TRAINING SUPPORT PACKAGE (TSP)

TSP Number/Title	55B40B03 Inspect Munitions Maintenance Facility
Task Number(s)/ Title(s)	093-400-4279 Inspect Munitions Maintenance Facility
Effective Date	21 August 1998
Supersedes TSP(s)	MP-05/B 645-55B40 MP-06/B 645-55B40
TSP User	USAOMMCS, Redstone Arsenal, Alabama and accredited Ordnance TASS Battalion
Proponent	US Army Missile and Munitions Center and School, Munitions Training Department, Redstone Arsenal, Alabama, 35897-6970
Comments/ Recommen-dations	Send comments and recommendations directly to: US Army CASCOM Training Directorate ATTN: ATCL, AO (Roy King) 401 First Street, Bldg 1109 Ft. 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 lesson, 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:	Inspect Munitions Maintenance Facility
CONDITIONS:	In a classroom environment, given the latest lightning protection test report, ASIR, DA Form 3024, SB 742-1, TM 9-1300-250, TM 9-1300-206, environmental guidelines, and an SOP.
STANDARD:	Inspect the maintenance facility in accordance with the requirements of SB 742-1, TM 9-1300-250, TM 9-1300-206, the SOP, and applicable environmental guidelines. Review all phases of ammunition maintenance operations. Record and report all discrepancies, and forward documentation to the ammunition surveillance office.

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
093-400-4279	Inspect Munitions Maintenance Facility

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	2.0 / PE2
Total hours	6.0

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
55B40B01	Surveillance Operations
55B40B02	Inspect Ammunition Operations for Safety

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
SB 742-1	Ammunition Surveillance Procedures	APR 98	
TM 9-1300-250	Ammunition Maintenance	25 SEP 69	w/changes 1-7
TM 9-1300-206	Ammunition and Explosives Standards	30 AUG 73	w/changes 1-10

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, Viewgraphs 55B40B03, VG# 01 - VG# 20

STUDENT MATERIALS: Practical Exercise Worksheet 55B40B03-PE2
References listed above.

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

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. Being an ammunition specialist, you may be stationed at a depot, and from time-to-time be required to monitor maintenance operations of munitions being reworked. You will inspect the operation to ensure that all safety equipment is present and operational. You may also be required to set up sampling points for in-process verification of items being reworked.

Terminal Learning Objective

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

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

ACTION:	Inspect Munitions Maintenance Facility
CONDITIONS:	In a classroom environment, given the latest lightning protection test report, ASIR, DA Form 3024, SB 742-1, TM 9-1300-250, TM 9-1300-206, environmental guidelines, and an SOP.
STANDARD:	Inspect the maintenance facility in accordance with the requirements of SB 742-1, TM 9-1300-250, TM 9-1300-206, the SOP, and applicable environmental guidelines. Review all phases of munitions maintenance operations. Record and report all discrepancies, and forward documentation to the ammunition surveillance office.

Safety Requirements

None

Risk Assessment Level

Low

Environmental Considerations

None

Evaluation	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	This lesson will provide you with the necessary knowledge to inspect the maintenance facility and to review all phases of munitions maintenance operations in accordance applicable requirements.

SECTION III. PRESENTATION

1. Learning Step/Activity 1: Describe munitions maintenance facility inspection procedures.
(Reference TM 9-1300-250 chapter 4 and TM 9-1300-260 chapter 2)

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 2.0 hours
Media: Viewgraphs

Note: **Show VG02 (Inspect/Monitor Maintenance/Renovation Operations).**

a. Inspection Coordination. Before any maintenance/renovation operation can begin, the unit must have the proper depot maintenance work requirements (DMWR), required munitions drawings, military specifications, and required ammunition peculiar equipment (APE).

Note: Have the students look at a copy of DMWR to become familiar with the operations to be performed. (Each student will have a different DMWR).

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

(1) When the flow sheet SOPs, index of operations, and operations have been prepared, the ammunition officer with the assistance of his key NCOs, provides the service section with a list of all special tools that will be required. This list includes any requirement for fabrication of special equipment. A listing of tools and material is given to the supply section.

(2) A conference is held with the key NCOs for the purpose of reading the maintenance order and SOP. Each NCO is fully instructed in the operations for which he will be responsible and given a copy of the maintenance order and SOP. The line supervisor (NCOIC) makes a rough sketch of the line layout for the ammunition officer's approval. It is the responsibility of the line supervisor (NCOIC) to receive all the tools and supplies needed to perform the operation from the supply section.

b. Inspection Points. You must inspect to ensure compliance with the following areas: (TM 9-1300-250, page 4-7)

Note: **Show VG04 (Inspection Points).**

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(1) Ensure that the proper segment of the SOP and/or the pertinent DA publication is posted conspicuously at the operation location and ensure that it coincides with the operation being performed.

(2) Ensure that a complete copy of the SOP is retained in a location where it is immediately available to the foreman.

(3) Ensure that personnel under the foreman's supervision are instructed that omission of a written safety requirement in the SOP does not indicate that safeguards are not needed.

(4) Ensure that safe work practices are observed at all times.

Note: **Show VG05 (Inspection Points, Continued).**

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(5) Ensure that the quantity of explosives and the number of operators and transients authorized by the SOP are legibly and conspicuously posted in the operation location.

(6) Ensure that each operator is thoroughly instructed in his work assignment from a safety and operational standpoint and perform follow-up to the degree necessary to assure that personnel are conforming with all safety requirements and performing in a manner that will produce quality and quantity.

(7) Ensure that any operation is immediately stopped when an unusual or abnormal condition is encountered to the extent considered hazardous.

Note: **Show VG06 (Inspection Points, Continued).**

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(8) Ensure that there are no deviations from or violations of the SOP.

(9) Ensure that workers are taking corrective action on inoperative or defective equipment by reporting it to the next echelon of supervision or requesting repair directly from qualified mechanics.

(10) Ensure that operators are thoroughly trained and qualified to operate equipment from an operational and safety standpoint.

Note: **Show VG07 (Inspection Points, Continued).**

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(11) Ensure that assembly of end items of munitions are in accordance with component lot structure as specified by the planning activity.

(12) Ensure that daily inspection of hand tools and mechanical devices is performed to ensure that they have not become unsafe for use as designed, either to the item being worked on or to the operator.

c. Personnel and explosive limits. All operations involving explosives will be analyzed with a view toward reducing the number of personnel and the quantity of explosives that could be subjected to an incident. You must inspect for compliance with the following personnel and explosive limits.

Note: **Show VG08 (Personnel Limits).**

Note: Inform students that some of the information covered will be a review of previously discussed topics.

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(1) **Personnel Limits.** A minimum number of personnel will be exposed for a minimum amount of time to the smallest quantity of explosives consistent with safety and efficiency. However, at least one person should be available near the hazard area during explosive operations (such as disposal or testing) to give warning and assist in rescue activities in the event of an accident. The following will apply in the establishment of personnel limits. (TM 9-1300-206, pages 2-1 through 2-3)

(a) Tasks not necessary to the explosive operations will be prohibited within the immediate vicinity of the hazard.

(b) Unnecessary personnel will be prohibited from visiting the operation.

(c) Where it is essential to perform concurrent operations in a single building, or field site, the layout of operations will be planned to separate dissimilar operations to prevent propagation of fire or explosion. Such operations will be protected by dividing walls, barricades, or other means to minimize personnel exposure.

(d) The maximum number of operators, supervisors, and visitors (casuals) permitted at any one time in the immediate working area, room, cubicle, or building containing explosives will be effectively publicized by conspicuously placed posters or placards.

Note: **Show VG09 (Explosives Limits).**

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(2) **Explosives Limits.** Limits for munitions, explosives, and pyrotechnic materials shall be determined by a careful analysis of all facts, including operation timing, transportation methods, size of the items, and chemical and physical characteristics of the materiel. More stringent limits will be used for the more sensitive or hazardous materiel.

(a) Limits shall be established for each operation, rather than on an overall basis, so that each worker will be charged with the responsibility of not exceeding the established limit. Limits may be expressed in units of weight, trays, boxes, pallets, or any other unit that may be more easily observed and controlled.

(b) Except for storage buildings, explosive limits shall not be established on the basis of the maximum quantity of explosives permitted by explosives safety (quantity-distance) separation when smaller quantities will suffice for the operation. The maximum amount of explosives, expressed by weight and units of munitions as applicable, permitted in each room, cubicle, or building containing explosives will be conspicuously posted in each such area.

(c) Except for operational necessity, supplies exceeding approximately a 4-hour work requirement should be kept in a service storage building located at intraline distance from operating buildings based on the quantity of explosives in the service storage area.

Note: **Check on student learning.**

QUESTION: Where must a complete copy of the SOP be retained?

ANSWER: Where it is immediately available to the foreman.

QUESTION: What must assembly of ends items be in accordance with?

ANSWER: It must be in accordance with the component lot structure as specified by the planning activity.

QUESTION: Who should be prohibited from visiting the operation?

ANSWER: Unnecessary personnel.

QUESTION: For operational necessity, where should supplies exceeding a 4-hour work requirement be stored?

ANSWER: In a service storage building located at intraline distance from operating buildings based on the quantity of explosives in the service storage building.

Note: **Show VG10 (Protection of Personnel).**

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d. Protection of Personnel. You must inspect to ensure personnel are using suitable personal protective clothing, equipment, and devices to protect them against hazards inherent in specific jobs in accordance with AR 385-32.

Note: Refer students to Appendix B, TM 9-1300-206 and discuss the requirements for personal protective clothing and equipment.

Note: **Show VG11 (Munitions and Explosives Handling).**

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e. Munitions and Explosives Handling. You must inspect to ensure the following areas are complied with:

(1) Munitions and explosives will be handled carefully. Bale hooks will not be used. Nails will not be driven into shipping and storage containers containing munitions except to close the container in accordance with approved drawings or specifications. Containers will not be tumbled, dropped, dragged, thrown, rolled, or walked. However, munitions packaged in approved containers designed to permit dragging or towing may be moved accordingly. Unfuzed bombs equipped with shipping bands also may be rolled, if care is exercised. When it is necessary to lift palletized munitions, forklifts or properly used slings will be employed.

(2) Conveyors and forklifts may be used except where such use could cause initiation or create hazards. Sectionalized roller conveyors used to move munitions will be substantially supported and the section interlocked or secured. Boxes of munitions will not be used to support conveyors.

(3) Loose detonators, initiators, squibs, electrically actuated devices, blasting caps, and the like will not be carried in pockets of clothing, in tool kits, etc. Suitable containers will be used to provide adequate protection.

Note: **Show VG12 (Safety Hand Tools).**

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f. Safety Hand Tools. Inspect safety hand tools for the following:

(1) Ensure that authorized hand tools or other implements used in the vicinity of hazardous materials are handled carefully and kept clean.

(2) If the use of ferrous metal hand tools is required because of strength characteristics, the immediate area and equipment will be free from exposed explosives and other highly combustible material.

(3) Non-sparking or spark-resistant tools of lead or beryllium alloys that require sharpening or shaping shall be replaced rather than ground down, unless adequate exhaust ventilation is available on the grinder being used for this purpose.

Note: **Show VG13 (Personnel Responsibilities).**

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g. Personnel Responsibilities. You must inspect personnel to ensure they are observing the following precautions:

(1) They are not carrying fire- or spark-producing devices into munitions and explosive storage areas unless authorized in writing.

(2) Are not smoking, except in authorized areas. After smoking, ensure that burning tobacco is completely extinguished.

(3) They do not have fires for heating or cooking, except in authorized areas.

(4) They do not allow the accumulation of litter, packing material, dunnage, dry leaves, grass or twigs, etc., within firebreak areas.

(5) They do not accumulate oily rags or other material subject to spontaneous ignition, except in a covered metal box. They have such material collected daily and removed from the area.

(6) They do not conduct operations without approved SOPs and proper supervision.

(7) They only use permissible lighting in munitions storage sites.

(8) They do not become careless by reason of familiarity with munitions.

(9) In case of fire, they sound an alarm immediately and are ready to show the location of the fire to firefighting personnel.

(10) Ensure that each operator knows what to do in case of fire within the storage area.

(11) Ensure that the person in charge has instructed all personnel on the existing fire plan to aid firefighting crews and to prevent the loss of life and property in case of an accident.

(12) Ensure there are no firearms, cameras or camera flashing equipment in munitions and explosive facilities unless authorized in writing.

Note: **Show VG14 (Fencing, Placarding, and Admittance to Explosive Areas).**

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h. Fencing, Placarding, and Admittance to Explosive Areas. Inspect to ensure that the explosive area is placarded at each entrance. Unauthorized personnel will not be permitted to enter. Authorized personnel must enter and leave munitions areas at a designated point.

(1) The placard will require personnel, before entering the area, to present proper credentials and turn over all prohibited articles to the guard on duty, or to place them in containers provided for that purpose.

(2) The explosives areas will be separated from administration, residential, and entirely unrelated inert and warehouse areas by fences. Fencing (excluding that installed for security reasons only) should not be placed closer to explosives operating building than intraline distance.

(3) Reservation boundaries should be fenced. In certain cases, topography and/or other physical considerations may make fencing impossible or impracticable. Security measures will be in accordance with AR 50-6 and AR 190-11.

(4) The boundary of each explosives area will be posted at 500-foot intervals to warn against trespassing in accordance with AR 380-20.

Note: **Show VG15 (Guard Protection).**

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i. Guard Protection. Magazines and/or storage areas in which there are explosives and munitions will be afforded appropriate security at all times. Entrances to these areas will be locked unless protected by guards.

(1) Guards, and others in charge of explosives and munitions, will be thoroughly instructed in emergency firefighting procedures, hazards due to fire and explosions, and safety precautions to be taken. If a fire occurs in a closed magazine, no personnel will attempt to enter the magazine.

(2) Guards will be instructed to make a prompt report of the following:

(a) Any unusual occurrence in or near a storage area.

(b) Grass or forest fires in areas adjacent to the storage area.

(c) Dangerous practices of personnel working in magazines or storage areas in which there are explosives (smoking, drinking, etc.).

(d) Unauthorized use of fire equipment and tampering with munitions or electrical equipment.

(e) Unlocked magazine doors or shutters, defective telephone and electric wires, or openings in fences.

(f) The presence of suspicious personnel.

Note: **Show VG16 (Housekeeping).**

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j. Housekeeping Within an Explosives Area. You must inspect general housekeeping practices in explosives areas. Buildings and magazines within an explosives area will be kept clean and orderly at all times.

(1) **Waste Materials.** Oily rags, combustible and explosives scrap, and paper will be kept separate from each other. Each type of waste should be placed in self-closing, noncombustible containers properly marked and preferably located outside the buildings.

(2) **Cleaning.** A regular cleaning program will be carried on as frequently as required for maintaining safe operations. Extensive cleaning should not be conducted while an explosives operation is being performed.

(3) **Sweeping Compounds.** Hot water or steam should be used wherever practicable for cleaning floors in buildings containing exposed explosives. Sweeping compounds which are nonabrasive and compatible with the explosives involved may be used where the use of steam or hot water is not practicable. Such compounds may be combustible but will not be volatile (closed cup flash point will be more than 230°F). Sweeping compounds containing wax will not be used on conductive flooring. Where nitrated organic explosives are involved, that may form sensitive explosive compounds with caustic alkalies, use of cleaning agents containing caustic alkalies is prohibited.

(4) **Explosives Recovery and Reuse.** All loose explosives recovered as sweepings from floors of operating buildings will be destroyed.

Note: **Show VG17 (Operational Shields).**

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k. Operational Shields. Ensure that the operational shields are installed where items are being processed for the following; (TM 9-1300-206, page 8-3)

(1) Disassembly of loaded boosters, fuzes, primers, and blank munitions.

(2) Removal of base plugs from loaded projectiles.

(3) Removal of fuzes from pentolite-loaded projectiles.

(4) Disassembly of loaded bombs and warheads.

(5) Removal of fuzes from hand grenades loaded with high explosives except as noted in paragraph 8-3(c)(4), of TM 9-1300-206.

(6) Pull-apart of fixed munitions, 20mm and larger.

(7) Disassembly of foreign munitions or other munitions of uncertain design and condition.

Note: An operational shield is a barrier to protect personnel, materiel, or equipment from the effect of a possible fire or explosion occurring at the location of a particular renovation operation.

Note: **Show VG18 (Inspect Gages).**

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l. Inspect Gages. Inspect all gages; they must be undamaged and free of any foreign matter. Check the gage and the number of passes made with the gage. Gages will be inspected and certified in accordance with SB 742-1.

m. Inspect Hazard Symbols. Check to ensure that the proper fire and/or chemical hazard symbols are posted.

Note: In addition to the inspection procedures that have already been discussed, you will continually monitor the operations to ensure compliance with SOPs and safety regulations.

Note: **Check on student learning.**

QUESTION: When using nails in handling munitions and explosives, what precaution must you take?

ANSWER: Nails will not be driven into shipping and storage containers containing munitions except to close the container in accordance with approved drawings or specifications.

QUESTION: What is the preferred method of sharpening non-sparking lead or beryllium alloys?

ANSWER: They should be replaced rather than ground down.

QUESTION: What action should be taken after smoking in an authorized area?

ANSWER: Ensure that burning tobacco is completely extinguished.

QUESTION: How will oily rags, combustible and explosive scrap and paper be kept?

ANSWER: They will be kept separate from each other.

QUESTION: What are operational shields used for?

ANSWER: To protect personnel, materiel, or equipment from the effect of a possible fire or explosion occurring at the location of a particular renovation operation.

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2. Learning Step/Activity 2: Describe 5 sample plans for maintenance/renovation operation. (Reference SB 742-1 chapter 4)

Method of instruction: CO
Instructor-to-student ratio: 1:12
Time of instruction: 1.5 hours
Media: Viewgraphs

Note: **Show VG19 (Product Verification Sampling Plan).**

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a. Inspection by Attributes (Continuous Sampling) - MIL-STD-1235. Continuous sampling using MIL-STD-1235 is the preferred method of performing acceptance sampling for inspection by attributes. MIL-STD-05 will be used if the continuous sampling procedures of MIL-STD-1235 are not employed, for example, if the operations organization lacks adequate screening capability. The plans normally used are CSP-1 and CSP-F. The means of operation are described below:

(1) At the initial start of production, the operations organization will perform screening (100 percent inspection), and the ammunition surveillance organization will select samples at frequency "f" (MIL-STD-1235, Table 2a). The number of units that require 100 percent inspection is obtained from Table 2a for CSP-1, and Tables 3-A-1 through 3-A-12 for CSP-F of MIL-STD-1235 (the value of "i").

(2) Screening by operations may be halted after the screening crew finds "i" consecutive units to be defect-free and no defects have been observed in the concurrent ammunition surveillance samples. Observation of a defect by the operations organization or in the ammunition surveillance sample requires a new attempt to clear the "i" value before equaling or exceeding the "s" value, (MIL-STD-1235, Table 2-B) and will require discontinuance of product acceptance until the cause of the excessive amount of defective materiel has been corrected.

(3) Once the operations organization has been relieved of the responsibility for screening, the ammunition surveillance organization will continue sampling at a permissible frequency "f." The occurrence of a defect in any ammunition surveillance sample will require immediate screening by the operations organization for the defect concerned. The flow of production will be curtailed until the screening crew can begin screening. Screening will continue in an attempt to clear the "i" value; the provisions of paragraph (2) above apply concerning application of the "s" value.

(4) In addition to sampling at frequency "f," the ammunition surveillance organization will monitor the screening phases to ensure correct application of proper "i" and "s" values.

b. Inspection by Attributes - MIL-STD-105 (use latest revision). If for any reason the continuous sampling procedure noted above is not employed (for example, if the operations organization lacks adequate screening capability), the appropriate plan from MIL-STD-105 will be used by the ammunition surveillance organization.

(1) The inspection plan will be normal severity, single sampling, inspection level II, unless otherwise specified by the appropriate commodity command. Each inspection batch or lot will contain homogeneous material produced in a specified time interval (normally a single shift or day).

(2) Where possible, the switching procedures for MIL-STD-105 will be employed. However, reduced inspection for critical characteristics will not be used.

c. Inspection by Variables-MIL-STD-414. If the quality characteristics require evaluation on a variable basis, MIL-STD-414 will be used. Each inspection lot or batch will contain homogeneous material produced in a specified time interval, normally a shift or day. Unless otherwise specified, inspection level IV, variability unknown, standard deviation method sampling plans will be used; for single specification limit, Form 2 will be used.

d. Inspection for Critical Characteristics. All critical characteristics will be inspected 100 percent by the operations organization. Surveillance will inspect for critical defects using the most stringent sample size for major defects but will always accept on zero defects and reject on one. The presence of a critical defect in any ammunition surveillance sample or in any other item which has passed 100 percent inspection by operations personnel will require rejection of all suspected material regardless of which sampling plan is used.

(1) The extent of rejection will depend on the circumstances creating the critical defect. If the defect cause can be isolated to a particular quantity of material or production interval, then rejection may be limited to this quantity of material or production interval as determined by the QASAS in charge.

(2) Material that has been reprocessed and resubmitted for acceptance will be inspected as follows:

(a) MIL-STD-1235—use CSP-1. The operation organization will screen resubmitted units of product and the ammunition surveillance organization will select samples at frequency “f.” The permissible code letters, sampling frequency, and values of “i” and “s” will be based on the production interval and the applicable AQL (0.1 percent) or other AQL designated for critical defects.

(b) MIL-STD-105—use single sampling, tightened severity, inspection level II. Use an AQL value of 0.10 percent or other AQL designated for critical defects. Regardless of sample size, the acceptance number for critical defects will always be zero.

(c) MIL-STD-414—use inspection level IV, tightened severity, variability unknown, standard deviation method; for single specification limit, Form 2 will be used.

e. Lots. The continuous sampling procedures of MIL-STD-1235 will always be on a moving product basis. Selection of samples for inspection by MIL-STD-105 and MIL-STD-414 may be on either a moving lot basis or on a stationary lot basis; however, inspections requiring disassembly will be performed on a moving lot basis as close as practicable to the operations organization process on the part or parts being inspected.

f. Maintenance Type Operations of Short Duration and Limited Scope (5 days or less). These operations should be inspected using MIL-STD-1235, CSP-F, or MIL-STD-105. If it is impracticable to use either MIL-STD-1235 or MIL-STD-05, a spot check or roving inspection may be used when directed by the QASAS in charge.

(1) Critical emphasis must be given to the scope and nature of the operation to ensure that the adopted inspection procedure ensures acceptance of a good quality product while providing protection against accepting defective material.

(2) Adequate quality control procedures must exist within the operations organization if a spot check or roving inspection is to be used.

Note: **Check on student learning.**

QUESTION: What is the preferred method of performing acceptance sampling for inspection by attributes?

ANSWER: Continuous sampling using MIL-STD-1235.

QUESTION: In addition to sampling at frequency “f”, an ammunition surveillance organization must monitor the screening phase to ensure what?

ANSWER: Correct application of proper “i” and “s” values.

QUESTION: What percent will all critical characteristics be inspected for?

ANSWER: 100 percent.

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3. Learning Step/Activity 3: Practical Exercise.

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 Worksheet 55B40B03-PE2.

(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.

SECTION IV. SUMMARY

Note:	**Show VG20 (Summary).**
	Method of instruction: CO Instructor-to-student ratio: 1:12 Time of instruction: 0.4 hours
Review/ Summarize Lesson	During this lesson, we have discussed inspect/monitor maintenance/renovation operations and sample plans for maintenance/renovation operations. We have also conducted a practical exercise 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 inspecting munitions maintenance facilities.

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.

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(STUDENT NAME) (RANK) (CLASS) (DATE)

1. Who gives the approval for special tools and equipment to be designed and fabricated locally?

ANSWER:

REFERENCE:

2. What must happen when a critical defect is found in a surveillance sample?

ANSWER:

REFERENCE:

3. What change must be made to the SOP when indigenous personnel are employed in operations involving explosives?

ANSWER:

REFERENCE:

4. Who should make a rough sketch of the maintenance line layout?

ANSWER:

REFERENCE:

5. When gages are stored for long periods of time, how often will gages be examined for corrosion?

ANSWER:

_____

_____

_____

REFERENCE:

_____

6. Except for operational necessity, supplies exceeding approximately a 4-hour work requirement should be kept in a service storage building. What type distance shall the storage building be from the operating building?

ANSWER:

_____

_____

_____

REFERENCE:

_____

7. What is the preferable form of construction of a dividing wall?

ANSWER:

_____

_____

_____

REFERENCE:

_____

8. Where will renovation on explosives be performed?

ANSWER:

_____

_____

_____

REFERENCE:

_____

9. What locations do not permit explosives and munitions to be renovated, modified, or demilitarized?

ANSWER:

_____

_____

_____

REFERENCE:

_____

10. What must be applied to gages in order to protect them against corrosion?

ANSWER:

_____

_____

_____

REFERENCE:

_____

11. What materials are used in the construction of safety hand tools?

ANSWER:

_____

_____

_____

REFERENCE:

_____

12. What is used for cleaning floors in buildings containing explosives?

ANSWER:

_____

_____

_____

REFERENCE:

_____

13. What test may be necessary in order to establish SOPs for certain operations within a maintenance operation?

ANSWER:

_____

_____

_____

REFERENCE:

_____

14. What must be present for personnel protection during operations involving removal of base plugs from loaded projectiles?

ANSWER:

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_____

REFERENCE:

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15. What should the physical dimensions of operational shields be for quantities of bulk high explosives?

ANSWER:

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_____

REFERENCE:

_____

SOLUTION SHEET

1. Appropriate commodity command (TM 9-1300-206, paragraph 8-5(b)(2), page 8-6).

2. Rejection of all suspected materials (SB 742-1, paragraph 4-4(e).

3. The SOP will be in English and in the language the employee understands. (TM 9-1300-206, paragraph 2-10(a)(2), page 2-4).

4. The line supervisor (TM 9-1300-250, paragraph 4-7(b), page 4-7).

5. Quarterly (SB 742-1, paragraph 5-2 e.(2)(d)).

6. Intraline (TM 9-1300-206, paragraph 2-2(b)(3), page 2-2).

7. Reinforced concrete not less than 12 inches thick (TM 9-1300-206, paragraph 8-2(c)(4)(a), page 8-3).

8. Renovation shall be performed in an isolated area or building specifically designed for that purpose. (TM 9-1300-206, paragraph 8-2(a), page 8-2).

9. Where other munitions or explosives are stored. (TM 9-1300-206, paragraph 8-3(a), page 8-3).

10. A light non-corrosive oil. (SB 742-1, paragraph 5-2(e)(2)(c).

11. Wood, bronze, lead, beryllium alloys, and "K" monel metal. (TM 9- 1300-206, paragraph 2-5(a), page 2-2).

12. Hot water or steam (TM 9-1300-206, paragraph 2-9(c), page 2-4).

13. Controlled test (TM 9-1300-206, paragraph 8-2(b), page 8-2).

14. Operational shields (TM 9-1300-206, paragraph 8-3(c), page 8-3).

15. Those for munitions containing a comparagraphble quantity of explosives (TM 9-1300-206, paragraph 8-2(c)(3), page 8-3).