## **Army Regulation 702-6**

**Product Assurance** 

## Ammunition Stockpile Reliability Program

Headquarters
Department of the Army
Washington, DC
2 December 2016

**UNCLASSIFIED** 

# SUMMARY of CHANGE

AR 702–6 Ammunition Stockpile Reliability Program

This major revision, dated 2 December 2016---

- Adds responsibilities for the Deputy Chief of Staff, G=3/5/7 (para 1-4b).
- o Adds responsibilities for the Project Director-nonstandard ammunition (para 1–4k).
- o Identifies Department of the Army Civilian Quality Assurance Specialists (Ammunition Surveillance), General Scheule-1910 series (Career Program-20) as the organization responsible for the management and execution of the Ammunition Surveillance Program (para 3–1*a*).
- o Identifies the responsibilities of the military ammunition inspectors Staff Sergeant or above (military occupational specialty 89B) or designated civilian technicians (including local national at locations outside the United States) that have been trained and/or certified by the Defense Ammunition Center may supplement the Quality Assurance Specialist for the accomplishment of the Ammunition Surveillance Program (para 3–1b).
- o Establishes workload priorities for the Ammunition Surveillance Program and the process for risk acceptance or mitigation by the commander (para 3–2).
- o Requires performance of an initial receipt inspection on all Class V material that is received directly from the manufacturer (para 3-3a).
- o Requires periodic inspection of all field service account ammunition in Condition Codes A, B, C, D, E, and N for serviceability (deterioration and nonstandard conditions) (para 3–3*b*).
- o Requires periodic inspection of ammunition classified to Condition Codes F, G, H, and P using safety-in-storage criteria (para 3–3c).
- o Requires ammunition surveillance personnel at the shipping location to clear all lots of ammunition and explosives, and ammunition and explosives components and related material designated for shipment or issue (para 3-4a).
- o Requires Quality Assurance Specialist (Ammunition Surveillance) assigned to locations with live training areas to provide technical assistance on ammunition and explosives quality and explosives safety issues (para 3-4c).
- o Identifies the responsibilities of the quality assurance specialists (Career Program-20) personnel assigned as ammunition logistics assistance representatives (para 3–4f).

## \*Army Regulation 702-6

## Effective 2 January 2017

#### **Product Assurance**

## **Ammunition Stockpile Reliability Program**

By Order of the Secretary of the Army:

MARK A. MILLEY General, United States Army Chief of Staff

Official:

GERALD B. O'KEEFE Administrative Assistant to the Secretary of the Army

**History.** This publication is a major revision.

**Summary.** This regulation provides guidance and assigns responsibilities for managing the Ammunition Stockpile Reliability Program.

**Applicability.** This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.

#### 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 regulation 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 in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by pro- viding 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 higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix B).

**Supplementation.** Supplementation of this regulation and establishment of command and local forms are prohibited with- out prior approval from the Deputy Chief of Staff, G–4 (DALO–SUM), 500 Army Pentagon, Washington, DC 20310–0500.

**Suggested** improvements. Users 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–SUM), 500 Army Pentagon, Washington, DC 20310–0500.

**Distribution.** This publication is available in electronic media only and is intended for command levels C and D for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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## **Glossary**

## Chapter 1 Introduction

## 1-1. Purpose

This regulation prescribes policy, responsibilities, and guidance on the Ammunition Stockpile Reliability Program (ASRP). The ASRP provides life cycle responsibilities for monitoring performance, reliability, and safety characteristics of Class V items (that is, ammunition and explosives (AE) or DOD military munitions). This program applies to conventional and chemical ammunition, including small and large rockets, guided missiles, and associated materiel and non-standard ammunition (NSA), as applicable.

#### 1-2. References

See appendix A.

#### 1-3. Explanation of abbreviations and terms

See glossary.

## 1-4. Responsibilities

- a. Assistant Secretary of the Army (Acquisition, Logistics and Technology). The ASA (ALT) will review and identify programming requirements for procurement ammunition, Army (PAA) funded research, development, test, and evaluation (RDT&E) in support of ASRP until the procured item transitions to the Life Cycle Management Commands (LCMCs).
- b. Director of Army Safety. The DASAF has general staff responsibility for the Army's Explosives Safety Management Program (ESMP) and will—
- (1) Develop and monitor the Armywide policy and criteria for the Army's ESMP as an integral part of the Army Safety Program.
  - (2) Establish Department of the Army (DA) explosives safety standards.
  - c. Deputy Chief of Staff, G-3/5/7 The DCS, G-3/5/7 will—
  - (1) Consolidate and validate all AE requirements for ASRP.
  - (2) Prioritize all AE in support of validated requirements, to include AE needed to support the ASRP.
  - d. Deputy Chief of Staff, G-4. The DCS, G-4 will—
  - (1) Serve as the principal staff element for developing and disseminating ASRP policy.
- (2) Have primary staff responsibility for identifying to the extent possible all AE, equipment, and material requirements and services required to conduct the ASRP including the use of automatic identification technology.
  - (3) Implement the Army's ESMP as outlined in applicable Army policies and regulations.
  - (4) Develop policy for the logistics aspects of the ASRP.
- (5) Review and approve operation and maintenance, Army (OMA) requirements for the conduct of the ASRP. Include these requirements in the Army material plan.
- (6) Provide recommendations to the Deputy Chief of Staff, G-3/5/7 (DCS, G-3/5/7) for ASRP requirements for all AE items.
  - (7) Prioritize the allocation of resources for AE in support of the validated requirements for ASRP.
  - (8) Provide policy for the development, management, and prioritization of AE requirements.
  - e. Assistant Chief of Staff for Installation Management. The ACSIM will monitor the ASRP to-
  - (1) Ensure its compliance with the National Environmental Policy Act and other environmental requirements.
  - (2) Ensure environmental requirements are considered in the ASRP decisionmaking process.
  - f. Commanding General, U.S. Army Materiel Command. The CG, AMC will-
- (1) Conduct the ASRP, accumulate, and maintain data and findings for comparison with results of previous and subsequent tests.
  - (2) Coordinate the conduct of the ASRP with major field commands and technical agencies as required.
- (3) Budget and program OMA funding for the ASRP. Provide the ASA (ALT) and DCS, G-4 with budget and program requirements through established channels. The AMC budget and program will include funds required to support AMC's conduct of the ASRP.
- (4) Recruit, hire, and train personnel as Quality Assurance Specialist (Ammunition Surveillance) (QASAS) to conduct the ammunition surveillance program element (PE) of the ASRP per AR 702–12.

- (5) Ensure that the proper LCMCs maintain effective procedures for ammunition surveillance inspections worldwide.
- (6) Review ASRP guidance and findings continually to ensure the scope, methodology, and sample sizes for inspections and tests remain consistent with objectives, changing priorities, and operational experience.
- (7) Identify and conduct engineering and logistic corrective actions and develop schedules and resource needs required to restore and maintain the AE stockpile.
- (8) Manage the system of supply bulletins (SBs) and ammunition surveillance test plans (ASTPs) pertaining to field tests and inspection of AE items.
- (9) Manage the system of AE stockpile test procedures for other stockpile testing conducted where laboratory type tests are either performed with mobile test equipment, or conducted in special facilities such as the theater readiness monitor facility. Laboratory tests are also performed at:
  - (a) Proving grounds.
  - (b) Laboratories.
  - (c) Training facilities.
  - (d) Storage and field locations.
  - (10) Provide the DCS, G-4 with a summary of the test results.
- (11) Consult with subject matter experts, when test and analysis of an AE item will result in a recommendation not to extend the shelf life of AE that would significantly affect the Army's inventory for a weapon system.

*Note*. The activity conducting the analysis will provide supporting documentation to the DCS, G-4 for review to facilitate disposition of the AE.

- (12) Support and fund modernization efforts to improve ASRP methods, test, and predictive technology equipment.
- g. Commanders, Army commands, Army service component commands, and direct reporting units except U.S. Army Materiel Command. The Commanders, ACOMs, ASCCs, and DRUs, except AMC will—
- (1) Provide, on a nonreimbursable basis, support to the ASRP within their capability when requested by the CG, AMC for any portion of the ASRP that is conducted within their command or area of responsibility. This support will include, but may not be limited to the following:
  - (a) Furnishing test ranges, facilities, and firing units, as appropriate.
  - (b) Recovering test materiel.
  - (c) Moving related troops and materiel belonging to the supporting command.
- (2) Program, budget, and fund subordinate commands and installations for conducting surveillance inspections on those ammunition items accountable to these commands and installations.
- (3) Provide AMC with budget and program funding requirements that are beyond the requirements specified in paragraph 1-4g(1), and identified and required to support the ASRP functions performed by AMC installations and personnel.

*Note*. Funds required for other programs conducted in conjunction with the ASRP, such as annual service practice firings, will be excluded.

- (4) Provide reimbursement to commands providing ASRP support for AE and related functions (for example, QASAS personnel in accordance with AR 702–12 and this regulation).
  - h. Project executive officers and project managers. The PEOs and PMs will—
  - (1) Optimize the design of AE during its development.
- (2) Document, prior to fielding, life-limiting components and environmental factors identified as a result of reliability testing and/or predictive technology that degrade the shelf life of AE.
  - (3) Develop and publish the ASRP plan prior to material release.
  - (4) Initiate and fund the ASRP until the item is fielded.
- (5) Identify requirements for ASRP test samples throughout projected system life and incorporate these quantities into procurement contracts, as necessary.
  - (6) Provide ASRP OMA budget estimates to LCMCs 2 years prior to fielding the system.
- (7) Fund, design, build, and maintain any unique specialized test and predictive technology equipment necessary to conduct future ASRP or predictive technology testing.
- i. Heads of installations, activities, or commands with an ammunition and explosives mission. Heads of installations, activities, or commands with an AE mission will establish and maintain an ammunition surveillance program or provide reimbursement to commands providing ASRP support for AE and related support (for example, QASAS personnel in accordance with AR 702–12 and this regulation).

- *j. Director, U.S. Army Materiel Systems Analysis Activity.* The Director, AMSAA will conduct an overview analysis of the ASRP for AMC and will—
  - (1) Individual programs are being conducted satisfactorily.
  - (2) The methodologies used and the results obtained are the best possible.
  - (3) Perform special investigations and studies of ASRP, for AMC, as required.
  - k. Project Director-nonstandard ammunition. The PD-NSA will-
- (1) Develop or obtain technical data on AE items procured by PD-NSA, characterize AE to the extent that it can be inspected during storage for safety and serviceability, and define any critical characteristics that require unique monitoring.
- (2) Fund, design, and build any unique or specialized test or surveillance equipment on AE items procured by PD-NSA, necessary to conduct future ASRP.
- (3) Direct owners or caretakers of NSA to provide known configurations, modifications, and other unique characteristics required to accomplish future surveillance under the ASRP.

## 1-5. Objectives

The objectives of the ASRP are to—

- a. Ensure the AE stockpile continues to meet established performance, explosives safety, readiness, quality, and reliability requirements.
- b. Identify trends in reliability and critical performance parameters for timely decision making on the replacement, procurement, or maintenance for expiring AE required to maintain AE inventory.
  - c. Identify AE items that require maintenance, retrograde, or disposal.
- d. Provide the root cause of failure and data to support malfunction investigations to determine if the AE is safe for continued storage, handling, transportation, and use.
- e. Identify AE items with marginal reliability of performance not affecting safety of use for priority-of-issue and restricted use.
- f. Identify AE, including AE components, with degrading performance affecting system safety for restricted use and corrective actions.
- g. Identify assets that require corrective action to restore them to a satisfactory condition. These data will also provide a basis for determining the engineering and logistic corrective actions required.
- h. Provide a basis for determining whether the AE shelf life or certification period can be extended, or if a new shelf life or certification period must be established through scheduled maintenance. If the need for scheduled maintenance is indicated, provide the basis for determining the level of scheduled maintenance required.
  - i. Identify weak links in designs by using predictive methods during research and development.
  - j. Establish the initial shelf life and/or certification period requirements.
- k. Establish the activities necessary to ensure that sufficient data is available to make shelf life and /or certification period decisions.

## Chapter 2

## **Ammunition Stockpile Reliability Program Policy**

#### 2-1. Policy

- a. The validity of the Ammunition Stockpile Reliability Program. The ASRP has proven essential for providing the data needed to ensure the readiness of the Army's AE. Although some AE items (for example, missiles, rockets) spend nearly all their life in storage, all AE must be ready for use. Therefore, an Army program (that is, the ASRP) that continually measures the reliability of the AE stockpile is essential for providing data needed to ensure that safe and reliable AE is available for issue and use.
- b. Ammunition Stockpile Reliability Program support agreements and memorandum of understanding. When appropriate, AMC and major field commands will develop ASRP support agreements, including intra-Service support agreements and memorandum of understanding. To consolidate resources and reduce the overall cost of the ASRP, use inter-Service and foreign military sales agreements when multiple Services own the same AE item.
  - c. Ammunition Stockpile Reliability Program inspection policy.
- (1) The Army must apply the military Service's quality requirements, including the inspection and test procedures, to AE assets in storage. In general, inspect common AE items used by multiple Services in accordance with Army defect criteria and sampling plans without regard to current owner. Inspect Service unique AE items by the Service's criteria. In the absence of inspection procedures, apply DA Pamphlet (DA Pam) 742–1 criteria.

- (2) Propellant in conventional AE is subject to stabilizer deterioration and requires intensive management. Organizations storing propellant and propelling charges are responsible for monitoring propellant stocks for remaining effective stabilizer. Army installations storing propellant and propelling charges will ensure that subordinate and tenant activities follow the requirements of DA Pam 742–1. The U.S. Army Research, Development, and Engineering Command and the U.S. Army Test and Evaluation Command will establish and manage test programs for their nonstandard propellant material. The program will include a chemical analysis to determine the stabilizer content, and estimate for the remaining safe storage life. Conduct periodic throughout the life of the propellant until all quantities of the propellant have been demilitarized or used. Forward test results to the Joint Munitions Command Propellant Stability Program Manager.
- (3) The U.S. Army Research, Development, and Engineering Command Aviation and Missile Research, Development, and Engineering Center manages the Guided Missile and Large Rocket Propellant Assessment Program using shelf life or certification periods. Technical bulletin (TB) 9–1300–385, appendix G lists current shelf life and certification periods. Calculate shelf life based on the manufacturing date found within the AE's lot number. Classify guided missiles and large rockets with expired shelf life to Condition Code J.
- d. Environmental policy. The ASRP will comply with Army policy on the environment. This policy will be applied as required by AR 200-1.

## 2-2. Elements of the Ammunition Stockpile Reliability Program

The ASRP consists of the RDT&E elements, Stockpile Function Test Program, Stockpile Laboratory Test Program and Ammunition Surveillance Program. Depending on the type and nature of the AE item to be evaluated, any part or all of these programs may be used.

- a. Research, development, test, and evaluation. Establish the initial shelf life during RDT&E This phase also focuses on identifying critical life-limiting AE components, and methods to mitigate any associated risks through the ASRP. Develop the initial ASRP approach for the system and consider life cycle costs in design trade-offs. It is carried out by—
  - (1) Reliability testing and predictive technology test methods.
  - (2) Incorporating AE designs that provide the capability for nondestructive test or access.
  - (3) Designing and building specialized ASRP test and predictive technology equipment.
- (4) Establishing the maximum acceptable degradation that can occur in the critical performance parameters without impeding mission performance.
- (5) Designing and developing ASRP test, and predictive technology equipment capable of diagnosing the optimum number of critical performance parameters.
- b. Stockpile Function Test Program. This program uses physical testing of hardware to determine continuing reliability, detects trends in the AE stockpile, and provides critical assessments to stockpile managers to support decisions essential for managing the AE stockpile. It is accomplished through—
- (1) Function tests at ammunition test facilities including proving grounds. For the conduct of these tests, classify the AE stockpile into representative segments, by DOD identification code production lots, manufacturer, storage locations, or climatic conditions. Then select, test, and rate samples from the segments for reliability, performance, and serviceability of the AE stockpile as a whole. This element pertains to, but may not be limited to, AE such as:
  - (a) Mortars.
  - (b) Antitank mines.
  - (c) Large and small caliber guns and howitzer ammunition.
  - (d) Cartridge-actuated devices.
  - (e) Propellant-actuated devices.
  - (f) Missiles.
  - (g) Pyrotechnics, signals, and simulators, hand grenades and antipersonnel mines.
- (h) Certain chemical AE with chemical compound fillers of smoke that do not require extensive use of instruments or range facilities.
  - (i) Certain AE used for demolition that do not require extensive use of instruments or range facilities.
- (2) Unit firing of large rockets and guided missiles. Due to the high costs of these types of AE, the live-firing training or testing events are used to obtain and/or supplement performance and reliability data obtained during other elements of the ASRP. AR 700–19 and DA Pam 700–19 contain the policy and guidance for submitting these reports. In some cases, such events may be monitored by telemetry or other equipment, as required, to collect stockpile reliability data.
- (3) Nondestructive tests. The material commodity command directs nondestructive function tests. These include tests performed worldwide by mobile test vans or suit case type testers. These tests may be independent of, or added to, other inspections and tests included in this regulation. Nondestructive tests are used to—

- (a) Identify and segregate failing hardware.
- (b) Determine the extent of degradation or remaining useful life of a specific portion of the AE stockpile, for example, items exposed to environments or handling in excess of specifications for that item.
  - (c) Collect parametric data for reliability and performance trend analysis.
- (d) Revise or establish criteria for surveillance, service life, shelf life, or similar yardsticks for AE in use or in the AE stockpile.
- (4) *Identify function-testing requirements for nonstandard ammunition*. Such tests are not part of the ASRP unless the PD-NSA or owner requests and funds such tests.
- c. Stockpile Laboratory Test Program. AE that are conducive to laboratory testing include, but may not be limited to, toxic chemicals, propellants, cartridge-actuated devices, propellant-actuated devices, and complex conventional AE, including missiles, and some AE components.
  - (1) The program objectives are to-
- (a) Determine the AE stockpile's condition through laboratory testing for critical performance parameters that cannot be measured through surveillance or function testing.
- (b) Quantify any degradation and/or deterioration of AE as a function of time, location, method of storage, environmental exposure, operational use, and/or other AE stockpile stratification.
  - (c) Predict remaining useful life, safety, and reliability.
- (d) Provide essential feedback to improve maintenance and repair, support malfunction and deficiency investigations, and develop lessons learned for process and design problems, that in turn structure research and development, future test, and procurement strategies.
- (e) Provide trend predictions to be used as a tool to determine life expectancy and actively detect safety and performance deficiencies. Engineering centers will use this information to make decisions with respect to actions to be taken for fielded AE and design changes to existing and future AE.
  - (f) Determine if the AE tested are safe for continued storage, handling, transportation, or use.
  - (g) Predict marginal reliability or performance of the AE stockpile prior to its actual occurrence.
  - (h) Establish, confirm, or revise the shelf life or recertification periods for the AE.
  - (2) The program uses or includes—
  - (a) Uses destructive and nondestructive testing techniques.
  - (b) Both standard test equipment and special-purpose test equipment dedicated to specific AE.
- (c) The existing lab capacity of the AMC's LCMCs, other government agencies, AE contractors, or independent contractors.
- (d) Chemical analysis of double-base, composite-modified double-base, and minimum-signature propellant to determine the stabilizer content, and estimate the remaining safe storage life. Conduct this analysis periodically throughout the life of the propellant until all quantities of the propellant have been expended or demilitarized.
  - (e) Material analysis of seals, lubricants, adhesives, and conformal coatings.
- (f) Component level testing of warheads, submunitions, fuzes, safe, and arm devices, motors, squibs, or initiators, gyroscopes, accumulators, electro-optical and/or millimeter wave seekers, autopilots, control sections, and payload delivery devices.
- (3) The PD-NSA or the specific applicable owner will complete NSA laboratory testing. Testing methods and pass or fail assessment levels must be developed and specified prior to any testing.
  - d. Ammunition Surveillance Program. See chapter 3.

## 2-3. Funding the Ammunition Stockpile Reliability Program

- a. The ASRP elements described in paragraph 2–2 will be funded as follows:
- (1) *Joint Munitions Command.* ASRP efforts performed during sustainment of a fielded AE, including normal storage functions carried out during execution of the AE wholesale supply mission, are chargeable to OMA PE 424041 appropriations.
- (2) U.S. Army Aviation and Missile Command. U.S. Army Aviation and Missile Command. OMA PE 422123 appropriations fund ASRP efforts performed during sustainment of a fielded or out of production missile. Item developers will provide PAA funds to fund ASRP for missiles activities until the first full fiscal year after the end of production.
- (3) *Program Director-Nonstandard Ammunition*. The PD-NSA will fund NSA inspections and other directed ASRP elements for all procured NSA and AE items.
- (4) Research, development, test, and evaluation. Prior to fielding, the responsible AE developer will finance and perform all ASRP activities required during development using RDT&E funds.

- b. ASRP includes surveillance, laboratory tests, and function tests to validate the supply readiness of AE (end items and components), as well as preservation, packaging, and packing performed during receipt, storage, issue, and shipment. ASRP involves—
- (1) Readiness inspections (performed at regular intervals specified in supply bulletins (SBs) and ASTPs) or special instructions to verify the serviceability of AE items and components in the wholesale inventory.
- (2) Component, small arms ammunition trace function tests performed at designated testing locations on a cyclic basis.
- (3) AE stockpile function and laboratory tests at AMC LCMCs, other government agencies, and AE contractors or independent contractors.
- (4) Nondestructive function test performed worldwide by mobile test vans or suitcase type testers including predictive technology tests and data collection.
  - (5) Laboratory testing necessary to ensure continuing safety to store obsolete AE pending demilitarization.
- c. Funding for tests and inspections of AE or AE components that are in development, production, rework, or other phases involves the following:
- (1) Financing ASRP for systems no longer active in the U.S. inventory as outlined in paragraph 2-3a(1) through paragraph 2-3a(3). Security Assistance Program funds may also be appropriate for funding ASRP requirements for such AE. When appropriate, make a concerted effort to obtain Security Assistance Program funds for this purpose.
- (2) End item managers using OMA to fund noncyclical inspections directed by materiel commodity commands or other higher authority, including special inspections, inspections for the stockpile laboratory-testing program, and noncyclic function tests. These inspections and tests will be funded by the end item manager with OMA PE 424041 for conventional and OMA PE 422123 for missile items.
- (3) The same OMA funds that are currently financing the maintenance effort will finance verification inspections, and other inspections and tests, performed by depot-level maintenance activities (for example, overhaul and repair).
- (4) Tests and inspections of government furnished industrial stocks, used in the production of AE, are chargeable to OMA funds. Use PAA funds for components required to complete work in process.
  - (5) Tests and inspections required by an operational user will be user funded.
  - d. PD-NSA or applicable owner of other stored NSA will fund nonstandard AE.

## Chapter 3

## **Ammunition Surveillance Program**

#### 3-1. General

The Ammunition Surveillance Program is an integral part of the ASRP, is executed by ammunition surveillance personnel, and applies to all Army organizations that have AE-related missions (for example, receipt, storage, issue, maintenance, surveillance, demilitarization, transportation, or test). It evaluates the functional and nonfunctional characteristics of the AE stockpile. The program includes, but is not limited to, visual inspections and tests (for example, initial receipt, readiness inspection, and combat load), review and evaluation of the full range of AE-related logistic operations, and includes explosives safety functions. It is also conducted as part of both the supply readiness program and other quality control activities. AR 702–12, AR 740–1, and this regulation establish the Ammunition Surveillance Program, with implementation procedures provided by DA Pam 742–1, ASTPs, and SBs.

- a. DA Civilian QASAS (General Schedule–1910 series (Career Program–20)) manage and execute the Army's Ammunition Surveillance Program.
- (1) The ASRP functions identified by this regulation are accomplished under the technical direction a QASAS. Technical direction is a continual process of oversight, review, and assessment. The experience and knowledge of non-QASAS ammunition personnel conducting and supporting ASRP surveillance functions will be continually evaluated and considered in the oversight process.
- (2) The commander of organizations with assigned QASAS will appoint the QASAS-in-charge. Normally the commander appoints the senior QASAS, by grade, within the organization as the QASAS-in-charge. The QASAS-in- charge will ensure that the Ammunition Surveillance Program functions defined in this regulation and DA Pam 742–1 are executed.
- b. Ammunition warrant officers (military occupational specialty 890A and military ammunition inspectors) (military occupational specialty 89B in the grade of staff sergeant or above), or designated civilian technicians (including local nationals at locations outside the United States), who have been trained and/or certified by the Defense Ammunition Center may supplement and assist the QASAS for the accomplishment of the following ammunition surveillance functions:
  - (1) Inspecting AE.

- (2) Assisting and/or advising using units in AE surveillance, storage, and explosives safety matters.
- (3) Applying inspection criteria resident in the Munitions History Program.
- (4) Recommending ammunition condition code assignment (see DA Pam 742-1).
- (5) Applying AE suspensions and restrictions.
- (6) Inspecting AE laden conveyances including required blocking and bracing, to ensure the loads suitability for transport.
  - (7) Advising commanders on AE surveillance and explosives safety matters.
- (8) Inspecting AE storage locations to ensure compliance with applicable explosives safety criteria, including, among other matters, storage compatibility, and correct computation of explosives safety quantity distances.
- (9) Performing other ammunition surveillance-related activities, as directed, and/or approved by the QASAS-incharge.

## 3-2. Ammunition Surveillance Program workload priorities

- a. The Army's top-level ASRP priorities are the conduct of readiness and safety inspections, AE stockpile suspension restriction management, and oversight of a unit's or installation's AE explosives safety and reliability posture. Functions (not in rank order) include the following:
  - (1) Ensuring compliance with applicable Army and DOD policies.
  - (2) Conducting readiness inspections.
- (3) Conducting and/or supporting installation and unit safety managers with explosives safety activities, including, but not limited to the following:
  - (a) Determining compliance with quantity distance and storage compatibility requirements.
  - (b) Reviewing explosive safety waivers and deviations.
  - (c) Monitoring troop AE safety practices during combat, training, and contingency operations.
  - (d) Evaluating explosives safety of AE-related operations.
  - (4) Managing the AE suspension, restriction, and release program.
  - (5) Checking AE for deterioration or damage that may affect safety.
  - (6) Performing combat load inspections, AE management inspections, and technical assistance visits.
- (7) Ensuring, through an effective operation program, that suitable facilities and equipment are used during storage, processing, handling, and transportation, to include research, test, and development operations involving AE.
  - (8) Reviewing and evaluating the AE condition during supply and maintenance operations.
  - (9) Implementing assigned chemical safety functions as defined in AR 50-6.
  - (10) Performing, when required, investigations, and reports on AE malfunction in accordance with AR 75-1.
  - (11) Conducting magazine inspections.
  - (12) Managing the Propellant Stability Program.
  - (13) Performing area operations inspections.
- b. Secondary-level priorities that support the overall ASRP but are less critical than the top-level priorities include (not in rank order):
  - (1) Preparing function or trace test samples.
  - (2) Monitoring maintenance and/or renovation operations.
  - (3) Inspecting arms rooms.
  - (4) Conducting special inspections.
  - (5) Supporting the Radiological Protection Program.
  - (6) Overseeing installation and/or organization lightning protection system inspection program.
- c. Local AE surveillance organizations will assess the impact to safety and operational efficiency of those ASRP functions that are insufficiently resourced. This assessment will include an analysis of mission impact for those functions not completed in accordance with this regulation and DA Pam 742–1. Provide the assessment results to the local organization commander, or appropriate level of command, to help ensure the responsible authority has factual information to warrant the acceptance of the associated risk, or enable informed decisionmaking for mitigation.

## 3-3. Conduct of inspections

- a. Perform initial receipt inspections on all AE (Class V material) received directly from a manufacturer. Schedule inspections in a manner that ensures product quality deficiency reports and related warranty claims, if required, can be submitted during the warranty period.
- b. Perform readiness inspection of field service account AE in Condition Codes A, B, C, D, E, and N periodically for serviceability (deterioration and nonstandard conditions). Readiness inspections will be conducted at intervals described in DA Pam 742–1.

c. Perform a safety in storage inspection on AE in Condition Codes F, G, H, and P to determine suitability for continued safe storage and handling. Accomplish safety in storage inspections on Navy-owned AE stocks and all AE stocks in the resource recovery and disposition accounts.

## 3-4. Ammunition Surveillance Program functions for logistics and explosives safety

- a. Ammunition surveillance personnel at the shipping location will clear all lots and serial numbers of AE, including AE components, and related material designated for shipment or issue.
- b. AE to be modified, inspected 100 percent, or renovated, as directed, by the commodity command will have a lot suffix assigned by the commodity command, or a lot number assigned locally as outlined in Military–Standard–1168B.
- c. QASAS assigned to locations with live firing training or testing areas will provide technical assistance and support regarding AE quality and explosives safety in accordance with local installation service support agreements. This includes, but is not limited to, range support during training exercises, and reporting of malfunctions involving AE in accordance with AR 75–1.
- d. The QASAS will report AE stocks subjected to unsatisfactory or abnormal conditions for possible inclusion in the ASRP testing programs.
- e. In general, the Ammunition Surveillance Program monitors the implementation of explosives safety policies and practices during AE logistics operations. By contrast, the organizational safety office normally manages explosives safety programs and policies.
  - f. Ammunition logistics assistance representative (LAR) positions:
- (1) QASAS assigned to ammunition LAR positions will accomplish Career Program–20 functions defined by DA Pam 742–1 and the AMC Logistics Assistance Program training, functions, and requirements as defined by AR 700–4.
- (2) QASAS assigned to regional AFSBs in an ammunition LAR position will provide assistance to surveillance organizations within their assigned geographic areas.
- (3) QASAS assigned to the AMC Logistics Assistance Program are subject to the requirements of AMC Regulation 700–19.

## Appendix A

## References

#### Section I

## **Required Publications**

#### AR 50-6

Nuclear and Chemical Weapons and Materiel Chemical Surety (Cited in para 3–2a(9).)

#### AR 200-1

Environmental Protection and Equipment (Cited in para 2–1d.)

#### AR 702-12

Quality Assurance Specialist (Ammunition Surveillance) Program (Cited in para 1–4f(4).)

#### AR 740-1

Storage and Supply Activity Operations (Cited in para 3-1.)

#### DA Pam 742-1

Ammunition Surveillance Procedures (Cited in para 2-1c(1).)

#### TB 9-1300-385

Suspension and Restriction Program (see Munitions History Program at https://mhp.redstone/army.mil.) (Cited in para 2-1c(3).)

#### Section II

#### **Related Publications**

A related publication is a source of information. The user does not have to read it to understand the publication.

## AMC Regulation 700-19

Mobility Program for Logistics Assistance Program (LAP) Personnel (Available at http://www.amc.army.mil/amc/officialcommandpubs.html#regulations.)

#### AR 11-2

Managers' Internal Control Program

#### AR 25-30

The Army Publishing Program

#### AR 75-1

Malfunctions Involving Ammunition and Explosives

#### AR 385-10

The Army Safety Program

#### AR 385-63

Range Safety

#### AR 700-4

#### AR 700-19

U.S. Army Munition Reporting Systems

## DA Pam 385-63

Range Safety

#### DA Pam 385-64

Ammunition and Explosives Safety Standards

## DA Pam 700-19

Procedures of U.S. Army Munitions Reporting System

## Military-Standard-1168B

Ammunition Lot Numbering and Ammunition Data Card

## National Environmental Act

(Available at http://www.epa.gov/compliance/nepa/.)

#### 10 USC 101(e)(4)

Definitions: Military munitions: The term "military munitions" means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. (Cited in para (Available at http://www.gpo.gov/fdsys/pkg/uscode-2011-title10/html/uscode-2011-title10-subtitlea-partichap1-sec101.htm.).)

#### 42 USC 2011

Congressional declaration of policy (Available at http://www.law.cornell.edu/uscode.)

#### Section III

#### **Prescribed Forms**

This section contains no entries

#### **Section IV**

## **Referenced Forms**

Unless otherwise indicated DA forms are available on the Army Publishing Directorate Web site (http://www.apd.army.mil)

#### **DA Form 11-2**

Internal Control Evaluation Certification

#### **DA Form 2028**

Recommended Changes to Publications and Blank Forms

## Appendix B

#### **Internal Control Evaluation**

#### B-1. Function

The function of this evaluation is to provide guidance for the conduct of the management of the ASRP (see AR 702–6).

## B-2. Purpose

The purpose of this evaluation is to assist ammunition senior managers in the evaluation and accomplishment of the ASRP.

#### B-3. Instructions

Base answers on the actual testing of controls (for example document analysis, direct observation, interviewing, sampling, and/or others). Explain answers that indicate deficiencies and indicate the corrective action in the supporting documentation. Evaluate these internal controls at least once every 5 years and then certify on DA Form 11–2 (Internal Control Evaluation Certification).

## B-4. Test questions

- a. Did the AMC ensure the ammunition stockpile meets the established performance, explosives safety, and readiness, quality, and reliability requirements?
- b. Did AMC recruit, hire, and train QASAS personnel for conducting the ammunition surveillance PE of the ASRP per AR 702–12?
- c. Did AMC notify the DCS, G-4 when test and analysis of an ammunition item has resulted in a recommendation for shelf life nonextension that will significantly impact the Army's inventory of a weapon system?

## B-5. Supersession

Not applicable.

#### B-6. Comments

Help make this a better tool for evaluating management controls. Submit comments to the Deputy Chief of Staff, G-4 (DALO-SUM), 500 Army Pentagon, Washington, DC 20310-0500.

## **Glossary**

#### Section I

#### **Abbreviations**

#### **ACOM**

Army command

#### ACSIM

Assistant Chief of Staff for Installation Management

#### ΔŦ

ammunition and explosives

#### **AMC**

U.S. Army Materiel Command

#### AMSAA

U.S. Army Materiel Systems Analysis Activity

## ASA (ALT)

Assistant Secretary of the Army (Acquisition, Logistics and Technology)

## **ASCC**

Army service component command

## **ASRP**

Ammunition Stockpile Reliability Program

#### ASTP

ammunition surveillance test plan

#### CG

Commanding General

## DA

Department of the Army

## **DASAF**

Director of Army Safety

## DCS, G-3/5/7

Deputy Chief of Staff, G-3/5/7

## **DCS, G-4**

Deputy Chief of Staff, G-4

## DRU

direct reporting unit

#### **ESMP**

Explosives Safety Management Program

#### LAR

logistics assistance representative

## **LCMC**

Life Cycle Management Command

## **NSA**

nonstandard ammunition

#### **OMA**

operation and maintenance, Army

## **PAA**

procurement of ammunition, Army

#### PD

project director

#### PE

program element

#### **PEO**

program executive officer

#### PM

program manager

#### **OASAS**

Quality Assurance Specialist (Ammunition Surveillance)

#### RDT&E

research, development, test, and evaluation

#### ΤB

technical bulletin

#### Section II

#### **Terms**

## Ammunition and explosives (see military munitions)

Includes, but is not limited to, all items of U.S.-titled (that is, owned by the Government through the DOD components) ammunition, propellants, liquid, and solid; pyrotechnics; high explosives; guided missiles; warheads; devices; and chemical agent substances, devices, and components presenting real or potential hazards to life, property, and the environment. Excluded are wholly inert items and nuclear warheads and devices, except for considerations of storage and stowage compatibility, blast, fire, and nonnuclear fragment hazards associated with the explosives.

## Automatic identification technology

A suite of technologies that enables the automatic capture of source data, thereby enhancing the ability to identify, track, document, and control materiel, maintenance processes, deploying forces, equipment, personnel, and cargo. Automatic identification technology encompasses a number of read-write data storage technologies that captures assets.

#### Certification period

The length of the certified round logistics support concept in that the round has a confirmed level of reliability to perform its specified function without maintenance actions. The expiration of the period renders the round unserviceable unless maintenance is performed.

#### **Certified round**

A logistics concept during the operations and support phase of the life cycle. A certified round has a predictable and acceptable level of reliability over a specified certification period. During this period, it is maintenance free (excluding exceptions such as paint touch up). It requires periodic assessment of a statistical sample during the certification period to evaluate the reliability predictions. Either preventative or corrective maintenance is required at the end of the certification period to retain the missile in a serviceable condition. The certification period may be extended without maintenance based on the result of the Stockpile Reliability Program. Certified rounds are considered to be temporarily maintenance free for a certain certification period.

#### Life-limiting component

A component (or manufacturing process of a component) in the design that precludes indefinite storage life, due to agerelated degradation.

#### Military munitions: (see ammunition and explosives)

Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DOD, the U.S. Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, and demolition charges; and devices and components of any item specified above. The term does not include wholly

inert items, improvised explosive devices, nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under Section 2011, Title 42, United States Code (42 USC 2011) have been completed (see 10 USC 101(e)(4)).

#### **Military Munitions Rule**

A rule published by the Environmental Protection Agency on 12 February 1997 that identifies when conventional and chemical military munitions become hazardous waste subject to the Resource Conservation and Recovery Act, and provides for the safe storage and transportation of such waste.

#### Shelf life

The predicted usable life of an item or component materiel.

#### Weak link

Component of an item design that will degrade faster than other components rendering the item unusable.

#### Section III

## **Special Abbreviations and Terms**

This section contains no entries.