TRAINING SUPPORT PACKAGE (TSP)

TSP Number/Title	55B40B01 Surveillance Operations
Task Number(s)/ Title(s)	None
Effective Date	21 August 1998
Supersedes TSP(s)	MP-01/B 645-55B40 MP-02/B 645-55B40
TSP User	USAOMMCS, Redstone Arsenal, Alabama and Accredited Ordnance TASS Battalion
Proponent	U.S. Army Ordnance Missile and Munitions Center and School, Munitions Training Department, Redstone Arsenal, Alabama, 35897-6970
Comments/ Recommen-dations	Send Comments and recommendations directly to: U.S. Army CASCOM Training Directorate ATTN: ATCL, AO (Mr. Roy King) Bldg. 1109, 401 First Street Fort Lee, VA. 23801-1713 (e-mail Kingr1@Lee-dns1.army.mil) DSN: 539-1129, Commercial: 804-765-1129
Foreign Disclosure Restrictions	If Allied students are scheduled to attend this class, coordination with Security Division (ATSK-AS) is required to determine if the information can be released to Allied students.

Preface

Purpose

This training support package provides the instructor with a standardized lesson plan for presenting instruction for:

LESSON TITLE:	Surveillance Operations
CONDITIONS:	In a classroom environment, given AR 75-1, AR 700-22, DA PAM 738-750, SB 742-1, SB 742-1300-94-2, and TB 9-1300-385
STANDARD:	Demonstrate an understanding of the role of surveillance, the legal basis of the surveillance program, and surveillance activities in munitions operations by correctly answering written questions with seventy percent (70%) accuracy

This TSP Contains

TABLE OF CONTENTS

(21 August 1998)

SECTION I. ADMINISTRATIVE DATA

All Courses Including this Lesson

COURSE NUMBER(S)	COURSE TITLE(S)
645-55B40	Ammunition Specialist, ANCOC

Task(s) Taught or Supported

TASK NUMBER	TASK TITLE

Reinforced Task(s)

TASK NUMBER	TASK TITLE

Academic Hours

The academic hours required to teach this lesson are as follows:

	ADT HOURS/METHOD
Conference	4.0 / CO
Practical Exercise	4.0 / PE2
Total hours	8.0

Test Lesson Number

	Hours	Lesson No.
Testing:	3.0 TE2	55B40B10
Review of test results:	1.0 CO	55B40B11

Prerequisite Lesson(s)

LESSON NUMBER	LESSON TITLE
55B40A01 through A11	

Clearance and Access

Unclassified - If Allied students are scheduled to attend this class, coordination with Security Division (ATSK-AS) is required to determine if the information can be released to Allied students.

References Required

Number	Title	Date	Additional Information
AR 75-1	Malfunctions Involving Ammunition and Explosives (RCS GSGLD-1961 (MIN))	20 AUG 93	
AR 700-22	Worldwide Ammunition Reporting System	15 OCT 83	
AR 702-6	Ammunition Stockpile Reliability Program (ASRP) and Army Nuclear Weapons Stockpile Reliability Program (ANWSRP)	23 JUN 89	
AR 740-1	Storage and Supply Activity Operations	30 JUN 71	w changes 1 through 6
DA PAM 738-750	The Army Maintenance Management System	1 AUG 94	
SB 742-1	Ammunition Surveillance Procedures	APR 98	
SB 742-1300-94-2	Propellant and Propellant Charges	10 JUN 74	
FM 9-6	Munitions Support in Theater of Operations	20 MAR 98	
TB 9-1300-385	Munitions, Restricted or Suspended	1 APR 92	

Related

None

Student Study Assignments

None

Instructor Requirements

One instructor

Additional Support Personnel Requirements	None
Equipment Required	Overhead Projector
Materials Required	INSTRUCTOR MATERIALS: References listed above. 55B40B01, View graphs VG#01 - VG#39 STUDENT MATERIALS: References listed above. Practical Exercise work sheet 55B40B01-PE2
Classroom, Training Area, and Range Requirements	One 30-person classroom
Ammunition Requirements	None
Instructional Guidance	Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

Proponent Lesson Plan Approvals

Name	Rank	Position	Date

SECTION II. INTRODUCTION

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.1 hours

Motivator

Good morning/afternoon, class. I am _____. I will be your primary instructor for this lesson. As the Army shrinks, the NCO Corps shrink, and the Ordnance Branch shrinks, those NCOs who wish to be competitive for retention will have to perform extremely well not only as ammunition workers, but also as ammunition inspectors, in all aspects of munitions operations. This block of instruction is intended to examine the role of surveillance in munitions operations, the legal basis of the surveillance program, and to provide a brief overview of surveillance activities.

Terminal Learning Objective

Note: Inform the students of the following terminal learning objective requirements.

At the completion of this lesson, you (the student) will be able to:

ACTION:	Understand Surveillance Operations
CONDITIONS:	In a classroom environment, given AR 75-1, AR 700-22, DA PAM 738-750, SB 742-1, SB 742-1300-94-2, and TB 9-1300-385
STANDARD:	Demonstrate an understanding of the role of surveillance, the legal basis of the surveillance program, and surveillance activities in munitions operations by correctly answering written questions with seventy percent (70%) accuracy.

Safety Requirements

None

Risk Assessment Level

Low

Environmental Considerations

None

Evaluation	On a written end of annex examination, the student must score a minimum of 70 percent to achieve a GO.
Note:	**Show VG01 (Lesson Title).**
Instructional Lead-in	What happens in the surveillance section and, more importantly, why it happens, have traditionally been shrouded in a cloak of technical mystery in ammunition organizations. The authority of the QASAS and his deputy, the Ammunition Inspector, has been taken largely on faith by the uninitiated. With the consolidation of the 55B, 55R, and 55X into 55 “Super Bravo”, the curtains of mystery are being pushed aside, and those formerly excluded are being thrust into the heart of the inner sanctum.

SECTION III. PRESENTATION

1. Learning Step/Activity 1: Describe the legal basis of surveillance, surveillance regulations, and the surveillance program objectives.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.2 hours
Media: Viewgraphs

Note: **Show VG02 (Ammunition Surveillance And Quality Control Management).**

a. Scope. Chapter 4, AR 740-1, establishes the Ammunition Surveillance and Quality Evaluation Program, prescribes policy, designates responsibilities, and outlines the objectives concerning the surveillance and quality evaluation of guided missile, rocket munitions and conventional (includes chemical selected) munitions stored, maintained, and issued by the Army.

Note: **Show VG03 (Policy).**

b. Policy. Each installation, activity, and command concerned will establish and maintain an Ammunition Surveillance and Quality Evaluation Program in accordance with AR 702-6, AR 740-1, and Department of the Army Supply Bulletins.

Note: **Show VG04 (Responsibilities).**

c. Responsibilities.

(1) The Deputy Chief of Staff for Logistics (DCSLOG):

(a) Serves as the principal staff element for development and dissemination of policy pertaining to the Ammunition Stockpile Reliability Program (ASRP).

(b) Has primary staff responsibility for programming and funding all equipment and materiel requirements and services necessary to conduct the Ammunition Stockpile Reliability Program.

(2) CONUS and OCONUS major Army commands, except AMC, will:

(a) Program, budget, and fund subordinate commands and installations for the conduct of the ASRP pertaining to those munitions items placed under the accountability of such commands and installations.

(b) Provide support within their mission and capability as requested by the Commanding General AMC, for any portion of the ASRP that is conducted within their area of geographical jurisdiction. This support, which will be provided on a non-reimbursable basis will include the furnishing of test ranges, facilities firing units, recovery of test material and movement of associated troops and materiel belonging to the supporting command.

(3) The Commanding General, US Army Materiel Command (AMC) will:

(a) Conduct the ASRP pertaining to those munitions placed under the accountability of AMC and accumulate data and findings from tests for comparison with results of previous and subsequent tests.

(b) Coordinate with other major Army commands, as required, in conducting the ASRP, including depot programs over which AMC exercises accountability or direction as the materiel developer.

(c) Provide quality assurance specialist (ammunition surveillance) personnel for the conduct of the Ammunition Surveillance Program in accordance with the provisions of AR 742-9.

(d) Assure that materiel developers maintain effective procedures for conduct of surveillance inspections worldwide.

(e) Provide DA, DCSLOG with budget, program, and funding requirements for AMC through established channels.

(f) Conduct appropriate engineering and logistic corrective action and develop schedule and resource requirements necessary to restore the stockpile to a satisfactory condition.

(4) Commanders of supply installation and depot activities:

(a) The commander of each installation, activity, or command having a munitions mission within the scope of Chapter 4, AR 740-1 is responsible for insuring that all munitions are subjected to proper surveillance and that the results of examinations, tests, and investigations are promptly reported.

(b) Ammunition quality assurance specialist (ammunition surveillance) QASAS) is responsible for conducting examinations, tests, and investigations required to evaluate the current degree of serviceability and extent of deterioration (including inherent hazards) of munitions components and explosives.

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2. Learning Step/Activity 2: Describe the Ammunition Stockpile Reliability Program (ASRP).

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.7 hours
Media: Viewgraphs

Note: **Show VG05 (ASRP).**

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a. Purpose. AR 702-6 establishes policy, responsibilities and guidance on the ASRP. Most munitions are used only once; hence, usage and wear factors cannot be applied. The storage life normally ranges from 5 to over 20 years. The ASRP is a program that continually measures stockpile reliability to ensure that munitions and munitions components, available for issue and use, are safe and reliable.

b. Objectives. The objectives for the ASRP are as follows: (Reference AR 702-6, page 1 & 2, paragraph 5)

(1) All munitions entering into the stockpile must meet established explosive safety and reliability requirements.

(2) Munitions stockpile conditions and reliability trends must be identified.

(3) Munitions for timely maintenance, retrograde, or disposal must be identified.

(4) Munitions with marginal reliability or performance must be identified for priority-of-issue and/or restricted use.

(5) Shelf life and/or prescribed stockpile life must be established or confirmed.

(6) The cause of munitions malfunctions occurring in type-classified materiel must be investigated.

(7) A basis for the engineering and logistic corrective actions necessary to restore the stockpile to a satisfactory condition must be provided where unsatisfactory conditions exist.

(8) A basis for a formal reevaluation of weapon systems life expectancies that may be capable of extension must be provided.

c. The ASRP consists of the ammunition surveillance program, the stockpile function test program, and the stockpile laboratory test program. Depending on the type and nature of the munitions to be evaluated, any part or all of these programs will be used.

Note: **Show VG06 (Ammunition Surveillance Program).**

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d. **Ammunition Surveillance Program.** The Ammunition Surveillance Program is an integral part of the Ammunition Stockpile Reliability Program. It decides the functional and nonfunctional characteristics of the munitions stockpile. The program includes, but is not limited to visual inspections and tests, (such as initial receipt, periodic, pre-issue, and basic load). It is also conducted as part of the supply readiness program or other quality control activities. The primary elements of the surveillance program consist of surveillance inspections, safety, and logistics functions.

(1) **Surveillance inspections.** Surveillance inspections (i.e. visual inspections and tests) are administered by the care of supplies in storage (COSIS) programs. These inspections encompass all elements and are applicable to all DA activities which have a receipt, storage, issue, maintenance, surveillance or test mission for munitions including proving grounds, ammunition supply point and basic load storage.

(2) **Safety.** The Ammunition Surveillance Program encompasses safety functions involving munitions during storage, handling, and use. It provides review and reporting of conditions affecting safety and recommendations for corrective actions. Important areas included are as follows: (AR 740-1, page 4-2, paragraph 4-4 (2))

(a) **Storage.** Suitability, siting and use of facilities and use of proper storage methods. Compliance with applicable quantity-distance and compatibility standards.

(b) **Processing and handling.** Use of approved facilities, equipment, and methods and approved standing operating procedures. Compliance with applicable quantity-distance standards.

(c) **Transportation.** Suitability of transportation equipment and loading or stowage methods.

(d) **Deterioration or damage.** During inspections, examination for deterioration or damage indicating hazardous or potentially hazardous materiel. Recommendation for appropriate disposition.

(e) **Restricted or suspended munitions.** Management of the program of munitions restriction, suspension and release to minimize the possible use of hazardous items.

(3) **Logistics Functions.** The Ammunition Surveillance Program provides review and reporting of conditions affecting munitions during various logistics activities incurred in stockpile and use. It also provides a source of technical expertise and advice in regard to numerous logistics activities. (AR 740-1, page 4-2, paragraph 4-4(3)). These include:

(a) **Supply and maintenance operations.** Provides reporting of conditions and recommendations as well as technical advice concerning storage, receipt, issue, identify, inventory, care and preservation, maintenance, demilitarization, disposal, transportation, and other related functions.

(b) **Troop use in training and combat.** Provides reporting of conditions and recommendations and technical advice in regard to the use of authorized munitions and components for complete rounds, range operations, malfunction investigation and reporting and field storage, supply, transportation, and other related logistics activities.

(c) **Chemical Surety.** Provides technical consultant service to assure compliance with the surety program.

Note: **Show VG07 (Stockpile Function Test Program).**

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e. Stockpile Function Test Program. (AR 740-1, page 4-2, paragraph 4-4 (b), and AR 702-6, page 3, para. 7 b (1)) This program determines the functioning reliability, develops shelf or service life, and detects trends in stockpile performance. The program is managed by the materiel commodity commands. It is carried out by the following subprogram function tests:

(1) **Function tests at ammunition test facilities including proving grounds.** This subprogram pertains to munitions items such as mortars, antitank mines, large and small caliber gun and howitzer munitions, cartridge activated devices, propellant activated devices, and missiles requiring special facilities and equipment for testing and data collection.

(2) **Function tests at munitions storage facilities.** Tests in this subprogram pertain to items such as pyrotechnics, signals and simulators, hand grenades and antipersonnel mines, and certain chemical items with fillers of smoke that do not require extensive use of instruments or range facilities. (AR 702-6, page 3, para. 7b (1) (a), (b))

(3) **Function tests at training facilities.** Annual service practice firings of large rockets and guided missiles, conducted by military units, are used to supplement the ballistic performance and reliability data obtained during other elements of the ASRP. In some cases, these firings may be monitored by telemetry or other equipment, as required, to collect stockpile reliability data.

(4) **Special function tests.** Special function tests are held, as directed by the materiel commodity command. These tests may be independent of, or added to, other inspections and tests. Special function tests are used to determine the extent of degradation of a specific portion of the stockpile or to revise or establish criteria for surveillance, service life or use, shelf life, or similar yardsticks for items currently in use or in stock.

Note: **Show VG08 (Stockpile Laboratory Test Program).**

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f. Ammunition Stockpile Reliability Laboratory Testing. For those items conducive to laboratory testing, samples of materiel will be randomly selected from the stockpile for nondestructive or destructive tests, as appropriate, to detect the development of undesirable trends or uncover potential defects that are suspected, but are not known to exist.

(1) Stockpile laboratory tests may be independent of or supplemental to other inspections and tests. Items that are nondestructively tested, mainly missiles, will be returned to the stockpile in a restored, ready-for-issue condition.

(2) Surveillance inspections performed in connection with "Care of Supplies in Storage" and "Quality Control" activities will normally be funded with OMA funds. Inspections performed by or directed by the materiel developer in connection with the life cycle stockpile reliability testing program or stockpile laboratory tests will be funded by AMC with applicable procurement appropriation (PA) or operations and maintenance, Army (OMA) appropriation funds.

Note: **Show VG09 (QASAS).**

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g. Quality Assurance Specialist (Ammunition Surveillance).

(1) The Commander, U.S. Army Materiel Command (AMC) is the functional chief of the QASAS Civilian Career Program. The Commander, Industrial Operations Command (IOC) provides munitions surveillance support to DoD installations, activities, and commands that receive, store, maintain, issue, use, and dispose of munitions.

(2) The deputy to the CG, U.S. Army IOC is the functional chief's representative and provides overall direction of the QASAS Civilian Career Program.

(3) The Director, U.S. Army Defense Ammunition Center manages, administers, and operates the QASAS Civilian Career Program.

(4) The Army Director of Safety, Office Deputy Chief of Staff for Personnel has Army general staff responsibility for the Army Safety Program as defined in AR 385-10. He develops and monitors Army-wide policy and criteria for the munitions and explosives safety program as an integral part of the Army Safety Program and establishes DA explosives safety standards.

h. QASAS Careerists. QASAS careerists are qualified to perform the following duties.

(1) Develop, manage, or execute munitions surveillance programs.

(2) Conduct tests and studies to assess serviceability or deterioration of munitions.

(3) Develop or approve procedures and apply controls so that munitions storage or issue operations comply with explosive safety regulations.

(4) Develop, analyze and apply information about the design, production, modification, disposal, and reliability of munitions.

(5) Provide technical aid to those who design, produce, transport, store, maintain, demilitarize, modify, and use munitions.

(6) Serve as nuclear or chemical surety officers.

i. Assignment and management of QASAS personnel.

(1) QASAS personnel are assigned by directed placement to fill positions. The Ammunition Civilian Career Management Office at the U.S. Army Defense Ammunition Center manages the recruitment, training, assignment, and promotion of these personnel. Provisions for these functions are found in CPR 950-20.

(2) The hiring command supervises, rates, and appraises assigned QASAS. Technical direction is provided in AR 740-1 and AR 702-6.

(3) A group of senior level QASAS are assigned to the US Army Defense Ammunition Center. They perform the following functions.

(a) Inspect, review, and assess munitions operations for effectiveness per AR 700-13.

(b) Identify and correct problems affecting the mission.

(c) Provide technical aid on site for munitions malfunctions, accidents, and incident investigations.

(d) Help to develop and apply ammunition logistics policy.

(e) Advise on technical matters affecting stockpile reliability and explosive safety.

(f) Provide technical aid to plan, develop, construct, and modify munitions equipment and facilities.

(g) Assess and monitor the use of explosive safety standards for munitions in storage, transportation, maintenance, demilitarization, test, and use.

(4) QASAS assigned to depots will be rotated through all available job assignments consistent with required personnel staffing and mission requirements. Adjustment of intervals and order of assignment are at the discretion of the QASAS in charge.

Note: **Show VG10 (Ammunition Inspector Duties).**

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j. Inspector Duties. Inspector duties of military and civilian ammunition inspectors include:

(1) Inspect storage buildings and outdoor storage sites to make sure they comply with all safety standards of storage.

(2) Inspect surrounding areas for fire hazards and other nonstandard conditions.

(3) Take and record maximum and minimum temperature and humidity readings.

(4) Look for nonstandard conditions that could speed up the normal deterioration rate of the items in storage, thus creating a hazard.

(5) Help inspect and test the lightning protection system in magazines or explosives areas.

(6) Help pick samples to ship to CONUS proving grounds and laboratories for ballistic and surveillance tests or investigations.

(7) Teach surveillance and munitions safety.

(8) Prepare and keep proper correspondence, records, and reports to cover all munitions activities.

(9) Observe, inspect, and investigate to determine the current degree of serviceability of munitions and components.

(10) Monitor methods of storage, handling, and maintenance, and recommend changes for increased safety or operational effectiveness.

(11) Recommend to the commanding officer the controls needed to maintain approved standards of security.

(12) Act as technical advisor to the commanding officer on all ammunition surveillance matters.

(13) Conduct unit basic load inspections.

(14) Help investigate munitions malfunctions and accidents.

(15) Help plan, coordinate, and administer the explosives safety program. The program includes review, evaluation, and inspection of all operations, procedures, equipment, and facilities used with munitions and explosives operations to assure application of and compliance with pertinent safety standards.

(16) Help plan construction of explosives storage facilities based on current Q-D and storage criteria.

(17) Help prepare waivers for munitions facilities as required.

(18) Prepare and maintain accurate records of all observations, inspections, and investigations performed.

(19) Maintain files and indexes for all drawings and specifications covering munitions and methods of packing and storing.

(20) Inspect all incoming and outgoing shipments of munitions for sabotage devices; proper blocking, bracing, and loading; condition and serviceability; and compliance with existing instructions and regulations.

(21) Inspect dunnage used and methods of storage for compliance with specifications, drawings, and safety regulations.

(22) Furnish safety advice to the unit's operating elements.

(23) Inspect all facilities and methods used in connection with storage, handling, shipping, salvaging, and destroying munitions for compliance with existing regulations.

(24) Maintain and update munitions suspension file, both local and worldwide.

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3. Learning Step/Activity 3: Describe the relationship of the ammunition inspector to the commander.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.1 hours
Media: Viewgraphs

Note: **Show VG11 (Command Relationship).**

Note: Refer students to FM 9-6 chapter 2, organizational diagrams of DS, GS and DS/GS ammunition companies.

Initiate student discussion on the ammunition inspector to commander relationship, covering the following areas.

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(1) Overall responsibility lies with the commander.

(2) Surveillance reports directly to the commander.

(3) The hierarchical position of the surveillance section in a company structure is coequal with platoons and operations; not subordinate.

(4) Discuss the similarity in function of the ammunition inspector role to that of the Inspector General.

(5) Discuss the ethical dilemma if a 55 “Super Bravo” is rotated between surveillance and non-surveillance positions in the same unit. Discuss the possible conflict of interest.

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4. Learning Step/Activity 4: Describe the types of munitions item inspections.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.4 hours
Media: Viewgraphs

Note: **Show VG12 (Ammunition Item Inspections).**

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a. Sample Selection. Samples will be selected by a QASAS and must be representative of the entire lot or lot cluster under evaluation. The evaluation will include the overall condition of the lot/lot cluster in storage and will be recorded on the inspection report. The QASAS must ensure maximum representation of the lot or lot cluster while limiting re-warehousing. Other considerations in sample selection include:

(1) Samples of items that cannot be feasibly returned to the original package configuration (e.g., hermetically sealed containers, small arms munitions packed in metal (terneplate) lined M1917 boxes, and heat-sealed barrier bags) will be used on a recurring basis if the sampled lot is not part of a cluster.

(a) If the recurring samples indicate progression of deterioration-type defects, lot acceptability will be determined by the inspection of an additional sample from the original sealed containers.

(b) If the sampled items are part of a lot cluster, such samples will not be used on a recurring basis until all lots in the cluster have been inspected and the inspection cycle is repeated.

(2) Selection and preparation of the stockpile laboratory test program will be accomplished according to the instructions contained in SB 742-1, paragraph 3-4; the applicable SB for the particular item; and instructions from the appropriate headquarters.

(3) Selection and preparation of function or trace samples for shipment to a test facility will be accomplished according to instructions contained in SB 742-1, the applicable SB for the particular item, and instructions from the appropriate headquarters.

(4) Selection and preparation of propellant samples for shipment to a test facility will be accomplished according to SB 742-1300-94-2.

b. Types of Inspections. All inspections and tests will be conducted by or under the close supervision of a QASAS. The QASAS in charge will determine what close supervision entails.

Note: **Show VG13 (Types of Inspections).**

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(1) **Initial Receipt Inspection (IRI).** The IRI will be performed within 30 days after receipt or prior to shipment (whichever comes first) on material received directly from the manufacturer, vendor, or government activity that has been inspected and accepted by the government at the point of origin. This inspection is expected to identify gross manufacturer errors; it is not intended to be the manufacturer's acceptance inspection.

(2) **Receipt Inspection (RI).** When material is received from another CONUS or OCONUS storage activity or post, camp, station, or other using unit at which QASAS is assigned, the DSR card stipulates that required inspections/test were performed on the lot within the specified time interval for the item. Inspection will be on a sampling basis by lot or group for damage in transit only.

(a) If additional inspection is indicated, the scope will be determined by the QASAS in charge.

(b) Materiel returned from CONUS and OCONUS locations without accompanying DSR cards that document a current, valid inspection by a QASAS will be inspected according to paragraph 2-4 (b)(3), SB 742-1.

(3) **Acceptance Inspection (AI).** Acceptance inspection is performed on materiel received from a contractor or plant requiring inspection and acceptance at destination, materiel inspected at the origin and requiring acceptance at destination, and components from demilitarization to be reused or restored to stockpile.

(a) Instructions for the AI will be furnished by the applicable commodity command, when required.

(b) Depots receiving materiel from procurement for stock will process DD Form 250 (Materiel Inspection and Receiving Report) according to AR 715-29.

(4) **Periodic Inspection (PI) (Cyclic).** All required stocks will be inspected periodically for deterioration and nonstandard conditions for classification of true level of serviceability. The purpose of inspecting unserviceable, economically repairable, and suspended munitions is to detect evidence of further deterioration that may alter percentages requiring rework or necessitate a change of condition code.

(5) **Safety in Storage Inspection (SIS).** Non-required wholesale stocks, unserviceable non-repairable munitions, and all munitions in an RRDQA account, whether serviceable or unserviceable, will be inspected to ensure it is safe for continued storage and handling. Handling includes those preparatory actions necessary to demilitarize the item.

(a) The QASAS will determine whether the defects noted could result in a hazardous situation for either handling or storage.

(b) A SIS inspection is not required for inert or empty munitions.

(6) **Storage Monitoring Inspection (SMI).** Storage monitoring inspection is performed, as required, by applicable technical instructions for specific items or as determined necessary by the QASAS in charge. It is performed on items while in the storage site and includes but is not necessarily limited to:

(a) Inspecting lethal chemical agent munitions, containers of bulk lethal chemical agent, or containerized lethal chemical agent munitions to detect leakers and other visual defects.

(b) Reading and recording pressure and relative humidity of items packaged in pressurized or desiccated containers.

The frequency of SMI will be as required by the technical instructions for the specific item. SMI may also be conducted when determined necessary by the QASAS in charge. Combining SMI with magazine inspection is recommended.

(7) **Special Inspection (SPI).** Special inspections are performed at the direction of higher headquarters or to satisfy special or local requirements when approved by the QASAS in charge. Reasons for conducting an SPI must be entered in the inspection remarks.

Note: **Show VG14 (Types of Inspections Continued).**

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(8) **Pre-Issue Inspection (PII).** The PII is an inspection other than that required for a PI that must be performed prior to issue. Examples are munitions destined for prepositioned (PREPO) ships or a special check for specific defects as determined by the QASAS in charge or directed by higher headquarters.

(a) A lot or lot cluster overdue for PI will be given a PI prior to shipment, not a PII.

1 Normally, the appropriate sampling plan contained in SB 742-1 will be used.

2 Reasons for conducting a PII must be entered in the inspection reports.

(b) A PII will not be performed on Navy Weapons Quality Evaluation Center (WQEC) samples unless specifically directed.

(9) **Verification Inspection (VI).** This inspection is performed on materiel processed during preservation and packaging (P&P) and maintenance (renovation, modification, overhaul, etc.) type operations. Verification inspections will be performed in accordance with paragraphs 4-3 and 4-4, SB 742-1.

(10) **Basic Load Inspection (BLI).** Basic load inspection is performed on stocks of munitions (including training, security, and contingency stocks) maintained by a military unit or civilian security forces.

(11) **Surveillance Function Test Inspection (SFTI).** Function testing of munitions will be conducted according to paragraphs 3-1 through 3-3, SB 742-1, and SB 3-series or SB 742-series publications for the specific item to be tested. The visual inspection conducted in conjunction with the preparation of function test samples may satisfy the PI required for the lots tested. However, additional samples may be required.

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5. Learning Step/Activity 5: Describe the periodic inspection intervals.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.3 hours
Media: Viewgraphs

Note: **Show VG15 (Periodic Inspection Intervals).**

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a. Periodic Inspection Intervals. The normal interval of inspection for required stocks, except for stock in outside storage or industrial stock, is based on the expected rate of deterioration for specific item types. These deterioration rates have been developed into inspection interval categories that are assigned to items as appropriate. The normal interval of inspection for each category is depicted on the following viewgraph.

Note: **Show VG16 (Periodic Inspection Categories).**

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(1) The interval shown in Table 1 is to apply unless otherwise specified in the inspection procedures for a specific item or the interval is adjusted according to following:

(a) When inspection results of a specific lot or cluster reveal progressive degradation to such a degree that the lot may become unserviceable before expiration of the assigned category interval, the next inspection must be scheduled at a shorter interval based on conditions detected, storage conditions, and material involved.

(b) The normal interval of inspection may be expanded whenever local storage conditions, climatic conditions, and previous inspections justify. A prime concern in the area of climatic conditions must be the degree of relative humidity. The QASAS in charge is responsible for determining those items, specific lots, and lot clusters that will be placed in an expanded inspection interval status.

(c) For operational efficiency, all similar items should be programmed during the same month of a given year's PI schedule. To establish and maintain a schedule by like items, it is permissible to vary the date of the next inspection by decreasing the interval as much as 5 months or increasing the interval as much as 6 months.

Note: **Show VG17 (Priority Listings For Periodic Inspection).**

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b. Priority listings for periodic inspection of required stocks are as follows:

- Materiel with high turnover rates, needed to fill issue requirements
- Lots in CC-J for past due inspection by twice the interval
- Lots six months or more past due inspection (but less than twice overdue)
- All other required materiel at normal inspection intervals.

(1) Munitions except toxic chemical, nuclear, and MICOM-managed items are separated into categories for assignment of PI intervals. Category determination is based primarily on susceptibility to and rate of deterioration.

(a) Items not listed under one of the existing categories will be reported to AMSIO-IOA-A and be considered as Category Z until a category is assigned.

1 Changes to a category will be disseminated by message pending a formal change to SB 742-1.

2 Changes are effective immediately, and intervals for inspections must be adjusted at the time of change.

(b) Categories for specific items or a family of items are covered by Appendices E through X, of SB 742-1.

Note: **Show VG18 (Sample Size).**

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c. **Sample Size.** Sample inspection will apply to the entire cluster.

(1) The accept/reject list contained in VG19 is used as the criteria for cluster classification. If the sampled lot fails to meet serviceability criteria for reasons other than those which would be applied to entire lot cluster by direction of higher headquarters, such as restriction from use or limited serviceability, additional samples will be inspected.

Note: **Show VG19 (Sample Sizes and Acceptance/Rejection Numbers).**

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(2) Notes to Table:

(a) Inner pack and item samples must be selected from a minimum of ten outer packs. Additional outer packs must be inspected at either the inspection or storage locations(s) to make a total sample size of 20.

(b) If rounds are linked, a belt consisting of 6 links and 6 cartridges shall be capable of withstanding a tensile load of 19 pounds minimum without separation. Load shall be applied at a uniform rate and belt shall remain under tension for a minimum of 30 seconds.

(c) If rounds are linked, a belt consisting of 25 cartridges and 25 links shall be capable of withstanding a tensile load of 25 pounds for 7.62 mm and cal .30, 80 pounds for cal .50, and 115 pounds for 20 mm without separation. Load shall be applied at a uniform rate and belt shall remain under tension for a minimum of 30 seconds. No test for belts of 30 mm is required.

(d) For the purpose of the Table in VG19, SAA is defined as up to and including caliber .50.

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6. Learning Step/Activity 6: Describe surveillance defect standards.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.3 hours
Media: Viewgraphs

Note: **Show VG20 (Surveillance Defect Standards).**

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a. Surveillance Defect Standards. Munitions defects are classified into the following four categories:

(1) **Critical.** A defect that is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item, or a defect that is likely to cause the destruction of or serious damage to the weapon or launcher under normal training or combat conditions.

(2) **Major.** A defect other than critical that is likely to result in failure in tactical use or that precludes or reduces materially the usability of the item for its intended use.

(3) **Minor.** A defect other than critical or major that is not likely to result in failure during use or reduce the intended use of the item, but that should be corrected prior to issue.

(4) **Incidental.** A defect not of the critical, major, or minor type will be classified as incidental and corrected when maintenance is performed on the item. Incidental defects are not normally reported to the commodity command unless specifically requested, but they are recorded on the Depot Surveillance Record Card.

Note: **Show VG21 (Defectives).**

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b. Defectives. Defectives are items that have one or more defects; for example, a munitions item or unit that has one or more major defects is classified as a major defective. Likewise, a munitions item that has:

- One or more critical defects is classified as a critical defective
- One or more minor defects is considered a minor defective.

c. Criteria. Criteria for classifying metal, plastic, and rubber component defects are:

(1) **Metal/Plastic/Rubber**

(a) **Critical deterioration.** Deterioration that creates a hazardous condition for persons using or maintaining the item.

(b) **Major deterioration.** Deterioration that significantly reduces or precludes the functioning or use of the item and requires maintenance or renovation prior to issue.

(c) **Minor deterioration.** Deterioration that does not significantly reduce the functioning or use of the item but normally requires minor maintenance to restore the material to a condition where it can be issued or to prevent the progression of deterioration to a more serious degree.

(d) **Incidental deterioration.** Superficial deterioration that affects only the surface of the item and does not affect the intended use of the item. Items with incidental defects are acceptable for issue at the time of inspection.

(2) **Mixed Munitions**

(a) **Critical.** The type of munitions mixed within a lot can result in hazardous or unsafe conditions for persons using or maintaining the item; e.g., ball munitions with grenade cartridges or blank munitions, High Explosive (HE) with practice munitions, incorrect type of color of smoke or signal.

(b) **Major.** The type of munitions mixed within a lot can result in failure during tactical use; e.g., HE instead of HEAT munitions, incorrect fuse model.

(c) **Minor.** There are no minor/incidental defects defined.

(3) **Damage**

(a) **Critical.** The damage can cause hazardous or unsafe conditions for persons using or maintaining the item; e.g., broken safety devices, broken fins on fin-stabilized projectiles.

(b) **Major.** The damage can cause failure or materially reduce the intended use of an item; e.g., dented or distorted cartridge cases, damaged rotating bands, misaligned components.

(c) **Minor.** There are no minor/incidental defects defined.

(d) Any damage other than that defined above will be noted on the DSR card for information. Damage other than critical or major will not be used as acceptance/rejection criteria (except for clearance of material pertaining to security assistance programs) unless specifically required by appropriate item military standards, etc.

(4) **Packaging**

(a) **Critical.** The packaging or the absence of packaging components can cause hazardous or unsafe conditions for persons using, handling, transporting, or maintaining the material.

(b) **Major.** Containers are damaged, weathered, or decayed to the extent that the contents cannot be adequately protected; the containers require replacement; the containers are damaged to the extent that the contents cannot be readily removed; the container cap or closure is damaged or insecure to the extent that the contents cannot be adequately protected; or the container contents are loose to the extent that the item cannot be adequately protected during handling and transportation.

(c) **Minor.** Containers are weathered or deteriorated to the extent that maintenance is normally required prior to issue or use. Examples of minor packaging defects are wet, moldy, or mildewed inner containers (except metal); and improper or inadequate sealing of fiber containers.

(d) **Incidental.** Any packaging defect other than critical, major, or minor that should be corrected if and when maintenance becomes necessary. Examples of incidental packaging defects are broken or missing or ineffective hardware, banding, or packing components. However, contents must be safe and adequately protected for storage and shipment.

(5) **Used Packing Material.** The standards for evaluating used packing material are contained in SB 725-12 and SB 755-1 for Industrial Operations Command (IOC) managed items and the applicable SB 742 series Ammunition Surveillance Procedures for U.S. Aviation and Missile Command (AMCOM) items. Packing material that is acceptable for use as is, but has marking that must be obliterated prior to use, will be classified as Condition Code B.

(6) **Marking.** Marking that is missing, illegible, incorrect, or misleading is classified defective as follows:

(a) **Critical.** The marking can result in hazardous or unsafe conditions for persons using or maintaining the item; e.g., incorrect delay time, incorrect color or type of smoke or signal, HE munitions with practice marking.

(b) **Major.** The marking can cause misuse or failure; e.g., incorrect model or type of round or fuse, HE instead of HEAT.

(c) **Minor.** Defects other than critical or major that normally should be corrected prior to issue. Examples of minor marking defects are incorrect or missing lot number and Department of Transportation (DOT) name on the item or packing.

(d) **Incidental.** Defects other than critical, major, or minor that should be corrected if and when maintenance becomes necessary. Examples of incidental marking defects are use of Ammunition Identification Code (AIC) versus NSN; illegible or missing marking such as nomenclature, NSN, DODIC, cube, and weight; and incorrect weight format or placement.

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7. Learning Step/Activity 7: Describe munitions condition codes.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.1 hours
Media: Viewgraphs

Note: **Show VG22 (Munitions Condition Codes).**

Note: Refer students to Appendix C, SB 742-1 and discuss each condition code and its associated meaning as found in Appendix C.

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8. Learning Step/Activity 8: Describe suspended and restricted munitions.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.2 hours
Media: Viewgraphs

Note: **Show VG23 (Suspended and Restricted Munitions).**

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a. Suspended Munitions. Suspended munitions are items that are withdrawn from issue, movement, test, and/or use, with or without qualification, due to a suspected or confirmed unsafe or other defective condition. There are two types of suspensions:

(1) **Temporary Suspension.** A temporary suspension is an interim order prohibiting the issue, movement, and/or use of a munitions item, with or without limitation, due to a suspected unsafe or other defective condition. Munitions are temporarily suspended as a result of firing and handling malfunctions or other failure conditions pending investigation of the circumstances and the involved munitions.

(2) **Permanent Suspension.** A permanent order based on an engineering evaluation that prohibits the issue, movement, test, and/or use of a munitions item, with or without limitations, due to a confirmed unsafe or other defective condition. Munitions are permanently suspended as a result of an investigation that confirms that the involved munitions are unsafe or otherwise defective. Munitions permanently suspended should have a fix (restoring action) assigned. When a munitions item is permanently suspended and action to restore has not been determined, the "fix" entry will read: "No fix authorized" or "Fix undetermined at this time."

b. Limitations. There are two types of limitations:

(1) **Suspended from Issue, Movement and Use (SIMU).** A qualification to a suspension order prohibiting issue, movement, and use of a munitions item under any circumstance due to a suspected or confirmed unsafe condition. Munitions in this category are extremely dangerous to fire, handle, move, or transport. All such items are designated SIMU in the Limitations column. SIMUs assigned to lots permanently suspended with a fix assigned are not worked until special handling instructions are provided by IOC maintenance elements or the AMCOM Ammunition Management Office, as appropriate.

(2) **Suspended from Issue and Use (SIU).** A qualification to a suspension order prohibiting issue and use of a munitions item due to a suspected or confirmed unsafe condition. Munitions in this category are dangerous to fire or function. No movement, handling, or transporting limitations are imposed. All such items are designated SIU in the Limitations column.

c. Restriction. A restriction is an order that places special operating limits on the use of munitions for reasons of safety or degraded performance.

If during the inspection, you encounter munitions on the suspended/restricted list, you must annotate the lots and ensure that appropriate action is taken in accordance with TB 9-1300-385.

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9. Learning Step/Activity 9: The students will complete a practical exercise on the previously covered material.

Method of instruction: PE2
Instructor-to-student ratio: 1:12
Time of instruction: 2.0 hours
Media: None

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a. Directions to Instructor:

(1) Ensure each student has a copy of the Practical Exercise 55B40B01-PE2 Worksheet 1.

(2) Inform students of directions listed below.

(3) Provide assistance as required.

(4) Critique the exercise upon conclusion.

b. Directions to Students:

(1) The purpose of this practical exercise is for you to demonstrate how well you have retained the material we have covered in this lesson.

(2) Talking between students is not allowed during the practical exercise.

(3) Raise your hand for assistance, if needed.

(4) Using the reference material provided answer the questions and cite the reference where you found the answer.

(5) You have 100 minutes to complete this Practical Exercise.

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10. Learning Step/Activity 10: Describe the ammunition surveillance program for safety and logistics functions.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.8 hours
Media: Viewgraphs

Note: **Show VG24 (Safety and Logistics).**

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a. Safety and Logistics. The primary responsibility for the safe/proper conduct of all ammunition functions rests with the organization performing the function.

(1) The safety and logistics functions described in this lesson are the responsibility of QASAS personnel. These functions include inspection of buildings and areas in which munitions and explosives are stored, including ASPs, PSPs, and proving grounds; outside storage; operations involving handling, storing, maintenance, shipping, and destruction of munitions; and transport vehicles and vessels used for transportation of munitions and explosives.

(a) Safety, conduct of the operation, compliance with SOPs, munitions identity (lot integrity), and serviceability are primary concerns of such inspection. Unsafe practices, methods, or conditions must be corrected immediately and reported through appropriate channels for long-term corrective action.

(b) The QASAS in charge will maintain close coordination with the safety director on matters affecting the explosive safety program at an installation and furnish copies of magazine inspection reports follow-up actions, and propellant stabilizer data.

(c) Applicable safety, transportation, storage, maintenance, demilitarization, and supply regulations and directives issued by responsible commands will be used in conducting such inspections and ensuring the adequacy of the SOP.

(2) Prior to conducting any operation involving safety and logistics, a standing operating procedure (SOP) will be prepared. The SOP will be written within the guidelines contained in DA PAM 385-64 or AMC-R 700-107. The QASAS in charge will review the SOP for currency of safety, operational, and quality requirements.

Note: **Show VG25 (Storage Buildings and Areas).**

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b. Storage Buildings and Areas. Magazines and other buildings in which munitions and explosives are stored will be given a formal inspection every 7 months, except as noted in paragraph 11-2c. Such inspections will be performed by QASAS who will record and report the results.

(1) A formal record will be maintained of the results of these inspections, and lightning protection system tests to include discrepancy reports forwarded to responsible installation activities and the resolution or corrective actions resulting from these reports.

(2) Inspection results will be considered part of the technical history of the items in storage.

(3) Any unusual or changing conditions encountered during an inspection that have or could have an adverse effect on any of the stored items will be recorded on appropriate DSR cards; and such conditions, along with any potentially hazardous conditions, will be specifically noted and reported to the appropriate organization for prompt corrective action.

(4) A reinspection will be scheduled for locations where potentially serious conditions have been encountered to verify that they have been corrected.

(5) Conditions to be considered in the inspections of magazines and storage buildings include, but are not limited to:

- Compliance with storage drawing
- Segregation of lots and condition codes
- Adequacy of aisles
- Stability of stacks
- Separation of stacks by safety distance where such are specified
- Compliance with quantity distance limits in stacks and magazines

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Note: **Show VG26 (Outside Storage).**

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c. Outside Storage. Munitions placed in outside storage will be given adequate continuing inspection to ensure that packaging is not damaged to the extent that munitions content are exposed in any manner not intended by the original design of the package.

(1) Any damaged packages will be adequately repaired before placing in outside storage. All munitions will be stored in stable stacks with ventilation provided according to existing requirements.

(2) DA policy requires that outside storage of munitions and explosive material be held to an absolute minimum.

(3) It is recognized that there are situations where outside storage may be justified provided material is stored within explosive safety standards.

(4) Examples of these situations are as follows:

- Size precludes storage in magazines.
- Material is presently stored outside and scheduled for demilitarization or maintenance.
- Material is temporarily located in outside storage at the time of Suspension from Issue, Movement, and Use (SIMU).

(5) A formal examination of each outside site in which munitions are stored will be made quarterly. The inspection will consist of a general exterior examination of the munitions items and packages for evidence of deterioration or damage and for the presence of any conditions indicating the possibility of future deterioration.

(6) If the exterior examination reveals any evidence of deterioration or nonstandard conditions, additional detailed inspections will be made as necessary to determine the condition of the entire quantity of munitions affected.

(7) Each outside site will be examined immediately following any unusual weather condition, such as severe rain, snow, or wind storms, which might damage or affect the munitions.

(8) Munitions in outside storage will be subjected to a complete PI at least semiannually. Primary emphasis will be on detecting any evidence of deterioration or hazardous conditions that may affect the continued serviceability or storage safety of the munitions.

Note: **Show VG27 (Handling/Storage/Shipping).**

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d. Handling/Storage/Shipping. QASAS personnel will review handling, storage, and shipping operations for compliance with applicable safety and operational regulations. Reports of deficiencies will be forwarded through appropriate channels to obtain corrective actions, as required. Follow-up will be made to ensure deficiencies are corrected.

(1) A QASAS will clear all lots of munitions, components, and related material designated for shipment or issue. Clearance will include reviewing DSR cards, suspension records, and other applicable references. Local procedures will be designed to ensure that all necessary actions required prior to shipment are:

- Noted
- Provided to the operating element for action
- Checked to ensure completion prior to release of items for issue or shipment.

(2) Material transferred directly to the Defense Reutilization and Marketing Office (DRMO) for disposal, without demilitarization, will be duly certified as inert/free of hazardous chemicals and/or explosives by the ammunition operations organization. This certification will be verified by means of lot clearance procedures by QASAS as specified above.

(3) Material to be shipped to an installation without an assigned QASAS should have no less than one year remaining in the current inspection cycle. The senior QASAS at the shipping installation may make expectations consistent with good management practices and maximum utilization of resources.

Note: **Show VG28 (Temperature Control).**

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e. Temperature Control. Sudden changes in temperature may damage airtight containers or result in excessive condensation of moisture. If the temperature in a magazine exceeds 100 degrees F for a period of more than 24 hours, the magazine should be cooled by wetting the exterior of the building with water and by opening the doors and ventilators after sunset and closing them in the morning. If these methods do not prove effective in lowering the temperature, the commander will decide whether the materials should be moved to some other magazine.

(1) Storage magazines, in general, should not be provided with heat. Exception is made in the case of magazines where heating may be necessary to prevent condensation of moisture, to maintain constant temperature, or other reasons.

(2) Where approved heating apparatus is used to heat a magazine, it must be arranged to keep explosive materials at least 18 inches from the heating element.

Note: **Show VG29 (Protection From The Elements).**

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f. Protection from the Elements. Four fundamental requirements for protecting munitions from the elements are:

- Adequate shelter
- Appropriate dunnage
- Adequate drainage
- Adequate ventilation.

(1) The absence of these requirements, due to manpower and equipment shortages may create only minor problems because of the rapid turnover of stocks and temporary nature of the operation. The vehicle on which material is carried provides a reasonable degree of protection from the elements; however, if special munitions are not carried on vehicles, it should receive a high degree of protection.

(2) At depots, the requirements identified above are very important factors in planning of storage and issue operations because large stocks and longer term storage are involved. Appropriate storage ensures maximum serviceability and shelf-life of stocks and keeps maintenance to the minimum.

(3) Basically, four things are necessary to protect munitions from the weather: adequate shelter, enough dunnage, good drainage, and good ventilation. Tarpaulins (tarps) over stacks help, but they are useless unless they are raised clear of the stack. Tarps can also be used as improvised shelters for VT fuzes and pyrotechnics.

(4) In most areas, stacks have to be at least 4 to 6 inches off the ground. If they are not, the munitions get wet and air does not circulate. Rounds get rusty and become unserviceable. Lumber on the ground beneath containers acts as dunnage to raise them the appropriate distance.

(a) If there is no lumber, or if trees are not available for dunnage, try using empty munitions boxes or use ration boxes filled with sand or dirt.

(b) Bricks, wood from crates, and materials from wrecked buildings will also work.

(c) Putting strips of lumber between containers lets air circulate better and makes the stack more stable. But because wood rots and falls apart, check it frequently.

(d) Dig ditches around stacks of munitions if drainage is going to be a problem.

(5) If propellant charges are stacked, turn lids down slightly so water will not seep in or accumulate.

Note: **Show VG30 (Lightning).**

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g. Lightning. It is the policy of AMC to install lightning protection on buildings and structure used for manufacturing, processing, handling, or storing explosives, munitions, or explosive ingredients, particularly where operations cannot be shut down during electrical storms and personnel evacuated; and on buildings and structures the damage of which (by lightning) could cause large economic loss, or would handicap activities essential to the Department of Defense. Each such building and structure must be equipped with an effective lightning protection system.

(1) Temporary storage facilities and structures housing operations not regularly conducted at a fixed location need not be protected.

(2) Earth-covered magazines used for the storage of munitions and explosives in closed containers or in their approved shipping configuration are not required to have lightning protection systems, provided the metallic ventilators, doors and reinforcing steel are electrically bonded together and grounded.

(3) Groups of above-ground magazines must be provided with lightning protection systems.

(4) All details and pertinent data of proposed installations of lightning protection systems must be submitted through command channels to the Director, AMC Field Safety Activity, ATTN: AMXOS-SE for review and approval before any construction is started (this may be accomplished as part of a final safety review).

(5) Magazines and explosives operating facilities which are leased must be inspected at least once a year by the appropriate AMC installation safety personnel.

Note: **Show VG31 (Transport Vehicles and Vessels).**

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h. Transport Vehicles and Vessels. When transport vehicles and vessels are to be used for transportation of munitions and explosives, they must be given a thorough exterior and interior examination to determine suitability to transport the materiel involved.

(1) Loading must be according to specific requirements for the transport mode and type(s) of munitions and explosives involved.

(2) An authorized carrier's representative must certify the proper condition of rail cars to be used for transporting class 1.1 or 1.2 explosives.

(3) In case of motor vehicles, sufficient completed copies of DD Form 626 (Motor Vehicle Inspection) and DD Form 836 (Special Instructions for Motor Vehicle Drivers) will be furnished to the driver at the time of release of the shipment.

(4) Upon receipt at a military establishment, munitions/explosives laden transport vehicles and vessels must be given a thorough exterior and interior examination before unloading operations are started.

(5) Basic policy and guidance for transportation of munitions and explosives are contained in AR 55-355. Guidance on specific areas of interest is contained in AR 55-228, AR 190-11, BOE 6000, 46CFR, 49CFR, TM 38-250, DA PAM 385-64, and TM 9-1300-206.

(6) DD Form 1387-2 (Special Handling Data/Certification) for shipment of munitions and explosives on military controlled aircraft may be signed by a currently certified QASAS. They must meet the qualification in TM 38-250, as certifying officials.

Note: **Show VG32 (Demilitarization).**

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i. QASAS Involvement in Demilitarization. Monitoring of munitions/explosives demilitarization operations and sites will be as directed by the QASAS in charge and will comply with the MACOM directive establishing priorities of surveillance workload (i.e., first priority for explosive safety).

(1) An operation survey will be conducted by a QASAS, prior to and during any operation performed by the mission organization. The operation survey is directed toward verification of the mission organization's ability to accomplish a given operation in a safe, efficient, and qualitative manner. Further, the survey will verify that procedures and methods of destruction and demilitarization are accurate, in compliance with approved SOPs, and that all pertinent authenticating documentation is readily available.

(2) Detailed information on the survey is found in Chapter 10, SB 742-1.

Note: **Show VG33 (Documentation).**

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j. Documentation. An internal medium for all visits by QASAS personnel to operations will be established. Reports will be specific to identify the operation, supervisor-in-charge, SOP number (complete with most current change), date and times of the visit, deficiencies (or lack thereof), and suggestions for improvement noted.

Reports of deficiencies/operational improvements forwarded to responsible activities, and the resolution or corrective actions resulting from such reports, will be maintained. Follow up will be made to ensure deficiencies are corrected.

k. AIN/MIN.

(1) AINS are used to:

- Disseminate technical information for IOC/SMCA-managed items.
- Provide information relating to the conduct of the surveillance program.
- Dispense precautions pertaining to specific munitions.

(2) MINS are used to:

- Disseminate technical information for AMCOM managed items.
- Provide surveillance information regarding guided missiles and large rockets.

Note: **Show VG34 (Major Training Area Operations).**

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l. Major Training Area Operations. QASAS responsibilities are:

(1) QASAS assigned to live firing training areas are responsible for providing technical assistance and support on munitions quality and explosive safety matters to locally assigned personnel and to troops training at the facility.

(2) QASAS should be available to assist range safety officers to assure that units are properly briefed prior to commencement of training exercises. This will include as a minimum, safety in handling and transportation, protection of munitions from the elements, malfunction reporting requirements, and turn in procedures for unused munitions and residue.

(3) QASAS should be available to prepare or provide assistance in preparation of reports required by AR 75-1 and local procedures in conducting malfunction investigations.

(4) QASAS should conduct range area inspections periodically (daily when possible) of the ranges to assure that munitions are properly handled, stored, and transported. When visiting firing ranges the QASAS will observe firing and, if possible, consult with troops to determine if problems were encountered with the munitions during training.

Note: **Show VG35 (PREPO Ships).**

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m. PREPO Ships. Munitions supplied for PREPO ships is intended for long term storage aboard ship and for rapid deployment in a combat situation.

(1) Surveillance functions, including sample selection and inspection, removal and replacement of suspended stocks, minor preservation and packaging (P&P), stock rotation and inventory actions, are normally accomplished during periodic maintenance/inspection cycles for the ships.

(2) The Surveillance Program for PREPO stocks is designed to adequately describe the current condition of munitions and provide a basis for decisions concerning stock rotation and storage of munitions on board PREPO ships. Refer the students to Chapter 10, SB 742-1 for more details on PREPO ships.

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11. Learning Step/Activity 11: The students will complete a practical exercise on the previously covered material.

Method of instruction: PE2
Instructor-to-student ratio: 1:12
Time of instruction: 1.0 hour
Media: None

a. Directions to Instructor:

(1) Ensure each student has a copy of the Practical Exercise 55B40B01-PE2 Worksheet 2.

(2) Inform students of directions listed below.

(3) Provide assistance as required.

(4) Critique the exercise upon conclusion.

b. Directions to Students:

(1) The purpose of this practical exercise is for you to demonstrate how well you have retained the material we have covered in this lesson.

(2) Talking between students is not allowed during the practical exercise.

(3) Raise your hand for assistance, if needed.

(4) Using the reference material provided answer the questions and cite the reference where you found the answer.

(5) You have 100 minutes to complete this Practical Exercise.

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12. Learning Step/Activity 12: Describe the important or frequently encountered forms, records, and reports used in surveillance.

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 0.3 hours
Media: Viewgraphs

Note: Use this section as a primer. This subject matter will be covered in depth in later classes. A block-by-block "how to fill out the form" approach is not intended.

Note: **Show VG36 (Ammunition Forms).**

Note: Refer students to Chapter 11, SB 742-1 in order to discuss the form in detail.

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a. DA Form 3022-R. The DA Form 3022-R, Army Depot Surveillance Record (DSR) will be prepared and maintained in an up to date status for each lot, serial, or group of munitions in storage.

(1) A DSR card is normally used by all organizations which store munitions or explosives at any level above the user level.

(2) The DSR card contains information on the technical history of the materiel such as the results of each investigation, examination, test, any unusual or changing condition affecting the munitions, type of storage, etc.

Note: Ensure that the use of DA Form 3022-R as a temporary record during inspections is recognized.

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b. DD Form 1650. When munitions are renovated, inspected 100 percent for critical defects, modified, or regrouped, new or revised data cards will be prepared by the appropriate ammunition operations organization and approved by the QASAS in charge. The requirement for new ammunition data cards is outlined in MIL-STD-1167 and specific instructions from the commodity command.

Note: Ensure students appreciate the importance of DA Form 3022-R and DD Form 1650. Point out that the knack of composing appropriate comments for the "Conditions Encountered" portion of the "Record of Inspection" block will be a learned skill, and that the style developed will vary by the preference of the supervising QASAS.

Note: **Show VG37 (Munitions Records).**

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c. DA Form 4508. DA Form 4508 will be used to accomplish local condition code, NSN, nomenclature, and lot or SN changes and will be processed through and concurred in by the ammunition surveillance organization.

d. Suspension Records. Munitions suspected of being unsafe or containing a critical defect will be suspended to prohibit its issue and use. This action is based on malfunction or accident reports, function test reports, and inspection reports.

(1) Worldwide munitions suspension, restriction, and release notices are disseminated by IOC and AMCOM teletype or electronic mail supplements to TB 9-1300-385. These actions are then published in TB 9-1300-385 which also includes lists of lots suitable and not suitable for overhead fire in training.

(2) Suspended stocks in storage must be appropriately identified using DD Form 1575 (Suspended Tag-Materiel) or DD Form 1575-1 (Suspended Label-Materiel) to preclude unauthorized handling or issue.

Note: Ensure that the students appreciate the relationship between Ammunition Suspension/Restriction logs, TB 9-1300-385, and the requirement for the QASAS to "clear" lots for issue or shipment.

Note: **Show VG38 (Reports).**

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e. Reports.

(1) **DA Form 2415 (Ammunition Condition Report (ACR)).** The ACR is used to report failures, discrepancies, and other conditions of munitions materiel. The instructions for use, completion, and distribution of DA Form 2415 are outlined in DA PAM 738-750.

(2) **SF 368 (Quality Deficiency Report).** SF 368 is the authorized means for users of Army material to report:

- Equipment faults in design, operations, and manufacturing.
- Equipment improvement recommendation to suggest improvements in Army material.
- Unsatisfactory new equipment received that is a direct result of below standard quality or workmanship. Instructions on completion are contained in AR 702-7 and DA Pam 738-750.

(3) **SF 364 (Report of Discrepancy (ROD)).** Installations receiving shipments with damage due to improper unitization, packaging, preservation, or marking will report the discrepancies according to AR 735-11-2. SF 364 will not be used for reporting transportation discrepancies except for material sent parcel post. The QA organization will normally report packaging discrepancies while the operations organization reports discrepancies in the item(s) shipped.

(4) **SF 361 (Transportation Discrepancy Report (DISREP)).** Shipments received at an installation that are over, short, astray, lost, or damaged; improperly blocked and braced; incompatible, handled improperly by carrier; tender or use of carrier's inadequate equipment or facilities; misdirected shipments; improper documents; or shipped in violation of military regulation will be reported on SF 361 according to AR 55-38.

(5) **DA Form 984-R (Munitions Surveillance Report (RCS AMC-876)).** Surveillance inspection and test results of munitions items (except small arms tracer test that are to be recorded and reported according to SB 742-1305-94-20) function tested at designated facilities in compliance with SBs will be recorded and reported on DA From 984-R.

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13. Learning Step/Activity 13: The students will complete a practical exercise on the previously covered material.

Method of instruction: PE2 (Worksheet 3)
Instructor-to-student ratio: 1:12
Time of instruction: 1.0 hour
Media: None

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a. Directions to Instructor:

(1) Ensure each student has a copy of the Practical Exercise 55B40B01-PE2 Worksheet 3.

(2) Inform students of directions listed below.

(3) Provide assistance as required.

(4) Critique the exercise upon conclusion.

b. Directions to Students:

(1) The purpose of this practical exercise is for you to demonstrate how well you have retained the material we have covered in this lesson.

(2) Talking between students is not allowed during the practical exercise.

(3) Raise your hand for assistance, if needed.

(4) Using the reference material provided answer the questions and cite the reference where you found the answer.

(5) You have 50 minutes to complete this Practical Exercise.

SECTION IV. SUMMARY

Note:	**Show VG39 (Summary).**
	Method of instruction: CO Instructor-to-student ratio: 1:12 Time of instruction: 0.5 hours
Review/ Summarize Lesson	During this lesson, we have discussed surveillance operations to include inspections, reports, and forms. We have also conducted 3 practical exercises to reinforce the instruction.
Check on Learning	Determine if students have learned the material presented by: a. Soliciting student questions and explanations. b. Asking questions and getting answers from the students. c. Correcting student misunderstandings.
Transition to Next Lesson	Your next lesson will be on safety in ammunition operations.

SECTION V. STUDENT EVALUATION

Testing Requirements	Upon completion of this annex, your performance will be evaluated through a comprehensive end of annex examination.
Feedback Requirement	a. Schedule and provide feedback on the evaluation and any information to help answer students' questions about the test. b. Provide remedial training as needed.
Note:	Rapid, immediate feedback is essential to effective learning.

Practical Exercise Work Sheet 1

NAME **RANK** **CLASS** **DATE**

1. You have been directed to select and prepare for shipment a test sample of D541 (propellant, 155mm white bag). What reference will you use as your guide?

ANSWER:_____

_____

_____

REFERENCE:_____

2. What does the acronym "SASIP" stand for?

ANSWER:_____

_____

_____

REFERENCE:_____

3. You have just completed inspecting a sample of 81mm mortar cartridges packaged in jungle pack. How will you reseal the jungle pack?

ANSWER:_____

_____

_____

REFERENCE:_____

SITUATION: Today is Friday, 8 Feb 93. You are scheduling future inspections for munitions lots on which you performed periodic inspections this week.

*** Lots inspected this week ***

Monday:

C440 CTG, 105mm Blank M395 lot: PA-32-17X
C462 CTG, 105mm HE M444 lot: JA-32-1X
C697 CTG, 4.2in HE M329A2 lot: LOP81E200-007A

Tuesday:

C445 CTG, 105mm HE M1 w/o FZ lot: KN-77E002-002
C454 CTG, 105mm SMK WP M60 w/FZ PD lot: RD-32-87
C449 CTG, 105mm ILLUM M314 lot: LOW-3-1

Wednesday:

D680 PROJ, 8in HE M106 lot: IOP-17-78
D684 PROJ, 8in HE M404 lot: LS-1-10
D676 CHG, PROP, 8 in WB M2 lot: BAJ-63470

Thursday:

H490 RKT 2.75in HE w/whd M151 lot: LOP-312-10A
K092 MINE, APERS, M16A1 lot: LOP-35-22B
G881 GREN, hand frag M67 lot: LS-86M061-002

Friday:

A071 CTG, 5.56mm ball lot: LC-83D002-141

4. What periodic inspection interval would normally be appropriate for each of the items inspected?

MON:	TUES:	WED:	THURS:	FRI:
C440:	C445:	D680:	H490:	A071:
C462:	C454:	D684:	K092:	
C697:	C449:	D676:	G881:	

5. Schedule the next inspection for each item completed this week using the standard intervals.

MON:

C440 PA-32-17X _____

C462 JA-32-1X _____

C697 LOP81E200-007A _____

TUES:

C445 KN-77E002-002 _____

C454 RD-32-87 _____

C449 LOW-3-1 _____

WED:

D680 IOP-17-78 _____

D684 LS-1-10 _____

D676 BAJ-63470 _____

THURS:

H490 LOP-312-10A _____

K092 LOP-35-22B _____

G881 LS-86M061-002 _____

FRI:

A071 LC-83D002-141 _____

6. D540, CHG, PROP, GB M3, lot BAJ83d-011320, was due for inspection in July 1996. It's now February 1997. You haven't gotten around to doing the inspection yet and won't be able to for several more months. What must be done?

ANSWER:_____

_____

_____

REFERENCE:_____

7. You received one pallet of A131 (CTG, 7.62mm 4 ball M80/1 TR M62 linked) from Red River Army Depot 8 days ago. You are about to do the receipt inspection. What size sample will you select for this inspection?

ANSWER:_____

_____

_____

REFERENCE:_____

8. You have just completed your inspection of 736 M2A1 metal boxes turned in as residue from an infantry brigade's mass rifle qualification exercise. Of the boxes turned in, 735 are in perfect condition (to include legible markings). One was ran over by a truck and flattened. What condition code is appropriate for the 735 good boxes?

ANSWER:_____

_____

_____

REFERENCE:_____

9. In your inventory you have three M447 rocket motors (M119) in perfect condition, with two weeks remaining of their shelf life. No suspensions or restrictions apply to this lot. What condition code is appropriate for these motors?

ANSWER:_____

_____

_____

REFERENCE:_____

10. You spent all morning in the surveillance workshop inspecting artillery fuzes. When you returned to the office for lunch, you checked distribution and found a message suspending one of the lots still in the workshop from issue, movement, or use. What action is appropriate? (The 16 fuzes of that lot that you have in the workshop are the last in stock at your ASP).

ANSWER:_____

_____

_____

_____

REFERENCE:_____

11. Late last evening you were called to investigate a malfunction on the tank gunnery range. A C787 (CTG, 120mm HEAT-MP-T, M830) had functioned prematurely (in the bore of the main gun on an M1A1 MBT), killing the gunner, loader, and tank commander. What class of malfunction was this?

ANSWER:_____

_____

_____

REFERENCE:_____

12. 1/84th Field Artillery (155 SP) has submitted a DA Form 581 for the munitions that they will need for next week's combined arms live fire exercise, where their howitzers will fire over the heads of maneuvering infantry. Your stock control section has selected the lots to be issued and sent the 581 to you to ensure that none of the lots are suspended. Your check reveals that none of the lots are suspended or restricted. Further, the fuze and projectile lot numbers are listed in Appendix C and the propellant lot number is listed in Appendix D. What is the problem?

ANSWER:_____

_____

_____

_____

REFERENCE:_____

13. Your inventory includes 157,602 rounds of A483 (CTG, cal .45 ball M1911 Match Grade) in one lot. The Depot Surveillance Record for that lot indicates that the lot is restricted to match training use only (B14). The cartridges and their packaging are seen to be in perfect condition. What condition code is appropriate?

ANSWER:_____

_____

_____

_____

REFERENCE:_____

14. To what organization and address do Marine Corps units address their requests for ammo drawings?

ANSWER:_____

_____

_____

REFERENCE:_____

15. What does the acronym "PCP" stand for (in munitions terminology)?

ANSWER:_____

_____

_____

REFERENCE:_____

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SOLUTION SHEET
SURVEILLANCE OPERATIONS
PRACTICAL EXERCISE 1

1. Answer: Use SB 742-1300-94-895 as your guide to select and prepare propellant test samples.
   Reference: SB 742-1, paragraph 2-3a(5).

2. Answer: "SASIP" stands for "Supplemental Ammunition Surveillance Inspection Procedure."
   Reference: SB 742-1, paragraph 2-3b(2).

3. Answer: Reseal jungle pack samples with pressure sensitive adhesive tape, SPEC PP-T-60D, type III or IV.
   Reference: SB 742-1, paragraph 2-3c(6).

4. Inspection interval categories of items inspected:

	ANSWER	
DAY	ITEM	CAT/INT
MON	C440	Y/3yr
	C462	W/5yr
	C697	X/4yr
TUE	C445	W/5yr
	C454	W/5yr
	C449	Y/3yr
WED	D680	U/7yr
	D684	W/5yr
	D676	Y/3yr
THU	H490	X/4yr
	K092	X/4yr
	G881	Y/3yr
FRI	A071	U/7yr

NOTE: Table 2-1 and Table 2-2, pages 2-20 through 2-22 are the required references.

5. Next scheduled inspections (no extenuating circumstances):

		Inspections		
ITEM	CAT/INT	Current	Next	(ANS)
MON	C440	Y/3yr	970204	000204
	C462	W/5yr	970204	020204
	C697	X/4yr	970204	010204
TUE	C445	W/5yr	970205	020205
	C454	W/5yr	970205	020205
	C449	Y/3yr	970205	000205
WED	D680	U/7yr	970206	040206
	D684	W/5yr	970206	020206
	D676	Y/3yr	970206	000206
THU	H490	X/4yr	970207	010207
	K092	X/4yr	970207	010207
	G881	Y/3yr	970207	000207
FRI	A071	U/7yr	970208	040208

Note: References as per question 4.

6. Answer: Items more than 6 months past due for inspection are placed in C018D1T
   Reference: SB 742-1, paragraph 2-5b.

7. Answer: Sample size of A131 (7.62mm 4x1 linked) will be 10 belts.
   Reference: SB 742-1, paragraph 2-4b and Table 2-3.

8. Answer: Good packing materials with old markings will be assigned CC-B.
   Reference: SB 742-1, paragraph 2-7c(6).

9. Answer: Items with less than 3 months of remaining shelf life will be assigned CC-C.
   Reference: SB 742-1, appendix C, Condition Code C definition.

10. Answer: Items suspended from issue, movement, or use will not be handled or worked until special handling instructions are received from AMCCOM. Items in the workshop stay there, unmoved. Usual posting and reporting tasks must be done.
    Reference: TB 9-1300-385, paragraph 1-3c(1), page ii.

11. Answer: Malfunctions involving death or major injury are considered CLASS A malfunctions.
    Reference: TB 9-1300-385, paragraph 1-3i(1), page iv.

12. Answer: Items listed in Appendix D, TB 9-1300-385 (the propelling charge, in this case) are not suitable for overhead fire.
    Reference: TB 9-1300-385, paragraph 1-5e, page vii.

13. Answer: Otherwise serviceable, issuable items that carry a restriction are assigned CC-B.
    Reference: SB 742-1, appendix C, Condition Code B definition.

14. Answer: Marine Corps Units get their ammo drawings from:

    Commanding Officer
    NAVSURFWARCEN Crane Div.
    Code 4021, Bldg. 2084
    300 Highway 361
    Crane, IN 47522

    Reference: SB 742-1, paragraph 2-3b(3)(d).

15. Answer: In munitions terminology, "PCP" stands for the wood preservative "pentachlorophenol."

    Reference: SB 742-1, paragraph 2-4b(4)(d).

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Practical Exercise Work Sheet 2

NAME **RANK** **CLASS** **DATE**

1. Magazines in use will normally be inspected every ____ months; however, the inspection period may be shortened to as frequent as every ____ months or lengthened to as many as ___ months.

ANSWER:_____

_____

_____

REFERENCE:_____

2. Where would you find basic policy and guidance for transportation of ammunition and explosives?

ANSWER:_____

_____

_____

REFERENCE:_____

3. You are shipping 18 tons GSW of PETN based flexible detonating cord (1375-M456) from Pueblo Army Depot to the Sunny Point port facility. For security reasons, the shipment will be made by rail. Upon receipt at Sunny Point, what type of examination must be done before unloading operations are started?

ANSWER:_____

_____

_____

REFERENCE:_____

4. Which organization will develop a SOP to support demilitarization operations?

ANSWER:_____

_____

_____

REFERENCE:_____

5. You have eight earth covered magazines in your storage area. How frequently should you verify the depth of the earth covering on those magazines?

ANSWER:_____

_____

_____

REFERENCE:_____

6. Who has the authority and responsibility to stop unsafe operations where imminent danger is involved?

ANSWER:_____

_____

_____

REFERENCE:_____

7. What does the acronym "AIN" stand for?

ANSWER:_____

_____

_____

REFERENCE:_____

8. What reference provides reporting procedure guidance for munitions malfunctions?

ANSWER:_____

_____

_____

REFERENCE:_____

9. What branch of service uses (MPS) Maritime Prepositioning Ships?

ANSWER:_____

_____

_____

REFERENCE:_____

10. What specification is used to evaluate ammo skid bases for loading on PREPO ships?

ANSWER:_____

_____

_____

REFERENCE:_____

11. What is the project code for Army PREPO ships?

ANSWER:_____

_____

_____

REFERENCE:_____

12. Prior to conducting any operation involving functions covered in SB 742-1, a SOP will be prepared. The SOP will be written within the guidelines contained in which references?

ANSWER:_____

_____

_____

REFERENCE:_____

13. In any ammunition surveillance activity, SOPs are a fact of life. Who has responsibility for reviewing those SOPs and ensuring that they are current?

ANSWER:_____

_____

_____

REFERENCE:_____

14. How often will a formal examination be done on outside sites in which munitions are stored?

ANSWER:_____

_____

_____

REFERENCE:_____

15. When an installation's training ranges are in operation, how frequently should the QASAS inspect those areas?

ANSWER:_____

_____

_____

REFERENCE:_____

SOLUTION SHEET
SURVEILLANCE OPERATIONS
PRACTICAL EXERCISE 2

1. Normal interval = 12 months.
   Short interval = 3 months.
   Long interval = 24 months.

   REFERENCE: SB 742-1, paragraph 10-2a, 10-2c.

2. AR 55-355.

   REFERENCE: SB 742-1, paragraph 10-5c.

3. Through exterior and interior.

   REFERENCE: SB 742-1, paragraph 10-5b.

4. Surveillance organization.

   REFERENCE: SB 742-1, paragraph 10-6c.

5. Check the depth of earth cover every 24 months.

   REFERENCE: SB 742-1, paragraph 10-2a(4)(m).

6. QASAS, military ammunitions inspectors, MOS 55B (SSG/SFC) and properly certified civilian technicians.

   REFERENCE: SB 742-1, paragraph 10-1a (Note).

7. "AIN" stands for "Ammunition Information Notice."

   REFERENCE: SB 742-1, paragraph 10-10.

8. AR 75-1 provides guidance on malfunction reporting procedures.

   REFERENCE: SB 742-1, paragraph 10-11a (1) or (5).

9. The Marine Corps uses MPS (the Army calls its vessels used for the same task "PREPO").

   REFERENCE: SB 742-1, paragraph 10-12.

10. Skid bases are not used; they're replaced by 4-way entry pallets.

    REFERENCE: SB 742-1, paragraph 10-12c(5).

11. MW_ where the last alpha character indicates ship.

    REFERENCE: SB 742-1, paragraph 10-12e(1).

12. TM 9-1300-250.

    REFERENCE: SB 742-1, paragraph 10-1c.

13. The QASAS in charge is responsible for reviewing SOPs for currency.

    REFERENCE: SB 742-1, paragraph 10-1c.

14. Quarterly.

    REFERENCE: SB 742-1, paragraph 10-3b.

15. The QASAS should inspect operating ranges daily.

    REFERENCE: SB 742-1, paragraph 10-11c(1).

Practical Exercise Work Sheet 3

NAME **RANK** **CLASS** **DATE**

Situation: Yesterday, you performed periodic inspections on several lots. Today, it's raining, so you will remain in the office and prepare your entries for the DSR cards. Encode the following defects for C445 (CTG, 105mm HE, M1 w/o Fuze), lot: JA-69-36.

1. Defect: Seven of 20 samples had major green corrosion on the primer.

   Code: _____

2. Defect: Two of 20 samples had propellant bags stained blue and rotted (critical).

   Code: _____

3. Defect: The fiber tube inner packs on all 20 samples were wet (major).

   Code: _____

4. Defect: Four of 20 outer packs were missing banding and seals.

   Code: _____

5. Defect: Fifteen of 20 outer packs had illegible markings (minor).

   Code: _____

6. Defect: Nineteen of 20 projectiles were rusty; 6 had only minor rust on the ogive, 2 had major rust on the cylindrical body, and 11 had major rust on the bourrelet (critical).

   Code: _____

   Code: _____

   Code: _____

7. SF 364 (Report Of Discrepancy (ROD)) is used to report shipments received with damage due to improper unitization, packaging, preservation, or marking. Which regulation provides detailed guidance on its use?

ANSWER:_____

_____

_____

REFERENCE:_____

8. You are making a shipment of 1,432,070 rounds of A068 (CTG., 5.56mm TR, M196) to Miesau Army Depot (Germany). Various quantities of six different lots are included. You prepared photocopies of the DSR and ADC for each lot. Where do you send these documents?

ANSWER:_____

_____

_____

REFERENCE:_____

9. Supplements to TB 9-1300-385 are published by which organizations?

ANSWER:_____

_____

_____

REFERENCE:_____

10. Who normally uses DSRs?

ANSWER:_____

_____

_____

REFERENCE:_____

11. Who maintains the Depot Surveillance Records for samples being function tested under the centrally controlled program?

ANSWER:_____

_____

_____

REFERENCE:_____

12. What is the title of DD Form 250?

ANSWER:_____

_____

_____

REFERENCE:_____

13. You have completed your latest DA Form 4379-R. Where do you send the action copy?

ANSWER:_____

_____

_____

REFERENCE:_____

14. Today is 30 Jan 96. You have just mailed an ACR to AMCOM. When should you start looking for an answer?

ANSWER:_____

_____

_____

REFERENCE:_____

15. Yesterday, you conducted a normal periodic inspection on a lot of C445 (CTG., 105mm HE, M1, w/o Fuze). During the inspection, you discovered that each cartridge was missing propelling charge increment number two. Extremely distressed by this discovery, you inspected another sample (there are 10,360 rounds of this lot on hand in magazine 1207) and found exactly the same thing. This morning, you are preparing your ACR to inform IOC of this problem. What quantity will you enter in the "Quantity Defective" block?

ANSWER:_____

_____

_____

REFERENCE:_____

SOLUTION SHEET
SURVEILLANCE OPERATIONS
PRACTICAL EXERCISE 3

1. Code: 4131AP (35-44%, primer, major, corrosion).

2. Code: 1110AU (1-14%, propellant, critical, blue bag without loss of tensile strength).

3. Code: C311FS (95-100%, inner packing, major, wet pack).

4. Codes: 2331AA (15-24%, banding, major, missing) and 2421AA (15-24%, lead wire seals, major, missing).

5. Code: 8322FB (75-84%, outer packing, minor, marking illegible).

6. Codes: 3062CM (25-34%, body, minor, rust) and 1061CM (1-14%, body, major, rust) and 6060CM (55-64%, body, critical, rust).

   Reference for 1 through 6: AR 700-22, Table 4-2, pages 4-5 through 4-12, and paragraph 3-4c(1)(l), page 3-4.

7. AR 735-11-2 provides guidance on use of SF 364.

   REFERENCE: SB 742-1, paragraph 11-3c.

8. COMMANDER
   200th TAMMC
   Attn: AERLA-MMC-MD
   Unit 23203
   APO AE 09263.

   REFERENCE: SB 742-1, paragraph 11-4b(1).

9. IOC and AMCOM publish supplements to TB 9-1300-385.

   REFERENCE: SB 742-1, paragraph 11-2b(1).

10. All organizations which store ammo or explosives at any level above the user level.

    REFERENCE: SB 742-1, paragraph 11-2a(1).

11. DSRs are not required to be maintained on CCFTP samples.

    REFERENCE: SB 742-1, paragraph 11-2a(6)(a).

12. Material Inspection and Receiving Report.

    REFERENCE: SB 742-1, paragraph 11-3h.

13. Send DA Form 4379-Rs (Ammunition Malfunction Report) to:
    CDR
    AMCOM
    Attn: AMSMC-QAS-C
    Rock Island, IL 61299-6000.

    REFERENCE: AR 75-1, paragraph 2-2a(1), page 4.

14. Addressees should respond to ACRs within 90 days.

    REFERENCE: DA PAM 738-750, paragraph 9-4d, page 129.

15. Quantity Defective entry will be 40.

REFERENCE: DA PAM 738-750, figure 9-1, item 11, page 130.