

## TRAINING SUPPORT PACKAGE (TSP)

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**TSP Number/Title** 55B40B09 Annex B Review

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<b>Task Number(s)/ Title(s)</b>	093-400-4279	Inspect Munitions Maintenance Facilities
	093-400-4296	Plan Preservation and Packaging Operations for Munitions
	093-400-4282	Inspect Munitions Maintenance Operations
	093-400-4283	Prepare Surveillance Samples for Shipment
	093-400-4284	Process Ammunition Condition Reports, DA Form 2415 (ACR); Quality Deficiency Report, SF Form 368 (QDR); and Report of Discrepancy, SF Form 364 (ROD)
	093-400-4285	Schedule Munitions Inspections Periodic, Storage Monitoring, Receipt Inspection, and Initial Receipt Inspection
	093-400-4278	Conduct Malfunction Investigation

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**Effective Date** 21 August 1998

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**Supersedes TSP(s)** MP-16/B 645-55B40

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**TSP User** USAOMMCS, Redstone Arsenal, Alabama and Accredited Ordnance TASS Battalion

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**Proponent** US Army Ordnance Missile and Munitions Center and School, Munitions Training Department, Redstone Arsenal, AL 35897-6970

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**Comments/ Recommendations** Send comments and recommendations directly to:

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**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.

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**Preface**

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**Purpose**

This review will cover the material taught in lessons 55B40B01 through 55B40B08.

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**This TSP Contains**

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(21 August 1998)

**SECTION I. ADMINISTRATIVE DATA**

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<b>All Courses Including this Lesson</b>	<u>COURSE NUMBER(S)</u> 645-55B40	<u>COURSE TITLE(S)</u> Ammunition Specialist, ANCOC
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<b>Task(s) Taught or Supported</b>	<u>TASK NUMBER</u> None	<u>TASK TITLE</u>
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<b>Reinforced Task(s)</b>	<u>TASK NUMBER</u> None	<u>TASK TITLE</u>
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**Academic Hours**      The academic hours required to teach this lesson are as follows:

	<u>ADT HOURS/METHOD</u>
Conference	1.0 / CO
<hr/>	
Total hours	1.0

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<b>Test Lesson Number</b>	<u>Hours</u>	<u>Lesson No.</u>
Testing:	3.0 TE2	55B40B10
Review of test results:	1.0 CO	55B40B11

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<b>Prerequisite Lesson(s)</b>	<u>LESSON NUMBER</u> 55B40B01 through 55B40B08	<u>LESSON TITLE</u>
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**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.

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**References  
Required**

<u>Number</u>	<u>Title</u>	<u>Date</u>	<u>Additional Information</u>
AR 75-1	Malfunctions Involving Ammunition and Explosives (RCS GSGLD-1961 (MIN))	20 AUG 93	
AR 725-50	Requisition Issue of Equipment	26 JAN 93	
AR 385-11			
AR 700-22	Worldwide Ammunition Reporting System	15 OCT 83	
DA PAM 738-750	TAMMS	1 AUG 94	
DA PAM 385-64	Ammunition and Explosives Safety Standards		Draft
TM 38-250	Preparing Hazardous Materials for Military Air Shipment		
TM 9-1300-250	Preparation of Hazardous Materiel for Shipment	15 JAN 88	
TM 9-1300-206	Ammunition and Explosives Standards	30 AUG 73	with changes 1-10
TB 43-180	Calibration and Repair Requirements for the Maintenance of Army Materiel	27 NOV 92	
TB 43-0142	Inspect/Test of Lifting Devices	27 SEP 91	
TB 9-1300-385	Munitions, Restricted or Suspended	1 APR 92	
SB 742-1	Ammunition Surveillance Procedures	APR 98	
SB 742-1300-94-2	Propellant and Propelling Charges	2 OCT 84	
CFR 49	Code of Federal Regulations		

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**Related** None

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**Student Study Assignments** Review all notes and student issue for Annex B.

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**Instructor Requirements** One instructor

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**Additional Support Personnel Requirements** None

**Equipment Required** Overhead Projector

**Materials Required** INSTRUCTOR MATERIALS: Viewgraphs 55B40B09 VG#1 through VG#10

STUDENT MATERIALS: All Annex B student issue

**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**

<u>Name</u>	<u>Rank</u>	<u>Position</u>	<u>Date</u>

## SECTION II. INTRODUCTION

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

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**Motivator** Good morning/afternoon, class. I am \_\_\_\_\_. I will be your primary instructor for this lesson. This review is to refresh your memory and reinforce the essential knowledge and skills that you have been taught during the lessons and practical exercises. It also serves to answer your questions about subjects covered in this annex.

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**Terminal Learning Objective** N/A

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**Safety Requirements** None

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**Risk Assessment Level** Low

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**Environmental Considerations** None

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**Evaluation** Written end-of-annex examination. The student must score a minimum of 70 percent to achieve a GO.

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**Note:** Show VG01 (Title Slide).

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**Instructional Lead-in** We will now review each TLO and ELO to ensure you fully understand the task requirements.

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## SECTION III. PRESENTATION

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1. Learning Step/Activity 1:  
Review each TLO and ELO for the Annex B Lessons.
- Method of instruction: CO  
Instructor-to-student ratio: 1:12  
Time of instruction: 1.0 hours  
Media: Viewgraph
- 

**Note:** Show VG02 (TLO for 55B40B01).

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### a. Terminal Learning Objective.

Action: Determine the role of surveillance in munitions operations.

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.

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**Note:** Use the questions below to facilitate discussion on the lesson.

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QUESTION: 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: Use SB 742-1300-94-2 as your guide to select and prepare propellant test samples.

QUESTION: What is the meaning of the acronym "SASIP"?

ANSWER: "SASIP" stands for "Supplemental Ammunition Surveillance Inspection Procedure."

QUESTION: You have just completed inspecting a sample of 81mm mortar cartridges packed in jungle pack. How will you reseal these packages?

ANSWER: Reseal jungle pack samples with pressure sensitive adhesive tape, SPEC PP-T-60D, type III or IV.

QUESTION: D540, CHG, PROP, GB M3, lot BAJ83d-011320, was due for inspection in July 1996. It's now February 1997 and 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: Items more than 6 months past due for inspection are placed in CC-D.

QUESTION: 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: Sample size of A131 (7.62mm 4x1 linked) will be 10 belts.

QUESTION: 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 run over by a truck and flattened. What condition code is appropriate for the 735 good boxes?

ANSWER: Good packing materials with old markings will be assigned CC-B.

QUESTION: 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: Items with less than 3 months of remaining shelf life will be assigned CC-C page G-1, Condition Code C definition.

QUESTION: 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: Items suspended from issue, movement, or use will not be handled or worked with until special handling instructions are received from IOC. Items in the workshop stay there, unmoved. Usual posting and reporting tasks must be done.

QUESTION: 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: Malfunctions involving death or major injury are considered CLASS A malfunctions.



QUESTION: 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: Items listed in Appendix D, TB 9-1300-385 (the propelling charge, in this case), are not suitable for overhead fire.

QUESTION: 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: Otherwise serviceable, issuable items that carry a restriction are assigned CC-B.

QUESTION: To what organization and address do Marine Corps units address their requests for ammo drawings?

ANSWER: Marine Corps units get their ammo drawings from:  
Commander  
Naval Ordnance Station  
Technical Documents Department  
Code 8022  
Louisville, KY 40214-5001

QUESTION: What does the acronym "PCP" stand for (in munitions terminology)?

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

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**Note:** Show VG03 (TLO for 55B40B02).

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#### **b. Terminal Learning Objective.**

Action: Identify procedures for inspecting munitions operations for safety.

Standard: Identify the steps for inspecting munitions operations and facilities and recommend corrective measures and references with seventy percent accuracy.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: In many instances when accidents involved munitions, what was the cause determined to be a direct result of?

ANSWER: Human error and circumstances which were avoidable.

QUESTION: What is the minimum number of personnel permitted when conducting explosive operations?

ANSWER: Two.

QUESTION: What must be present when conducting concurrent operations in a single building?

ANSWER: Divided walls or barricades.

QUESTION: Who may permit matches or other flame or spark producing devices in a magazine or explosive area?

ANSWER: The commanding officer or his designated representative.

QUESTION: What type of lighter is permitted in an authorized smoking area when serviced by electricity?

ANSWER: Permanently installed electric lighters.

QUESTION: When burning vegetation is authorized, what is the minimum distance the burning operation must be from any above-ground type magazine?

ANSWER: 200 feet.

QUESTION: If ferrous metal hand tools are required because of their strength, what action should be taken?

ANSWER: Ensure the immediate area is free of exposed explosives.

QUESTION: What is the minimum distance that refueling may be permitted from an explosive location or building?

ANSWER: 90 feet.

QUESTION: When authorized in writing, when can the overhead guard be removed from a fork lift truck?

ANSWER: Only when the height of the overhead guard would deny entry of the fork lift into work locations.

QUESTION: When must a written standing operating procedure be prepared?

ANSWER: Prior to conducting operations involving munitions and explosives.

QUESTION: Who approves the standing operating procedures (SOP)?

ANSWER: The commander or a qualified member of his staff whom he has delegated to review and approve procedures.

QUESTION: How many personnel can ride in the cab of a truck that is transporting explosive materials?

ANSWER: Two.

QUESTION: How far apart should containers of explosives or munitions to be destroyed be spotted or opened?

ANSWER: Ten Feet.

QUESTION: Where limited space does not permit separate burning areas, a part of the explosive destruction ground may be reserved for burning rubbish under what conditions?

ANSWER: Provided the two areas are not operated simultaneously.

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**Note:** Show VG04 (TLO Lesson 55B40B03).

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**c. Terminal Learning Objective.**

Action: Inspect munitions maintenance facilities.

Standard: Inspect the maintenance facility in accordance with the requirements of AR 50-4, 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.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: Where should supplies be kept that will exceed a 4-hour work requirement?

ANSWER: In a service storage building.

QUESTION: What type of material is required for tools used in a maintenance/renovation operation?

ANSWER: Wood, non-sparking, or spark resistant materials.

QUESTION: What type of protective clothing should an individual wear when performing a maintenance/renovation operation that involves the generation of static electricity?

ANSWER: Cotton outer and undergarments.

QUESTION: What type of munitions is a pull-apart machine used for in maintenance/renovation operations?

ANSWER: Fixed munitions, 20mm and larger.

QUESTON: What should be placed on a grinder that will be used to ground down beryllium alloys tools?

ANSWER: Exhaust ventilator.

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**Note:** Show VG05 (TLO 55B40B04).

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**d. Terminal Learning Objective.**

Action: Conduct munitions maintenance operations

Standard: You must restore munitions to a serviceable condition, correctly detect and report all discrepancies, and comply with all environmental guidelines.

**Enabling Learning Objective #1.**

Plan preservation and packaging operations for munitions.

**Enabling Learning Objective #2.**

Inspect munitions maintenance operations.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: What may be used as the authority for a munitions maintenance operation?

ANSWER: Ammunition Condition Report (ACR), DA Form 2415.

QUESTION: What is the difference in purpose between substantial dividing walls and operating shields?

ANSWER: Substantial dividing walls are intended to prevent simultaneous detonation. Operational shields provide protection for the operator.

QUESTION: What is the purpose of a munitions process flow sheet?

ANSWER: A chart for recording in a compact manner the operational sequence of an operating line.

QUESTION: When will the old ammunition lot numbering system end?

ANSWER: When all old numbered ammunition is exhausted.

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**Note:** Show VG06 (TLO 55B40B05).

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**e. Terminal Learning Objective.**

Action: Prepare surveillance samples for shipment.

Standard: Correctly select the quantities of munitions IAW SB 742-1 and the item SB. Ensure that all samples, packaging, and markings are correct and that all documentation is completed correctly.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: What action must be taken by the storage installation if the lot(s) requested are not available?

ANSWER: The storage installation will furnish IOC Quality Assurance and Assessment and Directorate a list of possible substitute lots from items of the same DODIC and lot series.

QUESTION: Can two or more lot samples be shipped in one shipping container?

ANSWER: Yes, provided each lot sample is fully identified and separated.

QUESTION: What color must the end/side of the sample box(es) be painted?

ANSWER: White.

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**Note:** Show VG07 (TLO 55B40B06).

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**f. Terminal Learning Objective.**

Action: Process ammunition reports.

Standard: All discrepancies on the forms must be detected. All forms must be completed, reviewed, and processed correctly. Prepare a list of errors, correct forms, and forward to proper command addressee.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: What are some of the source documents used to complete DA Form 2415?

ANSWER: DA Pam 738-750, DSR Cards, Stock Records, and local SOPs.

QUESTION: How many copies of the DA Form 2415 should be prepared?

ANSWER: One original and six (6) copies.

QUESTION: If Block 16 of the DA Form 2415 is too small to contain a complete description of details, what must be done?

ANSWER: Use continuation sheets on 8 1/2" x 11" blank bond paper.

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**Note:** Show VG08 (TLO 55B40B07).

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**g. Terminal Learning Objective.**

Action: Schedule munitions inspections.

Standard: Correctly determine the types of inspections required and the time intervals for each type. Schedule inspections and plan the personnel, equipment, and transportation requirements. Maintain all inspection results and files correctly.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: What is the inspection interval for cartridge, 105mm semi-fixed for howitzer assembled with propelling charges less than 15 years old?

ANSWER: Every 3 months. SB 742-1, paragraph 2-9.

QUESTION: What type of inspection is performed on unserviceable non-repairable munitions storage?

ANSWER: A safety in storage inspection. SB 742-1, paragraph 2-4e,

QUESTION: How often are lightning protection systems tested?

ANSWER: At intervals contained in SB 742-1, paragraph 10-2b, AR 385-64/DA Pam 385-64 and DOD 6055.9-STD.

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**Note:** Show VG09 (TLO 55B40B08).

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## **h. Terminal Learning Objective.**

Action: Conduct malfunction investigation.

Standard: All malfunctions must be investigated and reported accurately in the time frame required in accordance with AR 75-1. Provide all information requested in the preliminary report and forward to appropriate agency. Correctly process an ACC change. Process a detailed malfunction report and forward within the time prescribed.

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**Note:** Use the following questions to facilitate discussion on the lesson.

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QUESTION: What is the definition of a misfire?

ANSWER: Failure of the primer or propelling charge to function wholly or in part.

QUESTION: What is the definition of a dud?

ANSWER: Explosive munitions which have not been armed as intended or which have failed to explode after being armed.

QUESTION: What are three causes for malfunctions?

ANSWER: Defective weapon, human error, and defective munitions.

QUESTION: Incorrect setting of a fuze constitutes what malfunction cause?

ANSWER: Human error.

QUESTION: What are the three classes of malfunctions?

ANSWER: Class A, Class B and Class C.

QUESTION: What are the two types of malfunction investigation reports?

ANSWER: Preliminary and detailed reports.

QUESTION: What form is used to perform a malfunction investigation where small arms munitions is involved.

ANSWER: DA Form 4379-R.

QUESTION: What report will be forwarded 10 working days after the malfunction has occurred?

ANSWER: Detailed report.

QUESTION: What information will be placed in block 19, DA Form 4379-1-R?

ANSWER: Range of Target.

QUESTION: When a malfunction occurs, who will the commanding officer contact immediately?

ANSWER: Unit ammunition officer.

QUESTION: How long will fragments and residue be kept after the malfunction?

ANSWER: 90 days.

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## SECTION IV. SUMMARY

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**Note:** **Show VG10 (Summary).**

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

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**Review/  
Summarize  
Lesson**

During this lesson, we have reviewed the Annex B lessons in preparation for the end-of-annex examination.

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**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 the end-of-annex examination.

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## SECTION V. STUDENT EVALUATION

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**Testing  
Requirements**

Upon completion of this annex, your performance will be evaluated by an end-of-annex examination.

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**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.
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**Note:**

Rapid, immediate feedback is essential to effective learning.

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