427–01–212–4998; GM, Stinger, Post, WPN RND	1	T
PL92	1427–01–219–2902; GM, Stinger, Post, PARTIAL	1	T
PL93	1427–01–291–7116; GM, Stinger, Basic, WPN RND, PARTIAL	1	T
PL94	1427–01–230–8783; GM, Stinger, RMP, WPN RND	1	T
PL95	1427–01–230–8784, GM, Stinger, RMP, PARTIAL Z587 1440–01–024–6931; GRIPSTOCK UNITIZED 1440–01–170–8618; CLAMSHELL 1440–01–233–1494; RMP	1 1 1 1	T

Table F–13
FSC 1400 series, missiles—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
PM75	1427–01–511–2143; GUIDED MISSLE AND LAUNCHER, ATACMS	1	
PM89	1427–01–523–8822; CANISTER ASSMBLY GUIDED MISSILE, PATRIOT	1	
PM93	1427–01–528–9582; GUIDED MISSILE AND LAUNCHER, PATRIOT	1	
PMA0	1427–01–532–0256; CANISTR ASSEMBLY GUIDED MISSILE, PATRIOT	1	
PMA1	1427–01–552–0718; CANISTER ASSMBL GUIDED MISSILE, PATRIOT	1	
PMA6	1427–01–568–9357; GUIDED MISSILE SYSTEM, THAAD	1	
PMA7	1427–01–578–1813; CANISTER ASSEMBLY,GUIDED MISSILE, PATRIOT	1	
PMA8	1427–01–578–1874; CANISTER ASSEMBLY,GUIDED MISSILE, PATRIOT	1	
PMA9	1427–01–585–3737; CANISTER ASSEMBLY,GUIDED MISSILE, THAAD	1	
PMB2	1427–01–601–1378; GUIDED MISSILE SYSTEM, THAAD 1427–01–603–7484; CANISTER ASSEMBLY,GUIDED MISSILE, THAAD	1 1	
PMB4	1427–01–599–7339; GUIDED MISSILE SYSTEM, THAAD 1427–01–606–4389; CANISTER ASSEMBLY,GUIDED MISSILE, THAAD	1 1	
PMB6	1427–01–616–7725; CANISTER ASSEMBLY,GUIDED MISSILE, PATRIOT	1	
PMC0	1427–01–630–4742; CANISTER ASSEMBLY,GUIDED MISSILE, THAAD	1	
PN01	1440–01–094–0830; BCU, STINGER 1440–01–113–6327; BCU, STINGER 1440–01–122–1084; BCU, STINGER 1440–01–332–8131; BCU, STINGER	1 1 1 1	
PN07	1440–01–411–1688; GRIPSTOCK–CONTROL GROUP, STINGER	1	
PN15	1440–01–024–6931; GRIPSTOCK–CONTROL, STINGER	1	
PN16	1440–01–233–1494; GRIPSTOCK CONTROL, STINGER	1	
PU41	1410–01–387–8436; GUIDED MISSILE,INTERCEPT, PATRIOT	1	
PU55	1410–01–399–7459; GD MIS LB HEF AGM–114L, HELLFIRE	1	
PU72	1410–01–412–4435; GUIDED MISIL SURF: HELLFIRE 1410–01–587–4014; GUIDED MISSILE,SURF; HELLFIRE	1 1	

Table F–13
FSC 1400 series, missiles—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
PV18	1410–01–322–5333; GUIDED MISSILE SURF; TOW missile	1	
PV29	1410–01–332–2471; GUIDED MISSILE SURF; HELLFIRE	1	
PV30	1410–01–381–0715; HELLFIRE II AGM 114K; HELLFIRE 1410–01–586–9094; GUID MISSILE SURF: HELLFIRE	1 1	
PV82	1410–01–370–2289; GUIDED MISSILE SURF; TOW missile	1	
WF15	1410–01–464–9031; GUIDED MISSILE,SURFACE: HELLFIRE	1	
WF16	1410–01–464–9038; GUIDED MISSILE,SURF; HELLFIRE	1	
WF37	1410–01–473–0281; GUIDED MISSILE SURF; TOW missile	1	
WF81	1410–01–493–7454; GUIDED MISSILE,INTERCEPT; PATRIOT	1	
WF82	1410–01–500–0245; GUIDED MISSLE SURF; TOW missile	1	
WF85	1410–01–500–0575; GUIDED MISSILE,INTERECEPT; PATRIOT	1	
WF88	1410–01–501–6470; GUIDED MISSILE,SURF; HELLFIRE	1	
WF93	1410–01–503–6776; GUIDED MISSIL SURF; TOW missile	1	
WF96	1410–01–504–4781; GUIDED MISSILE,SURFACE; HELLFIRE 1410–01–587–4019; GUIDED MISSILE,SURF; HELLFIRE	1	
WF97	1410–01–505–4144; GUIDED MSLE SFC; HELLFIRE	1	
WG01	1410–01–510–9667; GUIDED MSLE SURF; HELLFIRE 1410–01–587–4016; GUIDED MISSILE,SURF; HELLFIRE 1410–01–511–2655; GUIDED MISSILE SURF; TOW missile	1 1 1	
WH48	1410–01–529–9681; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH49	1410–01–529–9676; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH50	1410–01–531–2663; GUIDED MISILE SURF; TOW missile	1	
WH51	1410–01–533–5256; GUIDD MISSILE SURF; TOW missile	1	
WH53	1410–01–533–8129; GUIDED MISLE SURF; TOW missile	1	
WH56	1410–01–539–2030; GUIDED MISSILE,PRACTICE; TOW missile	1	
WH58	1410–01–549–5511; GUIDED MISSILE,SURFACE;	1	

Table F–13
FSC 1400 series, missiles—Continued

DoD ID code	NSN/Noun	Unit pack	Reconciliation
	HELLFIRE		
WH59	1410–01–549–5336; GUIDED MISSILE,SURF; HELLFIRE	1	
WH60	1410–01–549–5512; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH63	1410–01–544–8709; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH64	1410–01–544–8726; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH65	1410–01–549–9403; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH66	1410–01–550–3429; GUIDED MISSILE,SURF; HELLFIRE	1	
WH67	1410–01–550–3435; GUIDED MISSILE,SURF; HELLFIRE	1	
WH68	1410–01–550–3440; GUIDED MISSILE,SURF; HELLFIRE	1	
WH69	1410–01–550–3417; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WH73	1410–01–554–5633; GUIDED MISSILE,SURF; HELLFIRE	1	
WH74	1410–01–554–5630; GUIDED MISSILE,SURF; HELLFIRE	1	
WH87	1410–01–567–3359; GUIDED MISSILE,SURFACE; HELLFIRE	1	
WJ24	1410–01–593–7733; GUIDED MISSILE, SURF; HELLFIRE	1	
WJ39	1410–01–606–2869; GUIDED MISSILE,SURFACE, TOW missile	1	

Appendix G

Salvage and Residue Weights

G–1. Background

Users may weigh expended small arms ammunition cartridges to determine if the ammunition issued to the unit was fired and if the total quantity of ammunition issued, less live ammunition turned in, equals the amount of residue turned-in. Table G–1 provides the weight for each type of small arms cartridge casing. A request for information for casings not listed in SAAS will be submitted to AESIP and will be determined locally.

Table G–1
Brass conversion chart

Case type	Weight (pounds)
.22 caliber, brass, short	0.0008
.22 caliber, brass, long	0.0014
.30 caliber, brass, carbine	0.0101
.30 caliber, steel, carbine	0.0081
.30 caliber, brass, all	0.0286
.38 caliber, brass, all	0.009
.45 caliber, brass, all	0.0124
.45 caliber, steel, all	0.012
.50 caliber, brass, all	0.121
.50 caliber, steel all	0.111
5.56 millimeter, brass, all	0.0135
7.62 millimeter, brass, large	0.026
9 millimeter	0.009
20.0 millimeter, brass, small	0.2
20.0 millimeter, brass, large	0.25
25 millimeter, all	0.48
Shotgun, brass, all	0.036

G–2. Computing total weight

Use the weights in table G–1 to compute the total weight of residue for each small arms DODIC issued.

G–3. Determining brass weight

To determine brass weight from the quantity of live ammunition issued, multiply the number of live rounds by the weight factor (pounds) found in. For example:

a. A user that is issued 39,875 rounds of 5.56 mm ammunition must return 538.3 pounds of brass (39,875 • 0.0135 = 538.3 pounds).

b. A user that is issued 39,875 rounds of 5.56 mm ammunition and turns in 19,875 rounds of live 5.56 mm ammunition, must return 270 pounds of brass ((39,875 −19,875) • 0.0135 = 270 pounds.).

G–4. Determining number of rounds

To determine the number of rounds from the weight of brass, divide the brass weight by the weight factor (pounds). For example, a user that was issued 39,875 rounds of 5.56 mm ammunition turns in 337.5 pounds of brass; 337.5 divided by 0.0135 equals 25,000 expended rounds. Subtract the expended rounds from the total rounds issued to determine the number of live rounds that the user must turn in (39,875 − 25,000 = 14,875) live rounds that the user must turn in.

G–5. To find weight

Multiply the quantity of expended cartridge cases by the weight. Using the example, brass, short, expended rounds, 0.22 caliber, work the formula as shown below.

G–6. Formula

Quantity of the item • Weight = Weight of expended cartridge cases.

G–7. Computation

39,875 rounds • 0.0008 pounds = 31.9 pounds. Work to one decimal place and round down, here, 31 pounds expended.

Appendix H

Ownership/Purpose Codes and Action Codes for Guided Missiles and Large Rockets

H–1. Ownership codes

The ownership or purpose code provides intelligence to NICPs, stock control activities, or storage activities. It indicates who has title to the assets and for what purpose the materiel is held within an ownership. This information is provided for: inventory management, requisition processing, and preparation of financial and supply status reports for decision making. Ownership codes (see table I–1 for ownership codes) are one-position, numeric characters. They segment inventory balances accounted for on inventory control records of a military service but which are owned by others.

Table H–1
Ownership codes

Code	Title	Explanation
1	Army	Applies to stocks held on inventory control records of a non-Army item manager but owned by Army.
2	DLA	Applies to stocks on inventory control records of an Army item manager but owned by DLA. Includes assets procured, stored, and issued by the Army based on approved funded requirements of DLA.
3	Others	Applies to stocks held on inventory control records of an Army item manager but owned by an agency outside of DOD.
4	Marine Corps	Applies to stocks held on inventory control records of an Army item manager but owned by the Marine Corps. Includes assets procured, stored, and issued by the Army based on approved funded requirements of the Marine Corps
5	Navy	Applies to stocks held on inventory control records of an Army item manager but owned by the Navy. Includes assets procured, stored, and issued by the Army based on approved funded requirements of the Navy.
6	Air Force	Applies to stocks held on inventory control records of an Army item manager but owned by the Air Force. Includes assets procured, stored, and issued by the Army based on approved funded requirements of the Air Force.
7	Other DOD	Applies to stocks held on inventory control records of an Army item manager but owned by a DOD agency other than a military service.
8	ILP	Applies to stocks held on inventory control records of an Army item manager but owned by the integrated logistics partnership.
9	Other Item Manager	Applies to assets on inventory control records of an Army item manager but owned by another item manager within the Army. Includes materiel owned by DA activities, must be reserved, and is restricted for issue to specific support programs.
0	Not Assigned	Reserved for future assignment by DOD.

H–2. Purpose codes

Purpose codes (see table H–2 for purpose codes) are one-position, alphabetic characters. They of identify the purpose for which an inventory balance is reserved.

Table H–2
Purpose codes

Code	Title	Explanation
A	General issue	Includes all operating stocks retained for general issue that are not earmarked, reserved, or restricted for issue to specified requirements. Includes assets reserved for issue PD 01–08 within control levels. Items are available for issue to meet the assigned logistical support responsibilities of the item managers.
B	Other WR materiel	Identifies requirements and assets designated by HQ, AMC, for support of U.S. forces beyond the

Table H–2
Purpose codes—Continued

Code	Title	Explanation
		prepositioning (retail) timeframes and such other WR accounts as may be directed by HQ, AMC. The primary account is CONUS.
C	Specific WRs	Applies to all requirements and assets designated as specific WR accounts.
D	Rapid deployment force	Applies to all WR accounts authorized for the rapid deployment force or Southwest Asia. Identifies requirements and assets that may be stored in CONUS or pre-positioned.
E	Reserved for specific plans or projects	Applies to assets, other than general WRs, specific WRs, or held to support requirements of a specific plan, project, or operation.
F	Reserved for production and maintenance	Applies to assets held to support military service repair, alteration, modification, conversion, or assembly programs to be done at an Army or other DOD repair or overhaul facility.
G	Reserved for provisioning	Includes stocks reserved to insure delivery of support items with the related end items.
H	Reserved for GFM	Applies to assets held for issue as Government-furnished materiel. Also called Government-furnished property or Government-furnished equipment to support contractually accomplished repair or production programs.
I	AEs requiring demilitarization	Applies to AEs requiring demilitarization that are found on AMCOM accountable records only.
J	Reserved for grant aid	Applies to assets allocated and earmarked for grant aid
K	Reserved for loan	Applies to assets held on record for loan, donation, or sale to authorized individuals, clubs, organizations, institutions, or municipalities for purposes such as display and exhibition.
L	Suspended (on loan)	Includes Army-owned, programmed inventories that have been approved for issue and are on loan. However, they may be recalled when needed to meet the gross requirements of the Army.
M	Potential excess	Includes assets over and above authorized retention limits of the Army. They are held pending completion of use screening by DOD, governmental, or nongovernmental agencies. Applies to Project PLUS criteria for screening of items against DOD require.
N	Potential security assistance	Assets are excess to Army needs and have been offered on an FMS survey.
O	Not used	
P	Reserved for Cooperative Logistics Supply Support Arrangement	Stocks allocated and earmarked for issue against U.S. commitments under Cooperative Logistics Supply Support Arrangement.
Q	Combat support allocated stocks	Allocated and earmarked for certain Joint Chiefs of Staff requirements.
R	Reserved for active Army decrement stocks	Applies to assets earmarked for issue to bring active Army units from the current authorized level of organization (ALO) to the full required authorized level of organization (level 1).
S	Theater backup	Identifies requirements and assets that would normally be pre-positioned forward but, by agreement between AMC and the appropriate major command, are stored in CONUS
T	Mission reserve component WR and full Army mobilization	Assets reserved for reserve component forces designated for active duty
U	Basic load items	Applies to all assets held for basic items (ammunition)
V	Logistic account transactions	Applies to all assets held for logistic account transactions.
W	Basic issue item	Includes serviceable and unserviceable, economically reparable basic issue items removed from major end items and stocks received and held in storage to complete major end items.

Table H–2
Purpose codes—Continued

Code	Title	Explanation
X	Special WR stockpile	A CONUS or overseas pre-positioned WR account to identify WR requirements and assets for HQ, AMC, specified accounts, such as new equipment fielding.
Y	Reserved for major item interchange assets	Identifies assets purchased and reserved by the item manager to satisfy other agencies' or activities' major item interchange requisitions.
Z	Reserved for use by inventory control point and stock control activity	Using an inventory control point and a stock control activity, advise the commander, AMC, of assignment of this code for review, possible standardization, and assignment of a DA reserved code

H–3. Large rocket ammunition

The codes listed in table H–3 identify large rocket ammunition.

Table H–3
Guided missile and large rocket action codes

Code	Explanation
F	Addition of information due to changes or error
Y	Combat loss
E	CC Change
R	Deletion of information due to change or error
Q	Items expended in testing (firing and other test) lot acceptance
K	Items expended in training (including ASPs and troop demonstrations) and expended in firing by Army
L	Items salvaged or demilitarized
O	Other losses (Armed Forces Day, VIP demonstrations, firing, et cetera)
C	Receipt from other area or activity. Report both the reporting UIC and the UIC received from
B	Receipt from CONUS depot
P	Receipt from manufacturer or contractor
A	Reconciliation reports
D	Shipment or transfer to another area or activity
J	Shipments or transfer to claimant other than Army
G	Shipment or transfer to CONUS depot
H	Shipment or transfer to manufacturer or contractor
N	Change of component data due to replacement
T	Correction or erroneous data
X	Account-code changes (SAAS-unique)

H–4. Number types

The codes listed in table H–4 identify the type of number (serial, lot, or combination of the two) under which a GMLR is reported. These data items relate directly to card code and serial or lot number indicator for end items only in AR 700–19.

Table H–4
Guided missile and large rocket codes

Code	Explanation
A	SN item
B	Lot number item
C	Mixed SN and lot number
D	Unknown (there is a number, but the reporting agent cannot distinguish the number)
E	None

H–5. Systems

The codes listed in table H–5 identify GMLRs by systems (AR 700–19).

Table H–5
Guided missile and large rocket systems identification codes

Code	System
C	Chaparral
H	Targets
J	Redeye
V	Shillelagh
2	TOW missile
S	Hawk
N	Lance
5	Dragon
R	Stinger
F	MLRS
3	Pershing II
6	PATRIOT
X	Roland
P	Hellfire

Appendix I

Ammunition Supply Facilities

I–1. The network

DOD ammunition are stored, monitored, maintained, and moved through a combination of military and commercial means. This network includes military, DA Civilian, and commercial facilities, equipment, and personnel. Permanent and temporary storage locations are shown in figure I–1. For details on whether facilities are GOCO or GOGO, see figure 6–1. For CONUS, see table I–1.

1. Sierra AD (TACOM) ▲	Pine Bluff Arsenal (JMC) 10. (682 Personnel)
2. Hawthorne AD (JMC) △	11. Milan AAP (JMC)
3. Toole AD (JMC) △	12. Crane AAA (JMC) ▲
4. Rock Island Aresnal (TACOM)	Lima Joint Sys. Manufacturing 13. Center(TACOM) △
5. Iowa AAP (JMC)	14. Bluegrass AD (JMC) △
6. Lake City AAP (JMC)	15. Holston AAP JMC
7. McAlester AAP (JMC) ▲	Anniston Army Depot 16. Ground Combat Vehicles (TACOM)
Red River Army Depot (AD) 8. Tactical Wheel Vehicles (TACOM)	Anniston Munitions Center 17. (JMC) △
Corpus Christi AD 9. Rotary Wing Aircraft (AMCOM)	18. Radford AAP JMC
Organic Industrial Base Legend	Letterkenny Munitions 19. Center (JMC) △
AAA = Army Ammunition Activity AAP = Army Ammunition Plant AD = Army Depot 15 GOGO 8 GOCO	Letterkenny Army Depot 20. Missiles (AMCOM)
3 Manufacturing Arsenal △ 1 Joint Systems Manufacturing Center	21. Scranton AAP (JMC)
△ 5 Maintenance Deptos 1 Storage Depot	Tobyhanna AD 22. Comm-Electronics (CECOM)
6 Munitions Production △ 5 Munitions Storage ▲ 2 Munitions Production & Storage	23. Watervliet Arsenal (TACOM)

Figure I–1. Permanent and temporary ammunition storage locations

Table I–1
Continental United States

Facility	Location	Owner	DoD activities address code	Safe haven	Ammunition holding area	Storage type
Aberdeen Proving Grounds ASP	Maryland	IMCOM	W91CRE			Tactical
Anniston Ammunition Center	Alabama	AMC	W31G1Z	Yes		Strategic
Blue Grass Army Depot	Kentucky	AMC	W22P1H			Strategic
Camp Atterbury ASP	Indiana	ARNG	W53P1M		2	Tactical
Camp Blanding Joint Training Center ASP	Florida	ARNG	W90GWP			Tactical
Camp Bowie ASP	Texas	ARNG	W81JTH			Tactical
Camp Clark ASP	Missouri	ARNG	W90GXA			Tactical
Camp Dawson ASP	West Virginia	ARNG	W81J6Y			Tactical
Camp Dodge ASP	Iowa	ARNG	W54CJX			Tactical
Camp Edwards ASP	Massachusetts	ARNG	W13A8L			Tactical
Camp Grafton ASP	North Dakota	ARNG	W81K9F			Tactical
Camp Grayling ASP	Michigan	ARNG	W56D9B			Tactical
Camp Guernsey ASP	Wyoming	ARNG	W81DFF			Tactical
Camp Hartell ASP	Connecticut	ARNG	W90GWG			Tactical
Camp Johnson ASP	Vermont	ARNG	W90GWK			Tactical
Camp Keyes ASP	Maine	ARNG	W90GW9			Tactical
Camp Lincoln ASP	Illinois	ARNG	W81NTB			Tactical
Camp Marseilles ASP	Illinois	ARNG	W90GWJ			Tactical
Camp Maxey ASP	Texas	ARNG	W81RD6			Tactical
Camp McCain ASP	Mississippi	ARNG	W81LK9			Tactical
Camp Perry ASP	Ohio	ARNG	W90GWT			Tactical
Camp Rapid	South Dakota	ARNG	W90GWH			Tactical

Table I–1
Continental United States—Continued

Facility	Location	Owner	DoD activities address code	Safe haven	Ammunition holding area	Storage type
ASP						
Camp Ravenna ASP	Ohio	ARNG	W56VJZ			Tactical
Camp Rilea ASP	Oregon	ARNG	W90GWY			Tactical
Camp Ripley ASP	Minnesota	ARNG	W90GW6			Tactical
Camp Roberts ASP	California	ARNG	W800AJ			Tactical
Camp Robinson ASP	Arkansas	ARNG	W90GWM			Tactical
Camp Santiago ASP	Puerto Rico	ARNG	W81K6A			Tactical
Camp Shelby ASP	Mississippi	ARNG	W35PWX			Tactical
Camp Sherman ASP	Ohio	ARNG	W90GWU			Tactical
Camp Swift ASP	Texas	ARNG	W81RD8			Tactical
Camp Umatilla ASP	Oregon	ARNG				Tactical
Camp Williams ASP	Utah	ARNG	W80JNL		1	Tactical
CAAA	Indiana	AMC	W53XMD			Strategic
Dugway Proving Grounds ASP	Utah	ATEC	W56GPY			Tactical
Duke Field ASP	Florida	IMCOM	W56DFP			Tactical
Florence ASP	Arizona	ARNG	W81CUW			Tactical
Fort AP Hill ASP	Virginia	IMCOM	W26HBU			Tactical
Fort Bliss ASP	Texas	IMCOM	W45QQ9	yes		Tactical
Fort Bragg ASP	North Carolina	IMCOM	W36B47		1	Tactical
Fort Campbell ASP	Kentucky	IMCOM	W34GNA			Tactical
Fort Carson ASP	Colorado	IMCOM	W51HUT			Tactical
Fort Chaffee ASP	Arkansas	ARNG	W90DED			Tactical
Fort Custer ASP	Michigan	ARNG	W56LTC			Tactical
Fort Devens ASP	Massachusetts	IMCOM	W13B8V	yes		Tactical
Fort Dix ASP	New Jersey	IMCOM	W15A9U			Tactical
Fort Drum ASP	New York	IMCOM	W16BEU			Tactical
Fort Gordon	Georgia	IMCOM	W33W9H			Tactical

Table I–1
Continental United States—Continued

Facility	Location	Owner	DoD activities address code	Safe haven	Ammunition holding area	Storage type
ASP						
Fort Harrison ASP	Montana	ARNG	W90GWN			Tactical
Fort Hood ASP	Texas	IMCOM	W45QRE		1	Tactical
Fort Huachuca ASP	Arizona	IMCOM	W61DEL		4	Tactical
Fort Hunter Liggett ASP	California	IMCOM	W81W0U			Tactical
Fort Indiantown Gap ASP	Pennsylvania	ARNG	W25RAY	yes	1	Tactical
Fort Irwin ASP	California	IMCOM	W80WLH			Tactical
Fort Jackson ASP	South Carolina	IMCOM	W37R7A			Tactical
Fort Knox ASP	Kentucky	IMCOM	W22PL1			Tactical
Fort Leaven-worth ASP	Kansas	IMCOM	W55C6G			Tactical
Fort Lee Virginia ASP	Virginia	IMCOM	W26HBK			Tactical
Fort Leonard Wood ASP	Missouri	IMCOM	W58RD6			Tactical
Fort Lewis ASP	Washington	IMCOM	W68EVP	Yes		Tactical
Fort McClellan (Pelham Range) ASP	Alabama	ARNG	W905D6			Tactical
Fort McCoy ASP	Wisconsin	IMCOM	W5CD27			Tactical
Fort Pickett ASP	Virginia	ARNG	W90T8G			Tactical
Fort Polk ASP	Louisiana	IMCOM	W42CXA			Tactical
Fort Riley ASP	Kansas	IMCOM	W81FG8	yes	1	Tactical
Fort Rucker ASP	Alabama	IMCOM	W31R4Z			Tactical
Fort Sam Hou-ston ASP	Texas	IMCOM	W45NQJ			Tactical
Fort Sill ASP	Oklahoma	IMCOM	W44QQ8		1	Tactical
Fort Wolters ASP	Texas	ARNG	W90GW4			Tactical
Ft. Benning ASP	Georgia	IMCOM	W33WXP		1	Tactical
Ft. Stewart ASP	Georgia	IMCOM	W81X4C			Tactical
Gila Bend ASP	Arizona	ARNG	W56MKD			Tactical
Gowenfield	Idaho	ARNG	W81JKP			Tactical
Greenlief ASP	Nebraska	ARNG	W81K5Y		1	Tactical
Hawthorne	Nevada	AMC	W65XME			Strategic

Table I–1
Continental United States—Continued

Facility	Location	Owner	DoD activities address code	Safe haven	Ammunition holding area	Storage type
Army Depot						
Idaho ARNG ASP	Idaho	ARNG	W81JKP		1	Tactical
Joint Base Langley-Eustis ASP	Virginia	IMCOM	W26RK5			Tactical
Letterkenny Ammunition Center	Pennsylvania	AMC	W25G1R			Strategic
MCAAP	Oklahoma	AMC	W44W9M			Strategic
Military Ocean Terminal Sunny Point		AMC	W568JT			
New Castle ASP	Delaware	ARNG	W90GWL			Tactical
Onate ASP	New Mexico	ARNG	W81J8Y			Tactical
Papago ASP	Arizona	ARNG	W90HEJ			Tactical
Picatinney Arsenal ASP	New Jersey	AMC	W907CC			Tactical
PBA	Arkansas	AMC				Strategic
Raleigh SSA ASP	North Carolina	ARNG	W81KDR			Tactical
Redstone Arsenal ASP	Alabama	IMCOM	W90D9V			Tactical
Rock Island Arsenal ASP	Illinois	AMC	W90KUS			Tactical
Tooele Army Depot	Utah	AMC	W67G23			Strategic
USFPO Carson City ASP	Nevada	ARNG	W90GU1			Tactical
USPFO–RI ASP	Rhode Island	ARNG	W91UJV			Tactical
West Point ASP	New York	IMCOM	W91FFL			Tactical
White Sands Missile Range ASP	New Mexico	ATEC	W81WB8			Tactical
Yakima ASP	Washington	IMCOM	W68P9X			Tactical
Yuma Proving Ground ASP	Arizona	ATEC	W61PAX	Yes		Tactical

Appendix J

Ammunition Programs, Decision Making Forums and Events

J–1. Logistics Modernization Program

a. The DA is committed to modernizing mission business processes and leveraging ERP systems to maximize the use of Enterprise resources across the DOD ammunition IB. A critical component of the Army Logistics Enterprise is the LMP, which is the key ERP system implemented to support the ammunition IB. Over the next 10 years, DA will expand LMP to create efficiencies and improve readiness. ERP and LMP strategic expansion will focus on the mission areas of logistics and production to better serve our customers and execute our mission.

b. The strategic vision for LMP and the production-oriented missions is threefold. First, implement key performance indicators and align business processes to ERP concepts to take full advantage of LMP and the best business practices it enables. Second, build upon LMP in implementing improvements which will enhance our ability to integrate and track our production shop floor activities from start to finish. Third, integrate and centralize ammunition budget and pricing; production status, forecasting, and demand planning; and integrate the GOCO and COCO business process execution with ammunition supplier collaboration within the LMP framework.

c. In the field of logistics, ERP principles and concepts will be implemented to maximize the Enterprise use of LMP. Future LMP releases will subsume current AIT system to use standard LMP materiel management capabilities. This will modernize our ammunition transportation and distribution management automated systems and work towards implementing new ERP centric concepts, such as distribution requirements planning. LMP redesign will tie into tactical ammunition business processes. The centralization and integration will align the ammunition end-to-end business processes within the Army Logistics Enterprise. Changes to current ERP will enable supply chain planning and execution business processes across the ammunition enterprise to improve and enable effective and efficient ammunition mission planning and execution.

J–2. Worldwide Ammunition Logistics and Explosives Safety Review and Technical Assistance Program

a. The HQDA Worldwide Ammunition Logistics/Explosives Safety Review and Technical Assistance Program reviews and audits are conducted by the LRTAO of the Army DAC under the provisions of AR 700–13 and are evaluated against a recognized standard.

b. The program evolved in recent years from simply documenting findings to conducting evaluations against a recognized standard and providing recommendations, including finding resolve and teaching and enhancing knowledge base. HQDA ammunition logistics and explosives safety reviews should not be punitive in nature; instead they should provide commanders technical expertise to reduce problem areas and provide solutions. Do not identify reviews as something dreadful but as a mechanism to encourage improvement and problem solving.

c. A comprehensive guide is available from LRTAO to aid performing self-assessment of ammunition logistics, ammunition surveillance, and explosives safety functions. The document, which is routinely updated, is not intended to supersede, contravene, replace, or modify the publications referenced herein or any other DOD, DA, ACOM, ASCC, or DRU criteria. Those publications take precedence in the event of any conflict with the guide.

J–3. Strategic portfolio analysis review

a. The objective of the SPAR is to conduct a 30-year portfolio assessment, including POM years. The analysis objectives include: answering Army senior leader interest in modernization efforts beyond POM years, developing a strong link between S&T efforts and program development, identifying decision points for new starts and transitions to sustainment, examining total life cycle costs, developing the Army position on key resourcing and acquisition decision-making venues, and providing guidance to TRADOC on requirement documents needed.

b. The SPAR is a phased effort that begins with an unconstrained identification of requirements that fulfill capability gaps and continues with allocation of funding and identification of trade space. TRADOC capability gaps identified during SPAR inform investment requirements and funding strategies. Collaboration with equipping stakeholders is required throughout the process. Identify requirements that fully fund ACAT I and ACAT II programs to approved baselines. Identify programs that are eligible for transition to sustainment, propose a way ahead (what and when), and provide some rationale for eligible programs that do not transition.

J–4. Army Munition Requirements Council of Colonels

The Army Ammunition Requirement Council of Colonels—chaired by the DCS, G–3/5/7 (DAMO–TRA), and TRADOC capabilities manager—reviews and integrates weapons standard and strategies. TRADOC proponents are re-

sponsible for developing weapons strategies, including POIs, home station or CTCs, CLs, and OPLs. Strategies approved by the Army Ammunition Requirements College of Colonels will be integrated into the TAMR.

J–5. Weapons system reviews

a. Annually, a cross-PEG review of program life cycle weapon system requirements and funding requests takes place. This review is the mechanism for PMs to submit their POM command requirements in detail to the PEGs. A successful WSR results in a complete understanding of a program's command-validated requirements; acquisition, sustainment, and divestment strategies; and resourcing profile over the FYDP by all HQDA, Secretariat Staff, TRADOC, AMC, and PEG representatives.

b. There is no specific ammunition specific WSR with the exception of the TT PEG identifying ammunition requirements for testing or new equipment training as typically directed in POM instructions.

c. Unlike durable items (for example, class VII) where one would buy a fixed quantity of items. Ammunition is expendable and requires annual replacement due to training, war, operations, and test usage. Pre-POM planning for the G–8 ammunition branch occurs annually in January or February. This G–8-led meeting is similar to a WSR, which is why the process is not repeated during the annual WSRs. This meeting convenes members of G–8, ASA (ALT), Program Executive Office, Ammunition, G–4, G–3, and all of the ammunition commodity managers at JMC. The status of each ammunition DODIC's inventory, usage, washout, IB concerns, requirement, et cetera, is analyzed to determine what G–8 will propose in the next POM, given a certain table of allowance. In a sense, the HQDA G–8 conducts a WSR-like process of the ACAT III ammunition items during this pre-POM review.

J–6. Annual ammunition program reviews

a. At HQDA level, two annual reviews of the ammunition portfolio are conducted. These reviews include representatives from ASA (ALT), Army Budget Office, HQDA, Program Executive Office, Ammunition, PMs, AMC, JMC inventory managers, and others.

b. The November review focuses on the current year of execution and the next budget year. Issues discussed include evolving or unresolved issues and new issues, current production problems (that is, backlog of undelivered), appropriation bill or continuing resolution issues or impacts, specific issues (such as every other year procurements), and current OCO requests. Emphasis is placed on potential funding changes or reprogramming.

c. The January review focuses on the POM years. Individual item-level reviews are conducted with analysis of inventory levels, serviceability, buys, expenditures, age, and IB issues and impacts. A detailed line-by-line perspective is developed of evolving or emerging issues which affect POM resourcing. OCO request possibilities are also evaluated. This review emphasizes future funding requests (for example, POM).

J–7. Total Army Ammunition Authorization and Allocation Conference and Missile Distribution Plan Conference

a. The primary forums through which HQDA G–3/G–4 ammunition management offices distribute ammunition authorizations and allocations are the TA4C and the MIDP conferences. The primary responsibilities of the TA4C and MIDP conference are to—

(1) Authorize the use of Army ammunition and prioritize ammunition allocations in support of validated requirements.

(2) Direct the worldwide positioning of Army ammunition to support Army readiness and effective and efficient stockpile management.

(3) Serve as a forum for informing Army ammunition managers about ammunition management policy, trends, requirements, and logistics issues.

b. The TA4C is generally held in April and August each year. The TA4C distributes initial authorizations in TAMIS for all conventional ammunition requirements at the April TA4C and adjusts them as needed at the August conference.

c. The MIDP conference is held just prior to or after the April TA4C and distributes authorizations and allocations for Army missiles.

d. HQDA ammunition managers co-chair the TA4C and MIDP conference. Representatives from all ACOM-level organizations having conventional ammunition and missile requirements attend the TA4C and MIDP conferences. Attendees must be knowledgeable of the command's requirements and priorities and must be authorized and prepared to make decisions for their commands.

e. Authorizations distributed at the TA4C and MIDP conference support the upcoming FY ammunition and missile requirements. In the event unplanned or emergency requirements occur outside of the TA4C and MIDP conference, command-level organizations may submit—via TAMIS to DCS, G–3/5/7—ammunition management office a by-

DODIC and nomenclature list of the required ammunition and quantities, justification, and an assessment of the operational impact of not receiving them. Such requests must be the exception rather than the rule.

f. Guidance specific to MIDP conferences:

(1) Missiles are high-dollar, high-demand, low-density ammunition that require intensive management at all levels.

(2) The Army does not procure live missiles for training. Units receive live missiles for training only if they are available through shelf-life management.

(3) Inventory data at the MIDP conference must include:

(a) By-DODIC quantities of serviceable missiles that will be available to support operational requirements.

(b) By-DODIC and location, quantities of serviceable missiles that are expected to reach their shelf life within three years and which are not expected to receive any further shelf-life extensions. The HQDA ammunition managers will give priority to using these missiles to support valid training and test requirements.

(c) Supply points will issue only the DODICs and quantities of missiles authorized in TAMIS to a unit or organization.

(d) Units must request an authorization change through command channels if a missile DODIC other than the one authorized is to be issued.

g. The HQDA's goal is to fully resource all valid requirements. When supply constraints exist, command-level ammunition managers must be able to identify their critical requirements and the operational impact of receiving authorizations that are less than their full requirement.

h. HQDA ammunition managers will ensure that authorized quantities are closely aligned with available supply, thereby giving units a reasonable expectation that ammunition will be available to support their requirements when needed.

i. Supply on hand is not justification for an authorization. When possible, HQDA ammunition managers will authorize older-model and substitute ammunition for training and tests to facilitate sound stockpile management and to prevent the accumulation of aging stocks in the stockpile. The DCS, G–4, ammunition managers will make every effort to issue the specific DODICs and quantities authorized to a unit or organization.

j. No later than the end of the second quarter annually, ACOMs may turn back ammunition and missile authorizations they do not intend to use during the remainder of the current FY. Tests are an exception and unused test authorizations will be returned to DCS, G–3/5/7 (DA G–37/TRA), upon completion of the test for which they were authorized. HQDA ammunition managers may redistribute these authorizations to support other requirements, if necessary.

J–8. Program Executive Office, Ammunition, portfolio reviews

a. Ensure a common understanding and full visibility of requirements driving fiscal investment across research and development, procurement, and sustainment.

b. It consists of three sessions:

(1) *First session.* PM or program director, TRADOC, contracting centers, ARDEC, JMC, and other Services prioritize efforts and identify opportunities to modify or terminate requirements where capability redundancy exists, and/or to reduce or stop production and/or delay development.

(2) *Second session.* Includes representatives from offices of the DCS, G–3; DCS, G–4; and DCS, G–8 who use recommendations from HQDA to feed the ammunition management processes, control redundancy, and support the POM build.

(3) *Third session.* The general officer or executive-level review assesses or agrees regarding capability roadmaps and warfighter modernization S&T efforts as well as should-cost, requirements, capability redundancy, and opportunities to reduce production quantities.

Appendix K

Joint Department Defense and Commercial Industry Forums

K–1. Joint Ordnance Commander's Group

a. JOCG pursues common business practices and merges other ammunition research, development, sustainment, and logistics groups into one life cycle conventional ammunition group. The JOCG mission includes advocating for jointness in conventional ammunition systems and processes, ensuring interoperability and/or interchangeability of ammunition systems, influencing and shaping policy, and advocating for effective use of the NTIB.

b. The JOCG scope includes all conventional ammunition and the total life cycle. Principal members include general and flag officers from each of the Services, including the Commanding General, JMC; Program Executive Office, Ammunition; Commanding General, Marine Corps Systems Command; NAVAIR; Program Executive Office, Unmanned Aviation and Strike Weapons; Naval Sea Systems Command; Ordnance Safety; Program Executive Officer, Weapons; Air Force Life Cycle Management Center; and Air Force Materiel Command. Additional participants may include Office of the Under Secretary of Defense, Special Operations Command, Defense Contract Management Agency, Deputy Executive Director for Conventional Ammunition, and ARDEC. The JOCG meets semiannually or more often as deemed necessary by its members.

K–2. Industrial Committee of Ammunition Producers

a. *Objectives.* The committee provides a forum for the open exchange of Government and industry views related to the DOD ammunition area. Specific objectives include—

(1) Review and discuss Government ammunition acquisition policies, procedures, and actions.

(2) Report on the health of the various sectors of the ammunition industry.

(3) Identify impediments to sustaining a responsive ammunition IB.

(4) Provide a platform for identifying issues related to the ammunition life cycle, from development through disposal.

b. *Membership.* The Industrial Committee of Ammunition Producers (ICAP) is formed from the National Defense Industrial Association (NDIA) corporate membership consisting of executives from defense industry producers of ammunition and ammunition components. Membership positions include a chair and the following sector leads; large caliber and bombs, small and medium caliber ammunition, propellants and explosives, GOCOs, warheads and rockets, pyrotechnics, fuzes, systems, electronics and sensors, and demilitarization.

c. *Expectations.* Each member of the ICAP is expected to represent a discipline or sector of the ammunition community as described in paragraph K–2*b*. Members serve for 2 years, with approximately half changing each year to maintain continuity. Members may serve longer or shorter terms at the recommendation of the chair and the concurrence of the vice president, operations, and the NDIA.

d. *Meetings.* The ICAP meets at the call of the ICAP chair at sites and times convenient to the membership. ICAP meetings are held semiannually along with quarterly webinars. Topics for discussion by the ICAP are solicited from NDIA members within the ammunition community and from interested Government agencies. Outside speakers will be invited as needed to address the topics. No consensus advice or recommendations resulting from group deliberation or interaction is expected. The intent is to share an open exchange of information or viewpoints between attendees rather than to formulate collaborative advice, opinions, or recommendations from the ICAP acting in a collective mode.

e. *Government relations.* The objective of the ICAP is the open exchange of Government and industry views; Government attendance is encouraged. The NDIA chair may invite various Government organizations and request Government attendance at the ICAP, consistent with the DOD joint ethics regulation. Government participants are involved in the management or control of the ICAP or other NDIA activities. The NDIA chair invites the following Government organizations to participate in ICAP meetings, but members of the ICAP may suggest or request at any time that other Government organizations participate or provide liaisons: PEO, Ammunition; PEO, Tactical Missiles; and Commanding General, JMC.

K–3. Ammunition Executive Summit

The purpose of the annual, NDIA-hosted Ammunition Executive Summit (MES) is to address the challenges of maintaining a stable and responsive ammunition enterprise. The MES—which is jointly presided over by JMC and Program Executive Office, Ammunition, leadership—explores the contemporary dynamics that affect both the current and future industrial manufacturing complex that supports our warfighting capability. In addition to industry executives, key Government acquisition leaders, program managers, research and technology centers, and academia involved in the U.S. ammunition enterprise attend the summit. The MES forum is intended to create a thoughtful and meaningful discourse on the critical factors and developments that will shape the current and future ammunition landscape. It convenes key

practitioners within the ammunition and weapons platform communities to work on solutions for the U.S. warfighter and our allies.

Glossary

Section I

Abbreviations

AA&E
arms, ammunition, and explosives

AAE
Army acquisition executive

AAP
Army ammunition plant

AAR
administrative adjustment report

ACA
air clearance authority

ACAT
acquisition category

ACFT
aircraft

ACOM
Army command

ACR
ammunition condition report

ACSA
acquisition and cross-servicing agreements

AE
ammunition and explosives

AESIP
Army Enterprise System Integration Program

AGM
air to ground missile

AHA
ammunition holding area

AIN
ammunition information notice

AIS
Automated Information System

AIT
automatic identification technology

ALR&D
Ammunition Logistics Research and Development

AMC
Army Materiel Command

AMCOM
Aviation and Missile Command

AMDF
Army master data file

AMRDEC
Aviation and Missile Research Development, Engineering Center

AMS
Army management structure

AMSJM–LIT
Ammunition Logistics Readiness Center Transportation Office

APE
ammunition peculiar equipment

APOD
aerial port of debarkation

APOE
aerial port of embarkation

APS
Army pre-positioned stock

AR
Army regulation

ARDEC
Armament Research Development and Engineering Center

ARMS
Armament Retooling and Manufacturing Support

ARNG
Army National Guard

AROC
Army Requirements Oversight Council

ARSTAF
Army Staff

ARW
ammunition requirements worksheet

ASA
Assistant Secretary of the Army

ASA (ALT)
Assistant Secretary of the Army, Acquisition, Logistics, and Technology

ASCC
Army service component command

ASP
ammunition supply point

ASRP
Ammunition Stockpile Reliability Program

ATACMS
Army Tactical Missile System

ATCMD
advance transportation control and movement document

ATEC
Army Test and Evaluation Command

ATHP
ammunition transfer and holding points

BAG
budget activity group

BCU
battery coolant unit

BIP
ballistic impact point

BIT
built-in test

BLIN
budget line item number

C4ISR
command, control, communications, computers, intelligence, surveillance, and reconnaissance

CAA
Center for Army Analysis

CAAA
Crane Army Ammunition Activity

CAC
common access card

CAM
Centralized Ammunition Management

CARES
Conventional Ammunition Readiness Evaluation System

CAT
category

CBA
capability-based assessment

CBL
commercial bill of lading

CC
condition code

CCDR
combatant commander

CECOM LCMC
U.S. Army CECOM Life Cycle Management Command (formerly the Communications-Electronics Command)

CIIC
controlled inventory item code

CITE
Center of Industrial and Technical Excellence

CL
combat load

CLU
command launch unit

COCO
contractor owned, contractor operated

COCOM
combatant command

COE
Center of Excellence

CONUS
continental United States

CPD
capability production document

CRDA
cooperative research and development agreement

CRMS
contingency retention ammunition stock

CTC
combat training center

CTG
cartridge
C1, C2, C3, or C4
DOD ammunition codes for readiness conditions

DA
Department of the Army

DA Pam
Department of the Army pamphlet

DAC
Defense Ammunition Center

DARAD
deviation approval and risk acceptance document

DCS
Deputy Chief of Staff

DD Form
Department of Defense Form

DFARS
Defense Federal Acquisition Regulation Supplement

DLA
Defense Logistics Agency

DOD
Department of Defense

DODAAC
Department of Defense activities address code

DODAC
Department of Defense Ammunition Code

DODD
Department of Defense directive

DODI
Department of Defense instruction

DODIC
Department of Defense identification code

DODM
Department of Defense manual

DOT
department of transportation

DRU
direct reporting unit

DSN
defense switched network

DT
developmental test

DTR
Defense Transportation Regulation

DTTS
Defense Transportation Tracking System

EOD
explosive ordnance disposal

ERMS
economic retention ammunition stock

ERP
enterprise resource planning

ESS
explosive safety siting

ETA
electronic transportation acquisition

ETM
elapsed time meter

FCR
fire controlled radar

FDT
first destination transportation

FDT&E
force development test and experimentation

FLIPL
financial liability investigation of property loss

FMR
full materiel release

FMS
foreign military sales

FORSCOM
Forces Command

FRHO
radio frequency handover

FRP
full-rate production

FSC
Federal supply classification

FSP
field surveillance program

FWT
fair wear and tear

FY
fiscal year

FYDP
Future Years Defense Program

FYTP
Five Year Test Program

G–37/TRA
DCS, G–3/5/7, Munitions Management Division (Department of the Army G–37/Training)

GATES
Global Air Transportation Execution System

GCSS–A
Global Combat Support System—Army

GFEBS
General Fund Enterprise Business System

GFM
Global Freight Management

GIS
Geographic Information System

GMLR
guided missiles and large rockets

GOCO
Government owned, contractor operated

GOGO
Government owned, Government operated

HD
hazard division

HE
high explosive

HERO
hazards of electromagnetic radiation to ordnance

HMU
health monitoring unit

HQ
headquarters

HQDA
Headquarters, Department of the Army

HSAAP
Holston Army ammunition plant

IAAAP
Iowa Army ammunition plant

IAR
inventory adjustment report

IB
industrial base

IBAT
Industrial Base Assessment Tool

IBSP
Industrial Base Strategic Plan

ICAP
Industrial Committee of Ammunition Producers

ICD
initial capabilities document

ICRDA
international cooperative research, development, and acquisition

ID
identification

IDM
Internet data modem

IDT
intradepot transfer

IHADDS
Integrated Helmet and Display Sight System

IIN
in transit-in notification

ILS
integrated logistics strategy

IMCOM
Installation Management Command

IRRIS
Intelligent Road/Rail Information Server

ITV
in transit visibility

IUID
item unique identification

JBC–P
Joint Battle Command—Platform

JCIDS
Joint Capabilities Integration and Development System

JMC
Joint Munitions Command

JOCG
Joint Ordnance Commanders Group

JROC
Joint Requirements Oversight Council

LAR
logistics assistance representative

LCMC
life cycle management command

LLC
limited life component

LMP
Logistics Modernization Program

LOAL
lock on after launch

LRC
logistics readiness center

LRTAO
Logistics Review and Technical Assistance Office

LSSS
logistics support, supplies, or services

M&S
modeling and simulation

MACS
Modular Artillery Charge System

MARID
Mobile Ammunition Renovation, Inspection, and Demilitarization

MATDEV
materiel developer

MCAAP
McAlester Army ammunition plant

MDA
milestone decision authority

MDD
materiel development decision

MDEP
management decision package

MDPP
ammunition deployment planning process

MES
Ammunition Executive Summit

MFDR
Missile Firing Data Report

MHP
Ammunition History Program

MIDP
Missile Distribution Plan

MIL–STD
Military Standard

MIN
missile information notice

MIPR
military interdepartmental purchase request

MLRS
Multiple Launch Rocket System

mm
millimeter

mm
millimeter

MMC
materiel management center

MPH
miles per hour

MRO
materiel release order

MRP
ammunition requirements process

MRR
ammunition readiness review

MSC
major subordinate command

MSRP
Missile Stockpile Reliability Program

MTMS
Ammunition Transportation Management System

NA
not applicable

NAR
notice of ammunition reclassification

NDIA
National Defense Industrial Association

NICP
national inventory control point

NLAC
National Level Ammunition Capability

NSN
national stock number

NTIB
national technology and industrial base

OCO
overseas contingency operations

OCONUS
outside the continental United States

OMA
operation and maintenance, Army

OPL
operational load

OPLAN
operations plan

OPROJ
operational project

OSD
Office of the Secretary of Defense

OT
operational test

P&A
price and availability

PAA
procurement ammunition, Army

PATRIOT
Phased Array Tracking Radar Intercept of Target

PBA
Pine Bluff Arsenal

PBC5
property book code 5

PBO
property book officer

PDJS
project director of Joint Services

PEG
program evaluation group

PEM
posting error minus

PEO
program executive officer

PEP
posting error plus

PES
potential explosion site

PM
product manager

POE
point of embarkation

POI
program of instruction

POM
program objective memorandum

PSP
Propellant Stability Program

QASAS
quality assurance specialist, ammunition surveillance

QWARRM
qualitative war reserve requirements for ammunition

R3
reclamation, recycling, and reuse

RDD
required delivery date

RDEC
research, development, and engineering center

RDECOM
Research and Development Engineering Command

RDP
ration distributing point

RDT&E
research, development, test, and evaluation

REPSHIP
report of shipment

RES
reserve

RF
radio frequency

RFID
radio frequency identification

RIC
routing identifier code

RMMS
requirement related ammunition stock

RP
rocket pod

RPI
real property inventory

RRAPDS
Remote Readiness, Asset Prognostic/Diagnosis System

RRDA/B5A
Resource Recovery and Disposition Account/B5A

S&T
science and technology

SAAS
Standard Army Ammunition System

SAAS MOD
Standard Army Ammunition System Modernization

SAILS
Standard Army Intermediate Level Supply

SB
supply bulletin

SDDC
Surface Deployment and Distribution Command

SDO
supply depot operation

SEP
Systems Evaluation Plan

SL
sustainment load

SMCA
single manager for conventional ammunition

SN
serial number

SOF
special operations force

SOP
standard operating procedure

SP
storage point

SPAR
strategic portfolio analysis review

SPF
single point failure

SPOD
seaport of debarkation

SPOE
seaport of embarkation

SQUID
SRP QASAS user inspection device

SRA
stock record account

SRC
security risk code

SRO
stock record officer

SRP
Stockpile Reliability Program

SSA
supply support activity

STRAC
Standards in Training Commission

T&E
test and evaluation

TA4C
Total Army Ammunition Authorization and Allocation Conference

TAC
transportation account code

TACOM
Tank—Automotive Command

TADS
Target Acquisition Designator System

TAMIS
Total Ammunition Management Information System

TAMR
total Army ammunition requirements

TB
technical bulletin

TCN
transportation control number

TDA
table of distribution and allowances

TDP
technical data package

TDY
temporary duty

TEMP
test and evaluation master plan

TM
technical manual

TMDE
test, measurement, and diagnostic equipment

TOE
table of organization and equipment

TOW
tube-launched, optically tracked, wire-guided

TRADOC
Training and Doctrine Command

TRL
technology readiness level

TSA
theater storage area

TSARC
test schedule and review committee

TUO
training use only

UIC
unit identification code

UII
unique item identifier

UIT
unique item tracking

UN
United Nations

USAR
U.S. Army Reserve

USARPAC
U.S. Army Pacific

USC
United States Code

USSOCOM
U.S. Special Operations Command

WARS
Worldwide Ammunition Report System

WARS–NT
WARS–New Technology

WIPT
working-level integrated product team

WR
war reserve

WRSA
war reserve stocks for allies

WSR
weapon system review

Section II

Terms

ammunition
Includes, but is not necessarily limited to, all items of training and WR ammunition, chemical propellants (liquid and solid), high and low explosives, rockets, guided missiles, warheads, devices, signals, components (including chemical fillers), and associated substances that contain energetic materiel and present potential hazards to life or property.

ammunition enterprise
DOD organizations that seek to achieve the highest possible degree of effectiveness and efficiencies in DOD operations for acquisition of top quality conventional ammunition for U.S forces.

ammunition industrial base
A conglomeration of military ammunition production and strategic storage facilities. These including GOGO, GOCO and COCO facilities.

Ammunition Industrial Base Corporate Board
Sole management body for strategic, resource, operational, and organizational decisions affecting the ammunition IB. The board functions as the deliberative body that makes overarching strategic decisions to balance production risk, efficiencies and sustain critical manufacturing and logistics capabilities, capacities, and skills within the ammunition IB.

Ammunition Industrial Base Task Force
Commercial consortium of ammunition producers whose mission is to ensure there is adequate funding and policies to sustain a responsive capable domestic IB to develop, produce and support superior ammunition for the U.S. military and its allies.

ammunition residue
Items remaining after ammunition and missiles are used. Ammunition residue includes such items as steel, plastic, or brass cartridge cases; links; safety wires; nose plugs; launch tubes; pull rings and levers; fin protectors; safety clips; igniters; firing devices; grommets; cardboard and wooden boxes; cans; missile containers; missile components; banding strips; pallets; and other items used to package ammunition and missiles.

ammunition supply point
An SSA that receives, stores, issues, and maintains accountability of ammunition.

Army Ammunition General Officer Steering Committee
Primary senior-level ammunition forum that considers and provides direction related to Army ammunition readiness and management.

Army Ammunition Requirements Councils of Colonels
The council is a semiannual forum, chaired by the DCS, G–3/5/7 (DAMO–TRA), and TRADOC Capability Manager-Live, responsible for formally analyzing, approving, and synchronizing proposed changes to Army ammunition requirements (Institutional POIs, Home Station/CTC, CLs, and OPLs).

Center of Industrial and Technical Excellence
A specific, technical competency designation, directed by SECARMY (in accordance with 10 USC 2474) for organic depot maintenance activities. These include maintenance activities that may be performed at ammunition GOGOs.

combat load
Standard quantity and type of ammunition an individual weapon, crew-served weapon, or a weapons platform and its TOE-designated ammunition carriers are designed to hold. CLs for bulk ammunition (grenades, signals, et cetera) are not associated with a weapon or weapons platform. Bulk ammunition CLs are assigned by SRC and reflect the quantity of ammunition required to give unit's capability and flexibility. CLs support the initiation of contingency and combat operations and are the basic building blocks of Army WR requirements.

Enterprise–Integrated Logistics Strategy
Provides enterprise framework for optimizing readiness and efficiency across the wholesale ammunition logistics base. It addresses SDOs, third-party, and non-SDO workload and presents an approach and methodology aimed at ensuring readiness and efficiency in the face of fluctuating workload and budget.

full materiel release
FMR is the formal certification that the materiel is safe, suitable (meets all of its performance requirements), and supportable (logistically) when used within its stated operational parameters. This certification provides the authorization for a PM to proceed to—(1) A FRP Decision Review (on developmental programs) when all MR requirements are satisfied. (2) Fielding to Soldiers on nondevelopmental acquisition programs or when satisfying requirements with commercial products. In these cases, all FMR requirements must be satisfied.

logistics assistance representative
A JMC ammunition LAR is a member of the AMC Logistics Assistance Program, which aids the early detection and resolution of logistics-related problems that affect unit and/or materiel readiness. LARs analyze, advise, assist, and train in all areas of ammunition logistics.

Logistics Modernization Program
Key ERP system the ammunition community implemented as part of the Army Logistics Enterprise. LMP supports the modernization of mission business processes and leverages the AMC ERP systems to maximize the use of enterprise resources across the ammunition IB.

malfunction
Failure of an ammunition item to function as expected when fired or launched, explosive items that fail to function.
a. Malfunctions include hang-fires, misfires, duds, abnormal functioning, and premature functioning of explosive ammunition items under normal handling, maintenance, storage, transportation, and tactical deployment.
b. Malfunctions do not include accidents or incidents that result solely from negligence, malpractice, or situations such as vehicle accidents or fires.
c. ACOMs, ASCCs, and DRUs divide malfunctions into four classes: class A, class B, class C, and class X.
(1) Class A malfunctions result in death or lost-time injury, are similar to previous malfunctions that have resulted in death or lost-time injury, are judged as having had an appreciable probability of causing death or lost-time injury, or have adverse political implications.
(2) Class B malfunctions result in damage to major equipment that cannot be repaired at the unit level of maintenance or result in an ammunition suspension that significantly impacts readiness or training.
(3) Class C malfunctions involve any other performance incident not covered above.
(4) Class X malfunctions involved any other nonperformance incidents (visual defects).

military ammunition rule
Rule published by the Environmental Protection Agency on 12 February 1997 that identifies when conventional and chemical military ammunition become hazardous waste subject to the Resource Conservation and Recovery Act and provides safe storage and transportation of such waste.

missile distribution plan
Primary forum through which the DCS, G–4 and DCS, G–3/5/7, ammunition management offices distribute missile authorizations to all ACOMs, organizations and agencies.

national technology and industrial base
Persons and organizations engaged in research, development, production, integration, services, or information technology activities conducted within the United States and Canada (Section 2500, Title 10, United States Code, Chapter 148).

operational load
The ammunition that Army units require to support or conduct a broad range of day-to-day operational missions, for example, installation EOD, special reaction team operations, ceremonies, guard missions, force protection, SOF predeployment site surveys, and so on. OPL requirements are developed in accordance with DA Pam 350–38 and AR 5–13.

operational projects
Ammunition set aside for a specific unit or mission as outlined in AR 710–2.

operations plan requirements
Total quantity of ammunition required to execute an ASCC's plan to equip a specified force structure to perform its assigned military mission and meet the CCDR objectives.

public–private partnerships
Agreement between an organic depot, plant or arsenal and one or more private or Government entities to perform work or use facilities and equipment. Partnership agreements can range from basic memorandum of understanding to more formal contracts depending on the specific situation.

quality assurance specialist, ammunition surveillance
Member of civilian career program established to develop, manage, and execute a worldwide ammunition surveillance program. A QASAS is responsible for conducting examinations, tests, and investigations required to evaluate the current degree of stockpile serviceability and determine future stockpile trends. A QASAS performs logistics functions, including monitoring all AEs operations for explosives safety regulatory compliance and providing technical advice relative to ammunition storage, issue, maintenance, demilitarization, transportation, explosives safety, and chemical surety.

safety confirmation
A formal document that provides the MATDEV and the decision-maker with the test agency's safety findings and conclusions and that states whether the specified safety requirements have been met. It includes a risk assessment for hazards not adequately controlled, lists technical or operational limitations, and highlights safety problems requiring further testing

single point failure
Situation where only one (or no) qualified source or producer of a munition end item, component or raw material exists.

stratification process
A uniform portrayal of requirements and assets that is a computer generated application, time-phased simulation of actions causing changes in the supply position, for example, procurement, repair, receipt, issue, termination, and disposal of materiel.

supply depot operation
Functions including receipt, storage, inventory, surveillance, maintenance, issue, shipment, transportation, and demilitarization.

suspension or restriction
Administrative procedure used to identify all ammunition that have been withdrawn from issue or use, with or without qualifications, because of an unsafe or suspected unsafe condition or ammunition that cannot be expected to meet required performance under all conditions, but may be issued and used with qualifications on their use. Suspensions and restrictions may be categorized by type, block, or serious impact:
a. Type suspension or restriction. A suspension or restriction applied to all lots of one model number, including all modifications or variations produced (for example, cartridge 105-millimeter-HE plastic tracer M393A2 series).
b. Block suspension or restriction. A suspension or restriction applied to all lots of one particular modification or variation of a model number (for example, cartridge 105-millimeter-HE plastic tracer M393A2 series).
c. Serious impact suspension or restriction. A suspension or restriction that results in reducing serviceable assets of an ammunition item to less than 50 percent of the stockpile or 50 percent impact criteria at the outside continental United States ACOMs, ASCCs, or DRUs is determined to have a significant impact on Army readiness irrespective of percentage of stockpile affected, or prevents a unit from meeting its operational commitment.
d. Specific suspension or restriction. A suspension or restriction may also be applied to a specific lot, group of lots, or SN items without being categorized as defined above.

sustainment load
The ammunition needed to sustain a force's operations until resupply can be provided. Prior to the commencement of combat operations, a SL consists of a CL (for initiation) and a multiple(s) of the CL for sustainment of units that actually will be in an ASCC's geographic area of responsibility prior to establishment of an SLOC, in accordance with logistics plans in the ASCC's most demanding OS and Joint staff-approved theater OPLAN or CONPLAN. Once operations commence, SL requirements are tailored based on the ammunition required to support forces until the next scheduled resupply shipment.

Total Ammunition Management Information System
The HQDA ammunition requirements generator, prioritization tool, and reporting system for DA and subordinate Army organizations. TAMIS is managed by the Army G–3/5/7 Ammunition Management Office. TAMIS is used to calculate, validate, approve, and distribute ammunition authorizations and collect expenditures from each ACOM, ASCC, field operating agency, DRU, and the ARNG.

Total Ammunition Management Information System Advisory Group
DA G–3 TRA hosted forum tasked with steering TAMIS functionality, general operating guidelines, and prioritizing requirements.

Total Army Ammunition Authorization and Allocation Conference
Primary forum through which the DCS, G–4 and DCS, G–3/5/7, ammunition management offices distribute conventional ammunition authorizations and allocations in support of validated requirements and G–3 priorities to all ACOMs, organizations and agencies.

Total Army ammunition requirements
By-DODIC listing of Army near year and out year ammunition requirements for WRs and operations, testing, and training. Army requirements identify the types and quantities of ammunition the Army must have to execute its warfighting and daily operational, test, and training missions.

type classification
The process used to establish the degree of acceptability of materiel for Army use and—
a. Allows implementation of DOD 5000 series Milestone C, FRP, and post-full operational capability (FOC) life cycle decisions and documentation discussed in AR 70–1.
b. Provides data for authorization, procurement, logistics support, asset visibility, maintenance, and readiness reporting.
c. Satisfies the Army acquisition management process to determine that materiel is type classified STD with a logistics control code (LCC) A (accepted for Army use) prior to obligating procurement funds.
d. Integrates the acquisition process with standard Army logistics processes that lead to production and deployment (materiel fielding) of the materiel.