CRM LESSON PLAN REPORT

INTRODUCTION TO OPTICS AND LASERS (BCT RM PD 8)(CLASSSROOM/CTA/SIMULATOR)
071-BT071048 / 5.02 ©

Approved
19 Jul 2021

Effective Date: 19 Jul 2021

SCOPE:

This lesson plan continues to place emphasis on the application of the functional elements of the shot process while introducing the Trainee to the M68 Close Combat Optic (CCO) and reinforcing the basic firing positions (standing unsupported, prone unsupported, prone supported, kneeling supported, and standing supported). Remind the firers to keep their firing eye focused on the Red Dot and understand that the target will be slightly blurry. Reiterate during training that the Stock Weld (Head position) achieved with the M68 CCO will be slightly higher than with the Back Up Iron Sights (BUIS) due to the increased height of the optic. (See TC 3-22.9, Fig. 6-1).

SECTION I. ADMINISTRATIVE DATA

All Course Masters/POIs Including This Lesson

Courses

Course Number	Version	Title	Phase	Status
750-BT	11.0	Basic Combat Training	N/A	Analysis

POIs

POI Number	Version	Title	Phase	Status
31B10-OSUT	21.0 ©	Basic Military Police	0	Analysis
12C10-OSUT	20.0 ©	Bridge Crewmember	0	Analysis
750-BT	11.0 ©	Basic Combat Training	0	Analysis
12C10-OSUT (ST)	20.0 ©	Bridge Crewmember	0	Analysis

Task(s) Taught(*) or Supported

Task Number	Task Title	Status
Individual		
071-705-0003 (*)	Zero an M68 Sight (Close Combat Optic) to a M16-Series Rifle/M4-Series Carbine	Approved
071-705-0016 (*)	Boresight a Sight System on an M16 Series Rifle or M4 Series Carbine	Approved
071-701-0001	Maintain an AN/PEQ-15 Aiming Light	Approved
071-705-0002 (*)	Operate an M68 Sight (Close Combat Optic)	Approved
071-705-0011 (*)	Mount the M68 Close Combat Optic (CCO) on a M16 Series Rifle or M4 Series Carbine	Approved
071-705-0001 (*)	Maintain an M68 Sight (Close Combat Optic)	Approved
071-701-0006	Zero an AN/PEQ-15 Aiming Light to a Weapon System	Approved
071-701-0008	Mount an AN/PEQ-15-Series Aiming Light on a Weapon System	Approved

Reinforced Task(s)

Task Number	Task Title	Status
071-COM-0033	Correct Malfunctions of an M16-Series Rifle/M4-Series Carbine	Approved
071-COM-0029	Perform a Function Check on an M16-Series Rifle/M4-Series Carbine	Approved
071-COM-0028	Load an M16-Series Rifle/M4-Series Carbine	Approved
071-COM-0027	Unload an M16-Series Rifle/M4-Series Carbine	Approved

Knowledge

Knowledge Id	Title	Taught	Required
071-WPN-0064	Target Detection Techniques	Yes	No
071-WPN-0067	Knowledge of Firing Positions	No	Yes
071-WPN-0068	Knowledge of Firing Techniques	No	Yes
ASAK03	How to use optics.	Yes	No

Skill

Skill Id	Title	Taught	Required
071-WPN-0008	Correct Weapons Malfunctions	No	Yes
071-WPN-0026	Assume Firing Positions	No	Yes

Administrative/ Academic Hours

The administrative/academic (50 min) hours required to teach this lesson are as follows:

Academic	Resident Hours / Methods		
Yes	0 hrs	25 mins	Lecture
Yes	7 hrs	20 mins	Drill and Practice
Yes	0 hrs	5 mins	Reflective Discussion
Total Hours(50 min):	8 hrs	0 mins	

Instructor Action Hours

The instructor action (60 min) hours required to teach this lesson are as follows:

	Hours/Actions		
	0 hrs	30 mins	Training Event Clean-up/Breakdown (non-FTX)
	0 hrs	30 mins	Training Event Prep/Setup (non-FTX)
Total Hours (60 min):	1 hrs	0 mins	

Test Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Prerequisite Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Training Material Classification

Security Level: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Foreign Disclosure Restrictions

FD3. This training product has been reviewed by the developers in coordination with the MCoE G2 foreign disclosure officer. This training product cannot be used to instruct international military students.

References

Number	Title	Date
AR 200-1	ENVIRONMENTAL PROTECTION AND ENHANCEMENT	13 Dec 2007
AR 385-10	The Army Safety Program	24 Feb 2017
ATP 3-34.5	Environmental Considerations	10 Aug 2015
TC 3-20.40	Training and Qualification - Individual Weapons	01 Jul 2019
TC 3-22.9	Rifle and Carbine	13 May 2016
TM 5860-01-471-2091	Operator's Manual for Laser Borelight System (LBS-300)	
TM 9-1005-319-10	OPERATOR'S MANUAL FOR RIFLE, 5.56 MM, M16A2 (NSN 1005-01-128-9936), (EIC: 4GM) RIFLE, 5.56 MM, M16A3 (NSN 1005-01-357-5112) RIFLE, 5.56 MM, M16A4 (NSN 1005-01-383-2872) (EIC: 4F9) CARBINE, 5.56 MM, M4 (Change 2 Dated 15 April 2019)	01 Aug 2016
TM 9-1240-413-13&P	OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR M68 SIGHT, REFLEX, W/QUICK RELEASE MOUNT AND SIGHT MOUNT (COMP M2: NSN 1240-01-411-1265) (COMP M4: NSN 1240-01-540-3690) {AF TO 11W3-5-5-121}	04 May 2013
TRADOC REG 350-6	Enlisted Initial Entry Training Policies and Administration http://www.tradoc.army.mil/tpubs/regs/TR350-6.pdf	09 Aug 2019

Student Study Assignment

TRADOC PAM 600-4, IET Handbook.

Instructor Requirements

Knowledgeable on TC 3-22.9 and TC 3-20.40.

Support Personnel Requirements

N/A

Additional Support Personnel Requirements

Name	Student Ratio	Qty	Man Hours
Bus Driver Remarks:	1:44		4.0
NCOIC Remarks:	0:0	1	8.0

Equipment Required for Instruction

ID - Name	Student Ratio	Instructor Ratio	Spt	Qty	Exp
* GTA 08-12-001 - Manual of Applied Performance Skills (MAPS) Remarks:	0:0				No
1005-01-382-0953 - Carbine, 5.56 Millimeter: M4A1 Remarks:	1:1	0:0	No	0	No
1005-01-448-8513 - Cleaning Kit, Gun, 5.56MM, , Soft Belt-Pak, Water Resistant Nylon Remarks:	1:1	0:0	No	0	Yes
1240-01-411-1265 - Sight, Reflex Collimator: XM68 Remarks:	1:1	0:0	No	0	No
1240-01-557-1897 - Sight Bore Optical: M150 Remarks: 32 of these M150 (RCO's) will be retained by the Company so they can be mounted on an M4 Series Carbine, Zeroed and then utilized during the retention and assessment shoot.	1:1	0:0	No	32	No
2310-01-090-7709 - Bus Transit 44 Passenger Remarks:	1:44	0:0	No	0	No
2320-01-090-7834 - Truck Carryall 1-1/2 Ton 8500 GVW Remarks:	0:0	0:0	Yes	1	No
2320-01-090-7905 - Truck Stake 3-1/2 Ton 14M GVW Remarks:	0:0	0:0	Yes	1	No
2320-01-540-2007 - Truck Utility Expanded Capacity Enhanced: M1152A1 Remarks:	0:0	0:0	Yes	1	No
5855-01-577-7174 - Illuminator, Infrared Remarks: The additional support material items are in order to swap out equipment that is NMC and continue to train without loss of training time.	1:1	0:0	Yes	20	No
5860-01-471-2091 - Borelight System, Laser: AN/PEM-1 Remarks:	1:10	0:0	No	0	No
6730-00-577-4813 - Screen, Projection Remarks:	0:0	0:0	Yes	2	No
6730-01-551-9773 - Projector, Multimedia: Epson Powerlite 760C Remarks:	0:0	0:0	Yes	2	No

(Note: Asterisk before ID indicates a TADSS.)

Materials Required

Instructor Materials:

This lesson plan and all listed manuals from reference section.

Student Materials:

M4 with M68 CCO.

TRADOC PAM 600-4, IET Handbook.

Classroom, Training Area, and Range Requirements

ID - Name	Quantity	Student Ratio	Setup Mins	Cleanup Mins
17210-1 Simulator Building (Motion-Based), 1 Square Foot Remarks: The class size is 200, but the TLO ISR is 2:50. Adjustments may be made to accommodate the simulations facility.		1:50	30	30

Ammunition Requirements

DODIC - Name	Exp	Student Ratio	Instruct Ratio	Spt Qty
None				

Instructional Guidance/ Conduct of Lesson

NOTE: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

When covering the Characteristics, Capabilities and Employment of the M68 Close Combat Optic ensure you cover that once mounted on the M4 the Trainee will have to change their Stock Weld (Head position) it will be a bit higher than it was when Shooting utilizing the Back Up Iron Sights (BUIS). This is due to the increased height of the M68 CCO. The functional elements of the shot process will be applied in the same manner as previously taught with the exception that the Stock Weld will be slightly higher.

Proponent Lesson Plan Approvals

Name	Rank	Position	Date
Joseph Hiner	Not available	Approver	19 Jul 2021

SECTION II. INTRODUCTION

Method of Instruction: Lecture
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (2:50) (Drill Sergeant(s))
Time of Instruction: 5 mins

Motivator

The M68 CCO red dot sight allows the Infantry Soldier to engage targets with both eyes open while maintaining situational awareness of events happening in close proximity and eliminating the difficulty associated with aligning iron sights.

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:	Maintain optics and lasers.
Conditions:	In an operational training environment (Classroom/Simulator/CTA) after receiving classroom instruction on optics and the AN/PEM-1, given (M68 TM) 9-1240-413-13&P, (AN/PEQ-15 TM) 9-5855-1914-13&P, (M150 RCO TM) 9-1240-416-13&P, and DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection and Maintenance Worksheet-for the sight).
Standards:	Maintain optics and lasers by: (1) Maintaining the M68 CCO Close Combat Optic properly. (2) Mounting the M68 CCO properly on the M4A1 Series Carbine. (3) Preparing the M68 CCO properly for operational usage. (4) Boresighting the M68 CCO properly. (5) Zeroing the M68 CCO properly. (6) Maintain the AN/PEQ-15 (ATIPAL) properly. (7) Mounting the AN/PEQ-15 (top mount) properly. (8) Preparing the AN/PEQ-15 for operational usage. (9) Boresighting the AN/PEQ-15 properly. (10) Dismounting the AN/PEQ-15 properly. (11) Maintaining the M150 Rifle Combat Optic properly.
Learning Domain - Level:	Psychomotor - Precision
No JPME Learning Areas Supported:	None

Safety Requirements

DD Form 2977 (DRAW) to be produced locally IAW DA PAM 385-30, DEC 2014.

Safety is of the utmost importance in any training environment. During the training process, Commanders will utilize the 5-step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken during the conduct of training. It is everyone's responsibility to recognize, mitigate and report hazardous conditions.

INSTRUCTOR NOTE: The Instructor will brief the students on the unit/facility SOP for classroom contingencies (i.e., what door will be used to exit the classroom, rally points, severe weather, etc). Safety must be paramount in the complex outdoor environment. Every precaution will be taken while

replicating realistic battlefield conditions.

INSTRUCTOR NOTE: The Instructor will brief the unit/site SOP and Deliberate Risk Assessment Worksheet for all potential contingencies encountered during that training period/event (i.e., severe weather, fire, evacuation, rally points, etc).

Risk Assessment Level

Low - Refer to Leader Actions

Assessment: Refer to Leader Actions

Controls: Refer to Leader Actions

Leader Actions: Refer to completed DD Form 2977; Deliberate Risk Assessment Worksheet, Jan 2014.

Low - Hyponatremia.

Assessment: Review the symptoms of Hyponatremia.

Controls: Drill Sergeants will monitor Trainee water consumption. Ensure the safety brief includes the symptoms of Hyponatremia

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

Low - Dehydration.

Assessment: Make sure Drill Sergeants check Trainees water is topped off prior to entering the simulator.

Controls: Drill Sergeants will include symptoms of dehydration in their safety brief. Drill Sergeants will monitor Trainees water Consumption.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the safety brief.

Low - Tripping over classroom furniture, items on the ground.

Assessment: Prepare classroom/simulator prior to the execution of training. Ensure floor is clear of obstructions that could lead to injuries.

Controls: The Drill Sergeants will ensure an orderly entrance and exit from the classroom/simulator.

Leader Actions: Ensure DD 2977 is updated with appropriate controls. Ensure Drill Sergeants have the appropriate information prior to the execution of training.

Environmental Considerations

NOTE: Instructor should conduct a risk assessment to include environmental considerations IAW the current environmental considerations publication, and ensure students are briefed on hazards and control measures.

a. Based on its commitment to environmental protection, the Army will conduct its operations in ways that minimize environmental impacts.

b. Units and installations will prepare an environmental risk assessment using the before, during, and after checklist found in ATP 3-34.5 Appendix K. The checklist should supplement local and state environmental regulations applicable to your area.

c. AR 200-1 (Environmental Protection and Enhancement) delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and insure all training procedures, training materials, and training doctrine, to include sound environmental practices and considerations. The Army's environmental standard is to be a

national leader in environmental and natural resource stewardship for present and future generations. This lesson plan meets this standard.

Instructional Lead-in

The primary sight for all Soldiers now is an optic, the M68 CCO red dot sight, that allows the Soldier to engage targets with both eyes open while maintaining situational awareness of events happening in close proximity and eliminating the difficulty associated with aligning iron sights.

SECTION III. PRESENTATION

NOTE: Inform the students of the Enabling Learning Objective requirements.

A. ENABLING LEARNING OBJECTIVE

ACTION:	Maintain an M68 Sight (Close Combat Optic).
CONDITIONS:	Given a M68 CCO, mounted on your M4 series carbine with a requirement to ensure it is operational. You have technical manual (TM) 9-1240-413-3&P and DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection and Maintenance Worksheet- (EGA)) for the sight.
STANDARDS:	Maintain the M68 CCO properly by: (1) Inventorying the M68 CCO. (2) Maintaining the M68 CCO. (3) Recording deficiencies on a DA Form 2404 or 5988-E. (4) Reporting deficiencies to Chain of Command.
LEARNING DOMAIN - LEVEL:	Psychomotor - Precision
No JPME LEARNING AREAS SUPPORTED:	None

ELO A - LSA 1. Learning Step / Activity ELO A - LSA 1. Identify major components of the M68 Close Combat Optic CCO

Method of Instruction: Lecture
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 20 mins
Media Type: Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Oral Presentation / Practical Exercise / PowerPoint Presentation
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

CAUTION: The M68 CCO provides no means for focusing the Optic. If the Shooter requires corrective eyewear they must utilize them. The Front and Rear lens covers (Shrouds) are permanently glued into position. Do not attempt to rotate them. Forcing the Front lens cover or the front of the Optic to rotate will permanently destroy the M68 CCO -- REPLACEMENT COST $250.00.

a. Major Components:

(1) Front Lens Shroud (DO NOT TWIST).

(2) Rear Lens Shroud.

(3) Front and Rear Lens Cover.

(4) Elevation Adjustment Screw.

(5) Elevation Adjustment Screw Cap.

(6) Windage Adjustment Screw.

(7) Windage Adjustment Screw Cap.

(8) Battery (DL1/3N).

(9) Battery Cap.

(10) Rotary Switch (10 Position).

(11) Collimated Dot.

(12) Torque Limiting Knob.

(13) Half Moon Spacer (For use on the M4 MWS).

b. Characteristics:

(1) Description: Electrical Red Dot Sight for the M16A1/A2 Rifle, M4 Series Carbine or the Modular Weapons Systems.

(2) The M68 CCO: Becomes 100% Parallax Free at 50 Meters and beyond and Features an Anti-Reflective Coated Lens System.

(3) LENGTH: 4.9 INCHES (125 mm)

(4) WEIGHT: 6.2 Ozs (175 gms)

(5) BATTERY LIFE: 3-20 DAYS

(6) RED DOT DIAMETER: 2.2 cm @ 25 M

(7) 8.8 cm @ 100 M, 26.4 cm @ 300 M

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings. The following questioning prompts can be utilized to determine if the Students have achieved the desired level of learning and are capable of applying the information taught during this lesson:

What actions would you take to perform_____?

How would you develop_____ to present _____?

What other way would you choose to _____?

What would the result be if _____?

How would you demonstrate_____?

How would you present _____?

How would you change_____?

How would you modify _____?

How could you develop _____?

Why does _____ work?

How would you alter _____ to _____?

What examples can you find that _____?

How would you solve _____?

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

ELO A - LSA 2. Learning Step / Activity ELO A - LSA 2. Maintain an M68 CCO.

Method of Instruction: Drill and Practice
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 20 mins
Media Type: Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Oral

	Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

1. Inventory the M68 CCO.

NOTE : Only inventory the components of the appropriate M68 CCO version that will be used.

a. Front and rear lens cover (do not twist).

b. Rear lens cover.

c. Elevation adjustment screw.

d. Elevation adjustment screw cap.

e. Windage adjustment screw.

f. Windage adjustment screw cap.

g. Battery (DL1/3N).

h. Battery cap.

i. Rotary switch(10 Position).

j. Collimated dot.

k. Torque limiting knob.

l. Half moon spacer (For use on the M4 MWS).

2. Maintain M68 CCO.

a. Check the sight for visual obstruction of target image, dust, dirt, pits, or moisture on optical surfaces.

b. Check the sight for loose or broken optical elements.

c. Check Sight Battery Caps.

(1) Ensure that battery cap is present.

(2) Ensure that battery cap's threads are clean.

(3) Ensure that battery cap's threads are undamaged.

d. Ensure that the red dot is visible when switch knob is set to one of the operating positions.

e. Check Quick Release Mount base assembly for damage (burrs, bent shaft, loose torque limiting knob) that will prevent sight from being installed.

f. Check sight adjustment caps.

(1) Ensure that both adjustment caps are present.

(2) Ensure that cap's threads are clean.

(3) Ensure that cap's threads are undamaged.

g. Check sight lens covers.

(1) Ensure that front and rear lens covers are present.

(2) Ensure lens covers can be snapped in place.

h. Check sight mount for damage that will prevent it from being installed on the M4 Carbine.

i. Check quick release mount for damage that would prevent installation of the sight (M4 carbine series only).

j. Check quick release mount base.

(1) Check base assembly for damage.

(2) Ensure torque limiting assembly works.

(3) Ensure rail grabbing clamping edge works.

k. Check anti-reflection device (ARD).

(1) Check for damaged threads.

(2) Check for damaged honeycomb.

(3) Replace ARD if missing or damaged.

l. Maintain lens.

(1) Remove large particles from exposed lens surfaces by first blowing on the surfaces.

(2) Blow as much dust and dirt as possible from the exposed lens surfaces.

(3) Gather the center of a sheet of lens paper, and use the edges to brush dust off lens.

(4) Moisten a piece of lens paper, when all visible particles of dust and dirt have been removed, gently wiping over the lens surfaces.

(5) Dry with clean lens paper. m. Maintain the ARD.

NOTE: Treat the honeycomb mesh with care as you would any optical surface.

(1) Clear snow or water from honeycomb when ARD is mounted by blowing sharply into face of ARD near one edge.

(2) Remove clogged dirt or mud by removing the shield from the sight and blowing clean.

(3) Run water through the honeycomb to clear it blowing through the mesh to remove the water, if necessary.

3. Record any deficiencies found on DA Form 2404 or DA Form 5988-E.

4. Report any deficiencies to chain of command/unit maintenance personnel.

NOTE : The unit's standing operating procedures (SOP) should provided guidance on reporting equipment status and turn-in procedures for equipment, as required.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO A): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO A):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

B. ENABLING LEARNING OBJECTIVE

ACTION:	Mount the M68 CCO properly on the M4A1 Series Carbine.

CONDITIONS:	The Trainee is preparing for training and must Mount the M68 CCO properly on the M4A1 Series Carbine. The Trainee will have technical manual (TM) 9-1240-413-3&P.
STANDARDS:	Mount the M68 CCO properly on the M4A1 Series Carbine by: (1) Preparing the M68 CCO for Operation. (2) Mounting the M68 CCO to the Flattop Receiver Rail (M4/M4A1).
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO B - LSA 1. Learning Step / Activity ELO B - LSA 1. Mount the M68 CCO properly on the M4A1 Series Carbine.

Method of Instruction: Drill and Practice
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 20 mins
Media Type: Printed Reference Material / Actual Equipment / Equipment Based Instruction / Oral Presentation / Practical Exercise / Situational Based Instruction
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Mount the M68 CCO to the flattop receiver rail (M4, M4A1, M16A4).

a. Ensure base of M68 CCO does not extend past the end of the mounting rail.

b. Ensure the grabber edges wrap around the mounting rail.

c. Ensure torque bar is in slot on mounting rail.

d. Applying finger pressure only, rotate the torque knob counter clockwise until it snaps two times.

e. Ensure to burn ends of five fifty cord to eliminate fraying.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO B):

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO B):

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to ac complish the intended learning outcome(s).

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting stude nt questions and explanations. Ask the students questions and correct misunderstandi ngs.

C. ENABLING LEARNING OBJECTIVE

ACTION:	Operate an M68 CCO.
CONDITIONS:	Given an M68 CCO, mounted on an M4-series carbine with components and a requirement to operate the M68 CCO.
STANDARDS:	Trainee will place the M68 CCO into operation without: (1) Damaging the equipment. (2) Injuring personnel.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO C - LSA 1. Learning Step / Activity ELO C - LSA 1. Place the M68 CCO into operation.

Method of Instruction: Drill and Practice
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 10 mins
Media Type: Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Oral Presentation / Practical Exercise / PowerPoint Presentation
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Place the M68 CCO into operation.

1. Ensure batteries are installed.

a. Ensure the switch knob is set to OFF.

b. Unscrew the battery cap by turning counterclockwise (CCW).

c. Insert battery with positive (+) end into battery cylinder.

d. Install cylinder and battery into battery cap.

e. Replace the battery cap by turn clockwise (CW) until snug.

f. Check battery power.

(1) Remove rear lens cover.

(2) Turn switch knob CW to ON position.

(3) Look through lens to verify red dot is present (replace battery if no red dot).

(4) Turn switch knob CCW to OFF position.

(5) Replace rear lens cover.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented

by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

ELO C - LSA 2. Learning Step / Activity ELO C - LSA 2. Activate the M68 CCO using the desired light intensity setting.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	10 mins
Media Type:	Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Practical Exercise / PowerPoint Presentation
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

Activate the M68 CCO using the desired light intensity setting.

NOTE: The M68 CCO is equipped with 10 positions for different dot intensity settings. The "OFF" position is the number 1 position. Positions 2, 3, and 4 are low intensity for night vision operations. Positions 5 through 10 are daytime settings. Position 10 is the extra high intensity setting.

WARNING: At higher intensity settings, the red dot is visible through the front of the sight. For night operations, close the front lens cover before turning the rotary switch to the desired setting. Check light for proper intensity before opening front lens cover. Failure to follow this warning could reveal your position to the enemy.

a. Ensure the front lens cover is closed.

b. Turn the switch knob to the desired setting.

c. Remove rear lens cover.

d. Look through lens to verify the desired intensity of the red dot on the front lens cover.

e. Remove the front lens cover.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

ELO C - LSA 3. Learning Step / Activity ELO C - LSA 3. Acquire a target using the M68 CCO.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	10 mins
Media Type:	Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Practical

Exercise / PowerPoint Presentation

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Aquire a target using the M68 CCO.

a. Obtain proper sight picture.

(1) Use the two-eyes-open method (preferred method) by positioning the head so that you can focus one eye on the red dot while scanning downrange with the other eye.

(2) Use the one-eye-open method by positioning the head so that you can shut your nonfiring eye while looking through the sight with the firing eye.

b. Place the red dot on the center of mass of the target.

NOTE: The same aiming method should be used to both zero and engage targets. The weapon must not be canted during aiming or firing.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

ELO C - LSA 4. Learning Step / Activity ELO C - LSA 4. Operate the M68 CCO under unusual conditions.

Method of Instruction: Drill and Practice

Mode of Delivery: Resident Instruction

Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))

Time of Instruction: 10 mins

Media Type: Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Practical Exercise / PowerPoint Presentation

Other Media: Unassigned

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Operate the M68 CCO under unusual conditions.

a. Operate in extreme cold conditions.

NOTE: Extreme cold will shorten battery life.

(1) Keep spare batteries in your inner pockets to keep them warm.

(2) Wipe off condensation after the M68 CCO has warmed up when brought from cold to warm.

b. Operate under dusty or sandy conditions.

(1) Keep front lens covers closed when sight is not being used.

(2) Keep rear lens covers closed when sight is not being used.

c. Operate under wet, muddy, and snow conditions.

(1) Ensure battery cap is hand tight before exposing the sight to water, mud, or snow.

(2) Ensure both adjustment screw caps are hand tight before exposing to water, mud, or snow.

(3) Close both front and rear lens covers when sight is not being used.

(4) Clean lens with lens paper and dry sight with a cloth as soon as possible after being exposed to water, mud, or snow.

d. Operate under chemical, biological, radiological, or nuclear (CBRN) conditions.

(1) Decontaminate sight with quick release mount and sight mount.

(2) Use M258A1 individual Soldier's personal decontamination kit.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary: **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.**
NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.
NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

ELO C - LSA 5. Learning Step / Activity ELO C - LSA 5. Power down the M68 CCO.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	5 mins
Media Type:	Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Practical Exercise / PowerPoint Presentation
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

Power down the M68 CCO.

a. Turn switch knob to the OFF position.

b. Replace front lens cover.

c. Replace rear lens cover.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary: **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.**
NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.
NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO C): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO C): **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning**

step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

D. ENABLING LEARNING OBJECTIVE

ACTION:	Boresight the M68 CCO.
CONDITIONS:	In an operational training environment (Simulator/CTA) after classroom instruction on the M68 CCO, given the characteristics, components, capabilities, limitations, mounting procedures, operating procedures and borelight instructions.
STANDARDS:	Boresight the M68 CCO by: (1) Zeroing the Borelight to the weapon. (2) Preparing the Target with proper offsets at 10 meters. (3) Boresighting the M68 CCO to the weapon.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO D - LSA 1. Learning Step / Activity ELO D - LSA 1. Boresight the M68 CCO.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	45 mins
Media Type:	Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

WARNINGS:

DO NOT STARE INTO THE VISIBLE LASER BEAM of the Borelight.

DO NOT LOOK INTO THE VISIBLE LASER BEAM THROUGH BINOCULARS OR TELESCOPES.

DO NOT POINT THE VISIBLE LASER BEAM AT MIRROR-LIKE SURFACES.

The borelight is an eye-safe laser that is used to zero aiming lasers (such as the AN/PEQ-15) without a 25-meter confirmation. The bore light will also boresight optics and iron sights to ensure that the first shot group hits the 25-meter zeroing target when zeroing the weapon. The bore light comes with a 5.56-millimeter, 7.62-millimeter, and .50-caliber mandrel. M320 and MK19 mandrels can be purchased separately.

Before bore sighting the weapon system, the bore light must first be zeroed to the weapon. To zero the bore light to the weapon—

(1) Stabilize the weapon by placing it in a rifle box rest or by laying two rucksacks side by side and placing another rucksack on top of the weapon.

(2) Align the visible laser with the weapon's barrel.

(3) Attach the 5.56-millimeter mandrel to the borelight.

(4) Insert the mandrel into the weapon's muzzle.

NOTE: The borelight is seated properly when the mandrel cannot be moved any further into the muzzle and the mandrel spins freely.

(5) Measure 10 meters with the 10-meter cord that comes with the borelight, or pace off eleven paces.

(6) Draw a zeroing mark (small dot) on a piece of paper or use the borelight reference point on the 10-meter Target Offsets from TC 3-22.9.

(7) Rotate the borelight until the battery compartment is facing upward and the adjusters are on the bottom. This is called the “START POINT”.

(8) Rotate the borelight until the battery compartment is facing downward and the adjusters are on top. This is called the “HALF-TURN POINT”.

(9) Identify the point approximately halfway between the start point and the half-turn point. This is the reference point.

(10) Turn the borelight on and spin it until it is in the start point position.

(11) Place the zeroing mark approximately 10 meters from the end of the barrel so that the visible laser strikes the zeroing mark.

(12) Slowly rotate the borelight 180 degrees while watching the visible laser made by the borelight.

a. If the visible laser stops on the zeroing mark, the borelight is zeroed to the weapon.

b.If the borelight does not stop on the zeroing mark, elevation and windage adjustments must be made to the borelight.

(13) From the start point, realign the zeroing mark with the visible laser, rotate the borelight 180 degrees to the half-turn position, and identify the reference point.

(14) Using the adjusters on the borelight, move the visible laser to the reference point.

(15) Rotate the borelight back to the start point; move the zeroing mark to the visible laser.

NOTE: If the visible laser cannot be located when the borelight is spun to the half-turn position, start this procedure at 2 meters instead of 10 meters. When the visible laser is adjusted to the reference point at 2 meters, restart the procedure at 10 meters.

(16) Repeat steps (13) through (15) until the visible laser spins on itself.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO D):

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO D):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting

student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

E. ENABLING LEARNING OBJECTIVE

ACTION:	Zero an M68 CCO.
CONDITIONS:	The Trainee is preparing for training and must prepare the Mounted M68 CCO in order to conduct a grouping exercise and then a zeroing exercise. The Trainee will have technical manual (TM) 9-1240-413-3&P, magazines and a M4A1 Series Carbine.
STANDARDS:	Zero the M68 CCO properly by: (1) Preparing the M68 CCO for operation. (2) Borelight an M68 CCO. (3) Establishing a correct sight picture. (4) Establishing a tight shot group (Grouping Exercise 8 out of 10 rounds within a 4 cm shot group). (5) Adjusting the M68 CCO to obtain a zero (achieving point of aim/point of impact for a 300 meter zero).
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO E - LSA 1. Learning Step / Activity ELO E - LSA 1. Zero an M68 CCO.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	30 mins
Media Type:	Printed Reference Material / Actual Equipment / Conference/Demonstration / Equipment Based Instruction / Practical Exercise / PowerPoint Presentation
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

1. Prepare the M68 CCO for operation.

NOTE: The CCO is equipped with 10 positions for different dot intensity settings. The "OFF" position is the number 1 position. Positions 2, 3, and 4 are low intensity for night vision operations. Positions 5 through 10 are daytime settings. Position 10 is the extra high intensity setting.

a. Ensure the front lens cover is closed.

b. Turn the switch knob to the desired setting.

c. Remove rear lens cover.

d. Look through lens to verify the desired intensity of the red dot on the front lens cover.

e. Remove the front lens cover.

2. Establish a correct sight picture.

a. Identify the aiming point on 25-meter zero target.

NOTE: When zeroing at 25 meters the point of impact of the round should be 1.4 cm or (1.5 squares on a 25-meter zero target) below the point of aim.

b. Assume a prone supported firing position.

c. Obtain a correct sight picture.

(1) Use the two-eyes-open method (preferred method) by positioning the head so that you can focus one eye on the red dot while scanning downrange with the other eye.

(2) Use the one-eye-open method by positioning the head so that you can shut your nonfiring eye while looking through the sight with the firing eye.

d. Place the red dot on the center of mass of the target.

NOTE: The same aiming method should be used to both zero and engage targets. The weapon must not be canted during aiming or firing.

3. Establish a tight shot group.

NOTE: A tight shot group is 3 rounds within a 4 centimeter or less square.

a. Fire a three-round shot group at the target.

b. Retighten the mounting knobs, as necessary, to seat the sight.

c. Identify the size of the shot group.

(1) Return to Step 2 if 2 of 3 rounds do not strike within a 4 cm or less circle / square.

(2) Proceed to Step 4 if 2 of 3 rounds strike within a 4 cm or less circle / square.

4. Adjust the CCO to obtain a zero.

a. Determine the necessary sight adjustments.

(1) Identify the center of the last fired shot group.

(2) Identify the adjustment to move this point of the center of the strike zone (zero offset).

b. Turn the adjuster knobs to move the next shot group to the target center.

NOTE: Adjustments move the point of impact 4 mm per click. Two clicks equal approximately 1 square on the standard M16A1 / A2 25-meter zeroing target. The elevation adjustment screw is turned clockwise to move the point of impact down and counterclockwise to move up. The windage adjustment screw is turned clockwise to move the point of impact left and counterclockwise to move right.

5. Establish a zero.

a. Fire a three-round shot group at the target.

b. Identify the location of the shot group on the target.

(1) Return to Step 4 if 2 of 3 rounds do not strike within the strike zone (zero offset).

(2) Proceed to Step 6 if 2 of 3 rounds strike within the strike zone (zero offset).

6. Confirm the zero.

a. Fire a three-round shot group at the target.

b. Identify the location of the shot group on the target.

(1) Return to Step 4 if 2 of 3 rounds do not strike within the strike zone (zero offset).

(2) Cease fire (zero is confirmed) if 2 of 3 rounds strike within the strike zone (zero offset).

Check on Learning:	Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.
Review Summary:	**NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.** **NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.**

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO E): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO E):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE:Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

F. ENABLING LEARNING OBJECTIVE

ACTION:	Operate the AN/PEQ-15 Advanced Target Pointer Illuminator Aiming Light (ATIPAL) properly on the M4A1 Series Carbine.
CONDITIONS:	The Trainee is preparing for training and must operate the mounted AN/PEQ-15 properly. The Trainee will have technical manual (TM) 9-5855-1914-13&P, M4A1 Series Carbine.
STANDARDS:	Operate the AN/PEQ-15 properly by: (1) Installing the batteries (correctly). (2) Ensuring the safety screw is configured properly. (3) Setting the desired mode of operation. (4) Activating the aiming light. (5) Powering down the aiming light.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO F - LSA 1. Learning Step / Activity ELO F - LSA 1. Operate the AN/PEQ-15 properly on the M4A1 Series Carbine.

Method of Instruction: Drill and Practice
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 1 hr
Media Type: Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

a. The the AN/PEQ-15 is a multifunctional laser device that emits both a visible and infrared (IR) light used for precise aiming and target illumination.

b. The visible laser can be used to boresight the device to a weapon without the need of night vision goggles.

c. The IR lasers emit a highly collimated beam of IR light for precise weapon.

d. Aiming and a separate IR-illuminating laser capable of being adjusted from a flood to a spot divergence.

e. A visible red-dot aiming laser can also be selected to provide precise aiming of a weapon during daylight or night operations. The lasers can be used as handheld illuminator pointers, or can be weapon-mounted with included hardware.

f. The co-aligned visible and IR aiming lasers emit through laser ports in the front of the housing.

g. These highly capable aiming lasers allow for accurate nighttime aiming and system boresighting.

AN/PEQ-15 Major Components:

(1) AN/PEQ-15 Assembly: The AN/PEQ-15 is a handheld or weapon mounted, battery operated, multifunction laser device that emits visible or IR light for precise weapon aiming and target / area illumination.

(2) Operator and Field: Maintenance Manual Provides detailed operating and maintenance procedures specific to the AN/PEQ-15.

(3) Soft Carrying Case: Protects the AN/PEQ-15 and accessories while in a field environment. The case includes belt clips for attachment to the standard issue web belt.

(4) Quick Reference: Guide: Provides at-a-glance instruction for basic operation, mounting, and boresighting of the AN/PEQ-15.

(5) Strap, Retaining (2): May be used alone or in conjunction with hook and loop fastener tape as an alternate means of attaching the Remote Cable Switch to the weapon.

(6) Pattern Generators (set of 5): Five pattern generators (i.e., circle, square, triangle, T-shape, cross) that, when individually installed over the aim lasers, project a specific holographic design over the aiming point of the laser.

(7) Remote Cable Switch: Allows for fingertip activation of the AN/PEQ-15 without interrupting the operator’s proper shooting platform (stance).

(8) Tape Fastener, Loop (3): Used to secure the Remote Cable Switch to the weapon.

(9) Battery, DL123A: One 3-volt DL123A battery used to power the AN/PEQ-15.

Controls and Indicators:

(1) Aim Neutral Density (ND)/Opaque Lens Cap: Double-sided lenses cap that, when placed over the Aim Lasers, reduces power output from the IR Aim Laser and completely prevents emission from the Visible Aim Laser.

(2) Activation Button: When in P (PROGRAM) mode, the Activation Button allows for programming the IR Illuminator pulse rate. When in one of the six operational laser modes (i.e., VIS-AL, AL, DL, AH, IH, DH, etc.), the Activation Button is used to actively emit laser radiation that corresponds with the position of the Mode Selector.

(3) Illuminator Adjusters: These adjusters can be rotated in azimuth and elevation to bring the illumination area over the aiming beam, and can be used to align the IR Illuminator with the barrel of the weapon.

(4) Serial Number: Stamped serial number location for easy visibility.

(5) Illuminator Diffuser Lens Cap: When installed over the IR Illuminator, spreads the laser energy over an angle of approximately 180 degrees, allowing for illumination of a 20’ x 30’ x 8’ room. This is useful for illuminating a small room and is most effective when used with the IR Illuminator Focus Knob adjusted to the widest beam (flood) setting.

(6) Infrared Illuminator: Used with night vision devices to provide variable focused IR illumination of the intended target area. The Illuminator Focus Knob is rotated to vary the illumination beam spread from flood to spot, based on the range and size of the area to be illuminated.

(7) Infrared Aim Laser: Used with night vision devices to provide a precision aim point or to mark targets.

(8) Visible Aim Laser: Used to provide a precision aim point or to positively identify/mark targets at close range during the day or night, without the need of night vision devices. It may also be used for boresighting the AN/PEQ-15 during daylight hours.

(9) Battery Cap: Provides secure housing for the 3-volt DL123A battery that powers the AN/PEQ-15.

(10) Safety Screw Storage Location (Black Chassis): Allows for secure storage of the Safety Screw after it has been removed from the Lockout Position.

(11) Mode Selector: Allows the user to select the desired mode of operation for the AN/PEQ-15. When switched to O (OFF), the AN/PEQ-15 will not emit laser energy.

(12) Aim Laser Adjusters: These adjusters can be rotated to simultaneously bring the Visible and IR Aim Lasers into azimuth and elevation alignment with the barrel of the weapon.

(13) Safety Screw: When installed in the Lockout Position, the Safety Screw prevents the Mode Selector from being turned to the high power laser settings (i.e., AH, IH, DH). Removal of the Safety Screw allows for access to all modes of operation.

(14) Integral Rail Grabber Bracket: Secures the AN/PEQ-15 to a weapon equipped with a MILSTD-1913 rail.

(15) Safety Screw Storage Location (Tan Chassis): Allows for secure storage of the Safety Screw after it has been removed from the Lockout Position.

(16) Remote Jack/Jack Plug: Provides an interface for the Remote Cable Switch. The AN/PEQ-15 comes with a Remote Jack Plug installed to protect the Remote Jack from debris and moisture.

(17) Tie Down Attachment Point: Allows for the attachment of a lanyard to the AN/PEQ-15 when used in the handheld mode.

Operating an AN/PEQ-15 (ALL NMC AN/PEQ-15's need to be tracked by Serial Number and Deficiency and this Tracker needs to be turned into BDE S-3 in order to get NEW Equipment)

(1) Install batteries.

a. Move the mode selector to OFF.

b. Unscrew the battery cap.

c. Install one (1) lithium DL123A battery observing terminal polarities marked on housing d. Re-install battery caps by hand tightening battery caps onto housing.

(2) Ensure the safety screw is configured properly.

NOTE: A removable safety screw installed in the lockout position prevents the mode selector from being turned to the high power laser settings (i.e, AH, IH, DH, etc.). This configuration is appropriate for a training environment or when the AN/PEQ-15 is being stored.

(3) Set the desired mode of operation.

a. Determine proper position of the mode switch.

b. Move mode switch to the desired position.

NOTE: A removable safety screw is installed in the lockout position to prevent the mode selector from being turned to the high power laser settings (AH, IH, DH). To access the high power laser settings, remove the safety screw by using a hex head wrench and then secure the safety screw to the nearby screw storage location.

(4) Activate the aiming light based on the desired mode of operation.

a. Activate during momentary operation.

(1) Press and hold the activation button (or the remote cable switch) to operate the aiming light in the operational mode set by the mode selector.

(2) Release the button (or the remote cable switch) to turn off the aiming light.

b. Activate during continuous operation.

(1) Press the activation button (or the remote cable switch) twice in rapid succession (double-tap) to turn the aiming light laser(s) on continuously.

(2) Rotate the illuminator focus knob to vary the illumination beam when using the IR illuminator mode of operation.

(3) Put neutral density/opaque lens cap on aim laser exit ports when operating visible laser.

NOTE: Under certain operating conditions, particularly at night, it may be desirable to prevent inadvertent emission of visible laser energy. The neutral density/opaque lens cap helps you prevent inadvertent emission.

(4) Press the button (or the remote cable switch) a third time (single-tap) to turn off the AN/PEQ-15.

NOTE: The AN/PEQ-15 is equipped with a shut-down feature that will automatically turn off any laser that has been activated for five continuous minutes. To reactivate, press (single-tap) the activation button.

(5) Power down the aiming light by moving the mode switch to the OFF position.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO F):

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO F):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE:Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

G. ENABLING LEARNING OBJECTIVE

ACTION:	Mount the AN/PEQ-15 properly on the M4A1 Series Carbine.
CONDITIONS:	The Trainee is preparing for training and must Mount the AN/PEQ-15 properly on the M4A1 Series Carbine. The Trainee will have technical manual (TM) 9-5855-1914-13&P.
STANDARDS:	Mount the AN/PEQ-15 properly on the M4A1 Series Carbine by: (1) Clearing the weapon.

	(2) Inspecting the AN/PEQ-15. (3) Installing the battery. (4) Mounting the AN/PEQ-15 to the weapon.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO G - LSA 1. Learning Step / Activity ELO G - LSA 1. Mount the AN/PEQ-15 properly on the M4A1 Series Carbine.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	40 mins
Media Type:	Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

CAUTION: Loosening the mounting screw beyond the point where resistance is first met may result in damage to the rail grabber assembly.

1. Clear the weapon.
2. Inspect the AN/PEQ-15.
3. Install the battery.
4. Mount the AN/PEQ-15 to the weapon (On the M4/M4A1 the AN/PEQ-15 can be mounted on the Top, Left Side or Right Side).

a. Mount the AN/PEQ-15.

(1) Loosen the mounting screw on the rail grabber bracket until the jaws have sufficient space to fit over the MIL-STD-1913 rail.

(2) Hold the AN/PEQ-15 with the laser apertures facing in the direction of the muzzle of the weapon.

(3) Position the AN/PEQ-15 on the rail ensuring the mounting screw in the mounting channel engages the weapon recoil grooves.

(4) While pushing down and forward on the AN/PEQ-15, firmly tighten the mounting screw by turning clockwise, ensuring not to over tighten.

NOTE: Failure to properly secure and tighten the AN/PEQ-15 to the rail may lead to boresight failure and the need to repeat zeroing procedures. The tightness of the mounting screw should be checked after each basic load of ammunition.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that

can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO G): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO G):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

H. ENABLING LEARNING OBJECTIVE

ACTION:	Boresight an AN/PEQ-15 properly on the M4A1 Series Carbine.
CONDITIONS:	The Trainee is preparing for training and must operate the mounted AN/PEQ-15 properly on the Carbine. The Trainee will have technical manual (TM) 9-5855-1914-13&P.
STANDARDS:	Boresight an AN/PEQ-15 properly on the M4A1 Series Carbine by: (1) Preparing the weapon. (2) Preparing the target. (3) Zeroing the borelight to the weapon. (4) Boresighting the AN/PEQ-15 to the weapon.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO H - LSA 1. Learning Step / Activity ELO H - LSA 1. Boresight an AN/PEQ-15 properly on the M4A1 Series Carbine.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	30 mins
Media Type:	Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

DANGER: Before using the borelight, ensure that the weapon is clear and on SAFE, and that the bolt is locked in the forward position.

(1) Do not stare into the visible laser beam.

(2) Do not look into the visible laser beam through binoculars or telescopes.

(3) Do not point the visible laser beam at mirror-like surfaces.

(4) Do not shine the visible laser beam into other individuals' eyes.

WARNING: When rotating the borelight to zero it, ensure that the mandrel is turning counterclockwise (from the firer's point of view) to avoid loosening the borelight from the mandrel.

1. Prepare the weapon.

a. Ensure the weapon is clear.

b. Stabilize the weapon without a cant.

NOTE: The weapon can be stabilized by placing the weapon in a rifle box rest or laying two rucksacks side by side with another rucksack on top of the weapon. The weapon does not have to be perfectly level with the ground when boresighting.

c. Insert the boresight filter to reduce blooming of the laser (optional).

d. Attach the 5.56-millimeter mandrel to the borelight.

e. Insert the mandrel into the weapon's muzzle.

NOTE: The borelight is seated properly when the mandrel cannot be moved any further into the muzzle and the mandrel spins freely.

2. Prepare the target.

NOTE: It is best to use two Soldiers to boresight. The firer zeros the borelight by making adjustments on the optic or aiming laser being used. The target holder matches the beam and zeroing mark, secures the target straight up and down (aligned with the cant of the weapon) 10 meters from the borelight, and directs the firer to make necessary adjustments. The target holder must wear night vision goggles when boresighting infrared (IR) aiming lasers. Both Soldiers must clearly communicate their actions.

a. Verify that the target includes the correct boresight offset (Table 1).

NOTE: Table 1 provides 10-meter target offsets marked in centimeters (cm) for a specific point of aim and point of impact. The offsets must be applied to a locally created target so that the aiming device/weapon combination can be properly boresighted. Ranges shown in the ZERO column are listed in meters.

Abbreviations used in the last column are defined as follows:

1. L - Left

2. R - Right

3. U - Up

4. D - Down

5. VIS - Visible Aim Laser

6. IR - IR (Infrared) Aim Laser

7. F - Flood (Illumination) Laser

(1) If the boresight target has the correct offset marked, proceed to step 2b.

(2) If the boresight target does not have the correct offset marked, prepare an offset target.

(a) Divide a blank sheet of paper into 1 cm x 1 cm gridlines.

(b) Draw the laser borelight symbol around a gridline intersection centered in the lower third of the target.

(c) Obtain the offset from Tables 1 for the device/weapon combination being used.

(d) Apply the target offset to the target by counting the specified number of squares up or down, and left or right, from the center of the laser borelight symbol.

(e) Label this point with the appropriate symbol for the aiming light/sighting device being used.

(f) Measure 10 meters or pace off eleven paces.

(g) Turn on the borelight.

(h) Ensure the laser strikes the target.

NOTE: If the visible laser cannot be located on the target or does not remain on the target as it is spun, then boresight at 2 meters instead of 10 meters. When the visible laser is zeroed at 2 meters,

restart the procedure at 10 meters.

(i) Place the borelight in the start position.

NOTE: When rotating the borelight to zero it, ensure that the mandrel is turning counter-clockwise (CCW), from the firer's point of view, to avoid loosening the borelight from the mandrel.

(1) Rotate the borelight CCW, 180 degrees.

(2) Ensure the battery compartment is facing upward.

(j) Align the boresighting target with the laser striking the zeroing mark.

(k) Secure the boresighting target.

3. Zero the borelight to the weapon.

NOTE: Before boresighting the weapon system, the borelight must first be zeroed to the weapon.

a. Determine the boresighting reference point.

(1) Place the borelight in the half turn position.

(a) Rotate the borelight CCW 180 degrees until the battery compartment is facing down.

(b) Ensure the adjusters are on the bottom while watching the path made by the laser dot on the target.

(2) Mark the target where the laser strikes the target (battery down mark).

(3) Identify the reference point half way between the zeroing mark (battery up position) and the current battery down position.

b. Determine if the borelight is boresighted (zeroed) to the weapon.

NOTE: A 1 cm or less circle means the borelight has been boresighted to the weapon.

(1) Rotate the borelight CCW.

(2) Ensure the laser dot remains stationary or rotates around the reference point no more than 1 cm.

(a) Proceed to step 3c, adjust the borelight, if the laser dot rotates in a circle greater than 1 cm.

(b) If the laser dot remains stationary or rotates around the reference point no more than 1 cm, proceed to step 4.

c. Adjust the borelight, as required.

(1) Turn the windage and the elevation adjusters, as required, to move the visible laser to the reference point.

(2) Repeat steps 3b and 3c until the visible laser spins a 1 cm or less circle then precede to step 4, boresight the aiming light.

4. Boresight the AN/PEQ-15 to the weapon.

CAUTION: Do not force adjusters beyond their end of travel.

a. Set the zero preset for the AN/PEQ-15.

(1) Rotate adjusters to the full CCW end of travel.

(2) Rotate adjusters back clockwise 2.5 turns to align the slotted head in a 12 o'clock/6 o'clock orientation.

b. Ensure target is prepared correctly.

(1) Confirm the target is at 10 meters (eleven paces).

(2) Confirm the boresight laser is striking the zero mark.

(3) Confirm the 10 meter AN/PEQ-15 boresight offset mark is the correct distance from the center of the zero mark.

(4) Confirm the target is secure.

c. Place the AN/PEQ-15 into operation.

d. Establish the AN/PEQ-15 boresight zero.

(1) Identify, on the target, the location of the AN/PEQ-15 aiming laser dot and the AN/PEQ-15 offset

mark.

(2) Adjust the AN/PEQ-15 aiming laser adjuster knobs until the aiming laser is on the offset mark on the target.

(3) Adjust the aiming light illumination beam adjuster knobs until the illumination beam is collocated with the aiming laser on the offset mark on the target.

e. Establish a positive load on each AN/PEQ-15 adjuster.

NOTE: Positive load is the controlled compression of the spring within the adjuster mechanism to ensure the highest level of accuracy is maintained after the AN/PEQ-15 / weapon combination is boresighted or zeroed. A positive load is achieved by rotating the adjuster by turning each adjuster eight clicks (1/4 turn) CW, then back (CCW) to the boresight/zero position.

(1) Select on adjuster.

(a) Turn the adjuster eight clicks CW.

(b) Turn the adjuster eight clicks CCW to the zero position.

(2) Repeat for each of the other three adjusters.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO H):

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO H):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

I. ENABLING LEARNING OBJECTIVE

ACTION:	Dismount the AN/PEQ-15 properly from the M4A1 Series Carbine.
CONDITIONS:	The Trainee is preparing for training and must Mount the AN/PEQ-15 properly on the M4A1 Series Carbine. The Trainee will have technical manual (TM) 9-5855-1914-13&P.
STANDARDS:	Dismount the AN/PEQ-15 properly on the M4A1 Series Carbine by: (1) Clearing the weapon.

	(2) Inspecting the AN/PEQ-15. (3) Installing the battery. (4) Mounting the AN/PEQ-15 to the weapon.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO I - LSA 1. Learning Step / Activity ELO I - LSA 1. Dismount the AN/PEQ-15 properly from the M4A1 Series Carbine.

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	30 mins
Media Type:	Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

Dismount the AN/PEQ-15 properly from the M4A1 Series Carbine.

(1) Clear the weapon.

(2) Remove the remote cable switch.

a. Unplug the remote cable switch from the remote jack on the AN/PEQ-15.

b. Remove the remote cable switch by detaching the hook and loop fastener tape.

(3) Remove the AN/PEQ-15 from the weapon.

NOTE: Identifying where the AN/PEQ-15 is mounted enables the user to remount it in the same position so that the zero is retained.

a. Make a note of where the AN/PEQ-15 is mounted on the rail.

b. Loosen the mounting screw on the AN/PEQ-15 or open the throw lever on the AN/PEQ-15 and remove it from the weapon.

(4) Perform PMCS on the AN/PEQ-15.

(5) Stow the AN/PEQ-15.

a. Turn the AN/PEQ-15 mode switch to OFF.

b. Remove the battery.

c. Replace all caps and covers.

d. Place the AN/PEQ-15 and all components in the carrying case.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary: **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.**

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that

can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO I): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO I):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

J. ENABLING LEARNING OBJECTIVE

ACTION:	Maintain the AN/PEQ-15.
CONDITIONS:	The Trainee is preparing for training and must Mount the AN/PEQ-15 properly on the M4A1 Series Carbine. The Trainee will have technical manual (TM) 9-5855-1914-13&P.
STANDARDS:	Maintain the AN/PEQ-15 properly on the M4A1 Series Carbine by: (1) Clearing the weapon. (2) Inspecting the AN/PEQ-15. (3) Installing the battery. (4) Mounting the AN/PEQ-15 to the weapon.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO J - LSA 1. Learning Step / Activity ELO J - LSA 1. Maintain the AN/PEQ-15 properly from the M4A1 Series Carbine.

Method of Instruction: Drill and Practice
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction: 30 mins
Media Type: Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Maintain an AN/PEQ-15.

1. Conduct preventive maintenance checks and services (PMCS).

a. Conduct Inventory of all major components.

b. Maintain AN/PEQ-15 components.

(1) Turn stowage bag upside down to shake out loose particles of dirt.

(2) Remove dirt, debris, and mud from the stowage bag.

(3) Inspect stowage bag for rips, tears, and frays.

(4) Inspect Rail Grabber Bracket for damage.

c. Maintain the aiming light.

(1) Maintain battery compartment.

(a) Remove battery cap.

(b) Remove batteries (if present) from battery compartment.

(c) Turn aiming light upside down to shake out loose corrosion.

(d) Inspect battery compartment for dirt or corrosion.

(e) Clean battery compartment, threads, and contacts with isopropyl alcohol and disposable applicator.

(f) Inspect battery cap and O-ring.

(g) Clean Battery Cap and Battery Cap threads.

(h) Apply lubricant to the O-ring using silicone grease.

(i) Replace battery cap.

NOTE: If AN/PEQ-15 is to be stored then do not replace the batteries.

(2) Maintain outer surface of the aiming light.

(a) Remove as much dirt and dust from the aiming light as possible.

(b) Rinse the aiming light housing with water.

(c) Clean around buttons, switches, adjusters, and attachment points with a soft cloth or disposable applicator.

(d) Wipe with clean cloth.

(e) Dry with clean soft cloth.

(f) Inspect for cracks, chips, or dents.

(3) Maintain Optical lenses.

(a) Remove Aim Neutral Density/Opaque Lens Cap, Pattern Generator, and IR Illuminator Diffuser Lens Cap.

(b) Brush off all loose dirt from the lens using a dry lens cleaning tissue.

(c) Inspect Aim laser Lens Cap lanyards for tears, rips, and for snug fit when in place over lasers.

(4) Maintain Remote Jack.

(a) Remove Remote Cable Switch or Remote Jack Plug if installed.

(b) Inspect Jack contacts for corrosion, dirt or damage.

(c) Clean contacts with Isopropyl Alcohol and Disposable Applicator.

(d) Replace Remote Cable Switch or Remote Jack Plug.

(5) Maintain laser.

(a) Activate each mode of operation.

(b) Ensure visible aim laser is visible.

(c) Ensure IR aim laser and illuminator are visible when using night vision devices.

(6) Maintain the Remote Cable Switch.

(a) Install Remote Cable Switch.

(b) Activate Remote Cable Switch.

(c) Verify that Remote Cable Switch is functioning and not damaged.

(7) Record deficiencies, if found, on DA Form 2404 or DA Form 5988-E.

(8) Stow the aiming light and components in the stowage bag or storage case.

(9) Report unserviceable items to your supervisor, as required.

Check on Learning:

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary:

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO J):

Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO J):

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

K. ENABLING LEARNING OBJECTIVE

ACTION:	Maintain an M150 Rifle Combat Optic (RCO).
CONDITIONS:	Given a M150 RCO mounted on your M4 series carbine to ensure it is operational. You have technical manual (TM) 9-1240-416-13&P and DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection and Maintenance Worksheet- (EGA)) for the sight.
STANDARDS:	Maintain the M150 RCO properly by: (1) Inventorying the M150 RCO. (2) Maintaining the M150 RCO. (3) Recording deficiencies on a DA Form 2404 or 5988-E. (4) Reporting deficiencies to Chain of Command.
LEARNING DOMAIN - LEVEL:	Psychomotor - Manipulation
No JPME LEARNING AREAS SUPPORTED:	None

ELO K - LSA 1. Learning Step / Activity ELO K - LSA 1. Maintain an M150 Rifle Combat Optic (RCO).

Method of Instruction:	Drill and Practice
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - NON-ICH (4:50)(Drill Sergeant(s))
Time of Instruction:	30 mins
Media Type:	Printed Reference Material / Actual Equipment / Equipment Based Instruction / Handout / Oral Presentation / Practical Exercise / PowerPoint Presentation / Situational Based Instruction
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

(1) M150 RCO Components (Refer to Slide).

(2) M150 RCO Characteristics.

a. M150 RCO.

b. 4x magnification.

c. Weight=15.3 ounces w/M1913 rail adaptor.

d. Length=5.8 inches.

e. 32mm objective lens.

f. Waterproof to depth of 66 feet w/adjuster caps on.

g. Eye relief 1.5 inches.

h. Field of view at 100 yds. = 36.8 feet.

j. Adjustments 3 clicks = 1 inch @ 100m.

(3) Inspecting the M150 RCO:

a. Inspect both lenses for cracks or chips.

b. Inspect the forged housing for cracks or damage.

(4) Inspect night illumination of the reticle.

a. Ensure both adjuster caps are present.

b. Inspect O rings on the adjusters.

c. Notify your armorer if any discrepancies are identified.

(5) Cleaning the M150 RCO:

a. Clean the M150 RCO with fresh water only.

b. Do not use any type of solvent.

c. If the lenses become dirty, rinse thoroughly with fresh water. USE LENSE PAPER!

d. Once thoroughly rinsed, wipe with a CLEAN cloth (Side to Side Only NO CIRCULAR MOTION).

e. The lenses could be scratched if dirt is pulled along the lens by the cloth.

f. Use a drop of oil on the interface knob threads only.

Check on Learning: Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

Review Summary: **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.**
NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.
NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

CHECK ON LEARNING (ELO K): Conduct a check on learning by asking questions, soliciting answers from Students and correcting misunderstandings.

REVIEW SUMMARY(ELO K): **NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.**
NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.
NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to

accomplish the intended learning outcome(s).

SECTION IV. SUMMARY

Method of Instruction:	Reflective Discussion
Mode of Delivery:	Resident Instruction
Instr Type(I:S Ratio):	Military - NON-ICH (2:50) (Drill Sergeant(s))
Time of Instruction:	5 mins

Check on Learning

Conduct a check on learning by asking questions, soliciting answers from students and correcting misunderstandings.

Review/ Summary

NOTE: Repeat the terminal learning objective of the lesson and summarize the learning step activity.

NOTE: Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

NOTE: Reiterate the Performance Enhancement Component(s) that can be utilized to accomplish the intended learning outcome(s).

The following 5 mental skills (Performance Enhancement Components) need to be taught early and reinforced often; Proper execution of all Infantry Tasks requires the full integration of the 5 Mental Skills Foundations:

1. Goal Setting: Identify a personally meaningful goal and develop a concrete plan to ensure achievement (plan, execute and persevere through challenges).

a. Identify personal values that can form the foundation for self-directed motivation.

b. Create a systematic plan of sustained goal pursuit.

c. Develop commitment strategies that support goal attainment.

d. Develop techniques to regularly monitor goal progress (Self-Regulated Learning).

2. Building Confidence: Think in deliberate ways to set conditions for consistent optimal performance.

a. Create personal examples of effective thoughts for confident performance.

b. Identify personal strengths that help performance across various tasks.

c. Recognize and Correct ineffective thoughts for confident performance.

d. Create personal examples of perceptions of failure and success (Failure is a teachable moment).

e. Create a personal example of reinterpreting threat as a challenge.

3. Attention Control: Heighten sensory awareness for what is most relevant and keep it there to avoid distractions (Concentrate amidst distractions).

a. Identify the ideal function for each of the four general attention styles (Situational Awareness, Focused Attention, Self-Regulation/Rehearsals and Analysis/Planning).

b. Identify personal distractors that compromise proper focus.

c. Create personal “Do” and “Be” cues to deliberately direct attention.

d. Identify personal distractors that compromise proper focus.

e. Developaroutinethatsetsyourthoughts, emotionsandbodyinanidealstateforfocusedskillexecution.

4. Energy Management: Effectively mobilize and restore mind-body activation to thrive under pressure (Maintain composure for effectiveness and efficiency).

a. Understand how mind-body activation impacts performance.

b. Prioritize controllable factors that influence mind-body activation (Control the Controllable).

c. Practice personalized strategies to combat chronic sleep restriction.

5. Integrating Imagery: Mentally rehearse performances to condition the mind and body to perform automatically and without hesitation (Prepare anywhere).

a. Understand that basis of the brain-performance connection.

b. Identify the Thought Performance Connection (TPC). What your mind thinks your body does.

c. Develop an imagery script for a specific performance, (Keep the firing eye focused on your aiming device Front Sight Post or Red Dot, the Target will be slightly blurry).

d. Two types of imagery integration are Deliberate and Hasty Imaging.

SECTION V. STUDENT EVALUATION

Testing Requirements

NOTE: Describe how the student must demonstrate the accomplishment of the TLO. Refer student to the Individual Student Assessment Plan.

Feedback Requirements

The Trainee will receive timely feedback from the Drill Sergeant during all practical exercises, hands-on performance evaluations, and written examinations through mentoring and reflective discussions. The Trainee will be counseled (positive and/or negative) based on their performance on evaluations and classroom participation. Score the Trainee in accordance with the ISAP. If the Trainee fails any step, show or tell him what was done wrong and show them how to do it correctly then provide an opportunity for supervised practices to ensure understanding and application. Document feedback for training developer(s), especially pertinent information that can improve training.

Appendix A - Viewgraph Masters

Introduction to Optics and Lasers (BCT RM PD 8)(Classsroom/CTA/Simulator)
071-BT071048 / Version 5.02 ©

Sequence	Media Name	Media Type
None		

Appendix B - Assessment Statement and Assessment Plan

Assessment Statement: None.

Assessment Plan: None.

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-BT071048 Version 5.02 ©

Appendix D - Student Handouts

Introduction to Optics and Lasers (BCT RM PD 8)(Classsroom/CTA/Simulator)
071-BT071048 / Version 5.02 ©

Sequence	Media Name	Media Type
5	198TH IET Handbook	PDF
20	M68 Tie Down SOP	PPTX