

**Qualify with the AN/PEQ-2A mounted on M249/ M240B Machine Guns.
071-SAWE11 / Version 1.0
Effective Date 08 Mar 2013**

SECTION I. ADMINISTRATIVE DATA

All Courses Including This Lesson	<u>Course Number</u>	<u>Version</u>	<u>Course Title</u>
	010-F38 (MTT-A/G)	1.0	Small Arms
Task(s) Taught(*) or Supported	<u>Task Number</u>	<u>Task Title</u>	
	<u>Individual</u>		
	071-025-0027 (*)	Mount an AN/PEQ-2A Series Aiming Light on an M240B Machine Gun	
	071-025-0028 (*)	Dismount an AN/PEQ-2A Series Aiming Light from an M240B Machine Gun	
	071-025-0029 (*)	Zero an AN/PEQ-2A-Series Aiming Light to an M240B Machine Gun	
	071-025-0030 (*)	Engage Targets with an M240B Machine Gun Using an AN/PEQ-2A-Series Aiming Light	
	071-010-0016 (*)	Mount an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	
	071-010-0017 (*)	Dismount an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	
	071-010-0018 (*)	Zero an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	
	071-010-0019 (*)	Engage Targets with an M249 Squad Automatic Weapon using an AN/PEQ-2 Aiming Light	
Reinforced Task(s)	<u>Task Number</u>	<u>Task Title</u>	
	None		

Knowledge

<u>Knowledge Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
071-WPN-0002	Demonstrate Knowledge of Boresight Procedures	Yes	No
071-WPN-0059	Identity and Location of Parts of Infantry Weapons	No	Yes
071-WPN-0062	Infantry Weapons Ammunition	No	Yes
071-WPN-0063	Weapons Functions	No	Yes
071-WPN-0064	Target Detection Techniques	No	Yes
071-WPN-0065	Range Estimation Techniques	No	Yes
071-WPN-0066	Theory and Operation of Night Vision Devices	Yes	No
071-WPN-0068	Firing Techniques	No	Yes
071-WPN-0069	Zeroing Techniques	Yes	No
071-WPN-0070	Functioning of the Traversing & Elevation Mechanism	No	Yes
071-WPN-0072	Mounting Machine Guns Tripods	No	Yes
071-WPN-0083	Traversing and Elevation Mechanism	No	Yes
071-WPN-0085	Methods of Determining Width and Depth of a Target	No	Yes

Skill

<u>Skill Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
071-WPN-0033	Load and Unload Infantry Weapons	No	Yes
071-WPN-0009	Zero Infantry Weapons	No	Yes
071-WPN-0027	Zero Night Vision Devices to Infantry Weapons	Yes	No
071-WPN-0005	Ability to Load and Unload Infantry Weapons	No	Yes
071-WPN-0006	Clear Infantry Weapons	No	Yes
071-WPN-0022	Detect Targets	No	Yes
071-WPN-0024	Follow Safety Procedures	No	Yes
071-WPN-0008	Correct Weapons Malfunctions	No	Yes
071-WPN-0031	Mount a Machine Gun on a Tripod with T&E Mechanism	No	Yes
071-WPN-0025	Mount Night Vision Devices to Infantry Weapons	Yes	No
071-WPN-0032	Use a Traversing and Elevation Mechanism	No	Yes
071-WPN-0007	Detect Weapon Malfunctions	No	Yes

**Administrative/
Academic
Hours**

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

<u>Academic</u>	<u>Resident Hours / Methods</u>		
Yes	0 hrs	45 mins	Conference/Demonstration
Yes	10 hrs	0 mins	Practical Exercise (Hands-On)
Yes	0 hrs	0 mins	Test Review
Yes	0 hrs	0 mins	Test
<hr/>			
Total Hours:	10 hrs	45 mins	

**Test Lesson
Number**

<u>Hours</u>	<u>Lesson Number</u>
None	

**Prerequisite
Lesson(s)**

<u>Lesson Number</u>	<u>Lesson Title</u>
None	

**Training
Material
Classification**

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

**Foreign
Disclosure
Restrictions**

FD7. This product/publication has been reviewed by the training/educational developers in coordination with the DOTD, MCoE, Ft Benning, GA 31905. FD authority. This product is NOT releasable to students from foreign countries.

References

<u>Number</u>	<u>Title</u>	<u>Date</u>	<u>Additional Information</u>
FM 3-22.68	Crew-Served Machine Guns, 5.56-MM and 7.62-MM	21 Jul 2006	
FM 5-19	COMPOSITE RISK MANAGEMENT	21 Aug 2006	
TM 11-5855-308-12&P	Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) Target Pointer Illuminator/Aiming Light AN/PEQ-2A AN/PEQ-2A	15 May 2000	
TM 9-1005-201-10	OPERATORS MANUAL FOR MACHINE GUN, 5.56-MM, M249 W/EQUIP (NSN 1005-01-127-7510) (EIC: 4BG) {TM 08671A-10/1A} (REPRINTED W/BASIC INCL C1)	26 Jul 1991	
TM 9-1005-313-10	OPERATORS MANUAL FOR MACHINE GUN, 7.62MM, M240 (NSN 1005-01-025-8095) M240B (1005-01-412-3129) M240C (1005-01-085-4758) M240D (1005-01-418-6995) M240E1 (1005-01-252-4288) M240G (1005-01-359-2714) M240N (15 Nov 2002	

**Student Study
Assignment**

NONE.

**Instructor
Requirements**

Complete a risk management worksheet. It is recommended that you use the ground risk assessment tools provided by the US ARMY COMBAT READINESS/SAFETY CENTER at https://grat.safety.army.mil/ako_auth/grat/default.aspx

**Additional
Support
Personnel
Requirements**

<u>Name</u>	<u>Student Ratio</u>	<u>Qty</u>	<u>Man Hours</u>
OIC	1:32		
Combat Lifesaver	1:16		
Driver, LMTV	1:12		
Range NCOIC	1:32		

**Equipment
Required
for Instruction**

<u>ID - Name</u>	<u>Student Ratio</u>	<u>Instructor Ratio</u>	<u>Spt</u>	<u>Qty</u>	<u>Exp</u>
1005-01-127-7510 - MACHINE GUN,5.56 MILLIMETER	1:4	0:0	No	0	No
1005-01-412-3129 - MACHINE GUN,7.62 MILLIMETER	1:4	0:0	No	0	No
1005-01-433-1617 - MOUNT,TRIPOD,MACHINE GUN	1:4	0:0	No	0	No
2330-01-108-7367 - Trailer Water: M149A2	1:32	0:0	No	0	No
4110-01-485-3548 - CHEST,ICE STORAGE	2:32	0:0	No	0	No
5820-01-451-8252 - Radio Set: AN/PRC-119F(C)	0:0	0:0	No	2	No
5855-01-432-0524 - Monocular Night Vision Device: AN/PVS-14	1:1	1:1	No	0	No
5855-01-447-8992 - ILLUMINATOR,INFRARED	1:4	0:0	No	0	No
6135-00-985-7845 - Battery, Nonrechargeable, AA	4:1	2:1	No	0	No
6260-01-178-5559 - LIGHT,CHEMILUMINESCENT	1:8	0:0	No	0	No
6515-00-137-6345 - Plug Ear Universal Size 400S	1:1	1:1	No	0	No
6515-01-472-1863 - INTRAVENOUS INJECTION SET	4:32	0:0	No	0	No
6530-01-290-9964 - Litter, Folding, Rigid Pole	1:32	0:0	No	0	No
6545-01-505-1170 - Medical Equipment Set, Combat Lifesaver	1:16	0:0	No	0	No
6685-01-590-1047 - Monitor, Heat Stress: Questemp 44	1:32	0:0	No	0	No
6760-00-985-6749 - Tripod, Photographic	1:32	0:0	No	0	No
7210-00-081-1417 - Sheet, Bed Cotton White	12:16	0:0	No	0	No
7520-00-053-9580 - Pen, Ball- Point, Medium, Black	1:8	0:0	No	1	No
8960-01-430-4378 - ICE	2:32	0:0	No	0	Yes
9150-01-079-6124 - CLEANER,LUBRICANT AND PRESERVATI	1:4	0:0	No	0	No
Z40430 - TRUCK, CARGO, 4X4, LMTV	1:12	0:0	No	0	No

(Note: Asterisk before ID indicates a TADSS.)

**Materials
Required**

Instructor Materials:

FM 3-22.68 CREW SERVED WEAPONS

TM 9-1005-313-10 Operators Manual M240 Machine Gun

TM 9-1005-344-10 M122 Operators Manual Tripod

TM 9-1005-201-10 Operators Manual M249 Machine Gun

TM 11-5855-308-12&P Operators Manual PEQ 2

Student Materials:

Note taking material.

Field Uniform.

**Classroom,
Training Area,
and Range
Requirements**

<u>ID - Name</u>	<u>Quantity</u>	<u>Student Ratio</u>	<u>Setup Mins</u>	<u>Cleanup Mins</u>
17833 Range, Machine Gun, Multipurpose, Automated (MPMG)		1:32	15	15
17801 Range, Firing Zero/ Basic 10m-25m		1:32	15	15

**Ammunition
Requirements**

<u>DODIC - Name</u>	<u>Exp</u>	<u>Student Ratio</u>	<u>Instruct Ratio</u>	<u>Spt Qty</u>
A064 - Cartridge, 5.56 Millimeter	Y	345:1		
A131 - Cartridge, 7.62 Millimeter	Y	345:1		

**Instructional
Guidance**

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

Before presenting this lesson:

1. Have on hand identified reference material linked to the lesson plan.
2. Review presentation and develop a list of questions to use during class.
3. Review and prepare conference / discussion material presented.
4. Ensure all equipment listed for this lesson plan (LP) is present, operable, and set up for use before class.
5. Refer to the practical exercise of this lesson plan. When necessary develop additional situations to use during the practical exercise.
6. PowerPoint users: Ensure the SLI file you are using has been called up using Microsoft PowerPoint Viewer and SLI / slide 1 is showing on the screen before class.
7. Whenever noted, slides are available to assist in explanation of task steps. Use slides as needed during class or practical exercise to reinforce training. The instructor may choose to use / not use the LP SLIs as developed, modify the existing SLIs content / order or insert new material as is necessary based on audience analysis to assist in Soldier learning. Changes must be annotated as a pen / ink change on the vault file master LP, VIP LP, and instructor LP. Changes must be approved through Senior Instructor and TDCD 183rd RTI Development Team notified.
8. Whenever necessary, ask leading questions of Soldiers in order to prompt Soldier discussion.
9. Encourage Soldiers to relate their first hand experiences during the activities.
10. Facilitate this lesson using Instructor methodologies.
11. Control group activities using Instructor techniques.

**Proponent Lesson
Plan Approvals**

<u>Name</u>	<u>Rank</u>	<u>Position</u>	<u>Date</u>
Robert Padin	Not available	Approver	08 Mar 2013

SECTION II. INTRODUCTION

Method of Instruction: Conference/Demonstration
Instr Type(I:S Ratio/Qty): instructor (4:32/0)
Time of Instruction: 5 mins
Instructional Strategy: Large Group Instruction

Motivator

In our current operational environment a Soldiers survivability depends on the proficeincy, and confidence in their ability to apply the fundamentals of engaging targets, making a more lethal, and deadly combination during combat.

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:	Qualify with the AN/PEQ-2A mounted on a Machine Gun.
Conditions:	During evening hours, M249/M240B machine gun, Night Vision Device (NVD), AN/PEQ-2A, qualification range, qualification scenario, 25M offset, 10M borelight target and the appropriate number of rounds for the weapon being zeroed and qualified with IAW the corresponding FM 3-22.68.
Standards:	Qualify with either the M249/M240B by hitting at least 6 out of 11 targets on a transition range IAW FM 3-22.68.

Safety Requirements

Safety Requirements in a Classroom Setting:

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.

Safety 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 doors will be used to exit the classroom, rally points, severe weather, WBGT/Kestrel set up, etc.

Safety Requirements other than Classroom Settings:

Safety must be paramount in the complex outdoor 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 while replicating realistic battlefield conditions.

Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions.

Instructor note: The instructor will brief the unit/site SOP and Risk Management Worksheet for all potential contingencies encountered during that training period/event i.e. WBGT/Kestrel set up, trail vehicles for PT/foot marches, severe weather, fire, evacuation routes, muzzle awareness, range safety briefs, required medical FLA with driver and medics with emergency equipment, student injury procedures, and rally points etc.

Risk Assessment Level

Moderate - All Army Instructors will conduct a Risk Assessment Worksheet (DA Form 7566, CRM Worksheet, Apr 05) prior to training and brief Soldiers on identified hazards

and required controls.

Assessment: The operations officer, in cooperation with the principal instructor, will prepare a risk assessment using the before, during, and after checklist and the risk assessment matrixes contained in Risk Management FM 5-19.

Controls: See Attached DA Form 7566.

Leader Actions: See Attached DA Form 7566.

Environmental Considerations

NOTE: Instructor should conduct a Risk Assessment to include Environmental Considerations IAW FM 3-34.5, Environmental Considerations {MCRP 4-11B}, and ensure students are briefed on hazards and control measures.

Users must comply with all local environmental regulations and guidance while conducting training.

Evaluation

Soldiers will be evaluated by task performance measures.

Instructional Lead-in

In our current operational environment a Soldiers survivability depends on the proficeincy, and confidence in their ability to apply the fundamentals of engaging targets, making a more lethal, and deadly combination during combat.

SECTION III. PRESENTATION

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

A. ENABLING LEARNING OBJECTIVE

ACTION:	Boresight the AN/PEQ-2A.
CONDITIONS:	Given a machine gun with an AN/PEQ-2A, 5 (AA) batteries, borelight, stable platform, NVGs and offset for AN/PEQ-2A.
STANDARDS:	Correctly Zero the Borelight and Boresight the AN/PEQ-2A in accordance with FM 3-22.68.

ELO A - LSA 1. Learning Step / Activity ELO A - LSA 1. Boresight the AN/PEQ-2.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 10 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

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

Boresighting the AN/PEQ-2A to the M249/M240B.

The steps to boresight the AN/PEQ-2A are:

a. Acquire a stable position.

NOTE: The use of a tripod is highly recommended to stabilize these weapons.

b. Have assistant mark off ten meters and use an NVD to see laser.

c. Zero the borelight to the weapon.

d. Boresight the AN/PEQ-2A to the selected weapon using the appropriate 10 meter boresight target.

e. Use a new 10 meter boresight target; do not use one that has been crumpled.

NOTE: The 10 meter boresight target for a specific AN/PEQ-2A and weapon configuration can be in FM 3-22.68.

Use a new 10 meter boresight target ; do not use one that has been crumpled.

f. DO NOT hold the offset with your hands. Tape the 10 meter boresight target so that the borelight laser is already aimed inside it's corresponding circle on the 10 meter boresight target.

h. Boresight the AN/PEQ-2A (keep borelight laser on the borelight circle and adjust the aiming laser until it is on the circle cross hair for the AN/PEQ-2A on boresight target).

i. Boresight the illuminator in the same manner.

NOTE: the adjusters are turned in the opposite direction of the arrows. (Adjusters move the "strike of the round" when using the arrows on the AN/PEQ-2A)

j. Turn off and remove borelight.

Helpful Tips:

1) If the borelight is no longer aligned with the circle on the 10 meter boresight target, it is easier to move the offset than it is to adjust the weapon.

2) Place the T&E mechanism so there is metal to metal contact with the tripod. (Less movement, more stability)

2) If boresighting the laser during daylight do not use the lens cap, but if it is getting dark, use the AN/PEQ-2A lens cap, this will reduce blooming and will provide you with a more accurate boresight.

3) Ensure that the weapon and the 10 meter boresight target are not canted regardless how the weapon is stabilized. (Keep tripod on level ground)

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

Review Summary: Conduct a Summary Review.

ELO A - LSA 2. Learning Step / Activity ELO A - LSA 2. Boresight the AN/PEQ-2 PE.

Method of Instruction: Practical Exercise (Hands-On)
Instr Type(I:S Ratio/Qty): instructor(4:32/0)
Time of Instruction: 1 hr 0 min

Instructional Strategy: Large Group Instruction
 Media Type: Actual Equipment
 Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Conduct Boresight the AN/PEQ-2 PE.

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

Review Summary: Conduct a Summary Review.

CHECK ON LEARNING (ELO A): Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

REVIEW SUMMARY(ELO A): Conduct a Summary Review.

B. ENABLING LEARNING OBJECTIVE

ACTION:	Zero the AN/PEQ-2A.
CONDITIONS:	At night, given a machine gun, AN/PEQ-2A, NVGs, 10-25 meter range, ear plugs and 24 rounds of ammunition.
STANDARDS:	Zero the AN/PEQ-2A to the machine gun with less than 24 rounds.

ELO B - LSA 1. Learning Step / Activity ELO B - LSA 1. Prepare the target and silhouette for zeroing.

Method of Instruction: Conference/Demonstration
 Instr Type(I:S Ratio/Qty): instructor(4:32/0)
 Time of Instruction: 0 hrs 10 mins
 Instructional Strategy: Large Group Instruction
 Media Type: Actual Equipment
 Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Prepare the M16A2 25 meter Zero Target and E-type silhouette for zeroing.

USE THE M16A2 ZEROING TARGET ONLY. The squares of the M16A2 25 meter Zero Target are 9.6 mm by 9.6 mm which is closer in size to a 1 cm square than the M4 25 meter Zero Target that is 13 mm by 13 mm. This makes it easier to determine the number of click adjustments needed to change the strike of the round.

The steps needed to prepare the target are:

1. Draw in the impact zone that is designated for the AN/PEQ-2A with the mounting system being used, and the location of where the AN/PEQ-2A will be mounted on the weapon.

In order to draw a correct impact zone on the M16A2 25 meter Zero Target:

- Count the number of squares to find the center of the impact zone (The impact zone for a specific AN/PEQ-

2A and weapon configuration can be found in FM 3-22.68.)

- Count 3 squares away from the center of the impact zone in each direction (top, bottom, left and right.)
- Draw the 6 cm square for the impact zone.

Cut out a 3 cm square from the center of the target. (This is done to eliminate blooming that is typical with IR aiming lasers when they hit a target at close range.)

2. Cut out a 3 cm square or larger from the center of an E-type silhouette target. (This is done so the IR aiming laser passes through both the M16A2 25 meter zero target and the E-type silhouette target.)
3. Tape the M16A2 25 meter zero target to the E-type silhouette target.
4. Ensure the holes of the M16A2 25 meter zero target and the E-type silhouette target are aligned.
(Because the soldier sees the IR aiming laser disappear through the 3 cm hole, he knows that the IR aiming laser is aimed center mass of the target.)

NOTE: Zero procedures for the AN/PEQ-2A are the same for all the weapons taught except for the specific details that are unique to each weapon.

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

Review Summary: Conduct a Summary Review.

ELO B - LSA 2. Learning Step / Activity ELO B - LSA 2. Zero the AN/PEQ-2A to the Machine Gun.

Method of Instruction: Practical Exercise (Hands-On)

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 1 hr 0 min

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

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

Zero the Machine Gun

1. Aim center mass of the M16A2 25 meter zero target until the IR aiming laser disappears through the 3 cm square then squeeze the trigger.

Fire three rounds, retighten the Insight rail grabber and mounting screw then triangulate.

Adjust shot group triangulation to designated strike zone target.

Repeat steps 3 to 5 until zeroed.

The AN/PEQ-2A is zeroed to the weapon when 6 out of 12 consecutive rounds strike the impact zone.

NOTE 4: The majority of the round must be inside the impact zone in order to count as a hit.

M249 SAW Field Zero:

Field zeroing procedures at 400 meters.

1. Fire a 3-5 round burst at 400-meter target with tracer rounds.
2. Retighten the mounting screw, rail grabber and mounting bracket if applicable.
3. Make necessary adjustments to the aiming point.
4. Repeat steps 1 and 3 until target is engaged.
5. Center Illuminator on aiming point once zeroing is complete.

M240B machinegun Field Zero:

Field zeroing procedures at 500 meters

1. Fire 7-9 round burst at 500-meter target with tracer rounds.
2. Retighten the mounting screw, and rail grabber and mounting bracket if applicable.
3. Make necessary adjustments to the aiming point.
4. Repeat steps a and c until zeroed.
5. Center Illuminator on aiming point once zeroing is complete.

ELEVATION 1 click=1cm @ 25 METERS

WINDAGE 1 click =1cm @ 25 METERS

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

Review Summary: Conduct a Summary Review.

CHECK ON LEARNING (ELO B): Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

REVIEW SUMMARY(ELO B): Conduct a Summary Review.

C. ENABLING LEARNING OBJECTIVE

ACTION:	Engage Targets with the AN/PEQ-2A.
CONDITIONS:	Given an assigned weapon, NVD, AN/PEQ-2A, 4 (AA) batteries, FF scenario (if applicable), ear plugs, magazines for the M4 (if applicable), and ammunition for selected weapon.
STANDARDS:	Familiarize while applying proper engagement techniques with the AN/PEQ-2A.

ELO C - LSA 1. Learning Step / Activity ELO C - LSA 1. Engage targets using the AN/PEQ2.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 15 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

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

The AN/PEQ-2A combined with the use of a NVG is an excellent way of acquiring and engaging the enemy at night. The potential for the enemy that has NVDs to find and fix your position is greater if you do not use your AN/PEQ-2A properly.

There are steps that the soldier must take in order to engage targets properly and reduce the risk of being detected.

These steps are:

1. Scanning: The AN/PVS-7 series of NVGs and the AN/PVS-14 have a field of view of 40 degrees. With such a small portion of what is in front of you actually being displayed through the NVGs, even the easiest of targets can be missed because they are not detected.

To be effective at detecting targets at night you must:

A. Aggressively search your sector of fire from your left to right limit, from close in to far out.

B. Do not stay fixed on one location for too long. Develop a good fluid rhythm that keeps you searching for targets with out stopping.

C. While searching, always point your weapon in the direction that you are scanning. This will decrease the

time that it will take to engage a target by already having the weapon pointed in the target's direction.

2. IR Discipline: The definition of IR discipline is using the IR aiming laser as little as possible and still be able to engage the target effectively. As with Light, Litter and Noise discipline, IR discipline has the ability of denying the enemy information about yourself and the unit. The less the enemy knows of your position, the less he will be able to find and fix your position.

Achieving proper IR Discipline is:

A. After identifying a target, activate the AN/PEQ-2A to place the IR aiming point center mass of the target.

B. Once the aiming point is center mass of the target, deactivate the AN/PEQ-2A and squeeze the trigger simultaneously.

3. Walking the Laser: Walking the Laser is the method that is used to bring the IR aiming point to the center mass of the target in the fastest way possible. With iron sights, the two methods of getting a good point of aim on the target are, by coming from the side of the target to center mass or coming up from the bottom of the target to center mass. Both are fine for day sights but coming from the side of the target to center mass poses challenges at night and should not be used. The reason is that the IR aiming point is harder to see when it is not hitting an object which increases the time it takes the soldier to find the IR aiming point and then move it to the center mass of the target. Also an IR aiming point that travels farther is more likely to be detected by the enemy. In contrast, by activating the AN/PEQ-2A at the base of the target, the IR aiming point will be reflected by the ground in front of the target making it more visible and be brought up to center mass of the target quicker.

To Walk the laser onto the target the soldier must:

A. Activate the AN/PEQ-2A at the base of the target.

B. Bring the IR aiming point up vertically until it is at center mass of the target.

4. Equipment and Position: Even if the soldier does steps 1 through 3 correctly he may fail to engage the target if his equipment is not worn properly or is mounted incorrectly (Ensure you have taught the students on the proper use of the Night Vision Goggles which is a pre requisite to learning this class. See Administrative Notes Slide for the Prerequisite classes) especially the PVS-7s or the PVS-14s. The firing position the soldier is in can also be the difference between success or failure when engaging a target.

The soldier should:

A. Have the NVG mounted securely to the helmet so it doesn't sag.

B. Be wearing the NVG in a way that allows the largest field of view.

C. Have the NVG focused for the clearest and crispest image possible.

D. Be in a firing position that allows him to move in a smooth track from left to right.

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

Review Summary: Conduct a Summary Review.

CHECK ON LEARNING (ELO C): Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

REVIEW SUMMARY(ELO C): Conduct a Summary Review.

D. ENABLING LEARNING OBJECTIVE

ACTION:	Qualify with the AN/PEQ-2A on an M249 SAW.
CONDITIONS:	At night given a M240B machine gun, PVS 14, PEQ 2, assistant machine gunner, and ammunition.
STANDARDS:	Qualify IAW FM 3-22.68 hitting a minimum 6 of 11 targets.

ELO D - LSA 1. Learning Step / Activity ELO D - LSA 1. Conduct a Practice Qualification.

Method of Instruction: Practical Exercise (Hands-On)

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 2 hrs 0 min

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

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

Fire Table III practice fire IAW FM 3-22.68.

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

Review Summary: Conduct a Summary Review.

ELO D - LSA 2. Learning Step / Activity ELO D - LSA 2. Conduct Table III Qualification Record Fire.

Method of Instruction: Practical Exercise (Hands-On)

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 2 hrs 0 min

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

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

Fire Table III for record IAW FM 3-22.68.

6 hits of 11 targets is the minimum qualification standar.

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

Review Summary: Conduct a Summary Review.

CHECK ON LEARNING (ELO D): Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

REVIEW SUMMARY(ELO D): Conduct a Summary Review.

E. ENABLING LEARNING OBJECTIVE

ACTION:	Qualify with the AN/PEQ-2A on an M240B machine gun.
CONDITIONS:	At night given a M249 machine gun, PVS 14, PEQ 2, and ammunition.
STANDARDS:	Qualify IAW FM 3-22.68 hitting a minimum 6 of 11 targets.

ELO E - LSA 1. Learning Step / Activity ELO E - LSA 1. Conduct a Practice Qualification.

Method of Instruction: Practical Exercise (Hands-On)
Instr Type(I:S Ratio/Qty): instructor(4:32/0)
Time of Instruction: 2 hrs 0 min
Instructional Strategy: Large Group Instruction
Media Type: Actual Equipment
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Fire Table III for practice IAW FM 3-21.68.

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

Review Summary: Conduct a Summary Review.

ELO E - LSA 2. Learning Step / Activity ELO E - LSA 2. Conduct Qualification Record Fire.

Method of Instruction: Practical Exercise (Hands-On)
Instr Type(I:S Ratio/Qty): instructor(4:32/0)
Time of Instruction: 2 hrs 0 min
Instructional Strategy: Large Group Instruction
Media Type: Actual Equipment
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Fire Table III IAW FM 3-21.68.

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

Review Summary: Conduct a Summary Review.

CHECK ON LEARNING (ELO E): Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

REVIEW SUMMARY(ELO E): Conduct a Summary Review.

SECTION IV. SUMMARY

Method of Instruction:	Conference/Demonstration
Instr Type(I:S Ratio/Qty):	instructor(4:32/0)
Time of Instruction:	5 mins
Instructional Strategy:	Large Group Instruction

Check on Learning

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

Review/ Summary

Conduct a review and summarize the TLO.

SECTION V. STUDENT EVALUATION

Testing Requirements

Soldiers will be evaluated by task performance measures.

Feedback Requirements

Feedback is essential to effective learning. Schedule and provide feedback on the assessment and any information to help answer Soldiers' questions about the training exercise.

Appendix A - Viewgraph Masters

**Qualify with the AN/PEQ-2A mounted on M249/ M240B Machine Guns.
071-SAWE11 / Version 1.0**

Sequence	Media Name	Media Type
None		

Appendix B - Test(s) and Test Solution(s)

Appendix C - Practical Exercises and Solutions

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-SAW11 Version 1.0

Appendix D - Student Handouts

**Qualify with the AN/PEQ-2A mounted on M249/ M240B Machine Guns.
071-SAWE11 / Version 1.0**

Sequence	Media Name	Media Type
None		

Appendix E - TRAINER'S LESSON OUTLINE

Qualify with the AN/PEQ-2A mounted on M249/ M240B Machine Guns.

071-SAWE11 / Version 1.0

Effective Date: 08 March 2013

1. The importance of this lesson: (Why)

Qualify with the AN/PEQ-2A mounted on a Machine Gun.

2. What we want our Soldiers to Achieve: (Outcomes/Standard)

Qualify with either the M249/M240B by hitting at least 6 out of 11 targets on a transition range IAW FM 3-22.68.

3. Tasks to be taught

<u>Task Number</u>	<u>Task Title</u>	<u>Task Type</u>
071-025-0027	Mount an AN/PEQ-2A Series Aiming Light on an M240B Machine Gun	Individual TAUGHT
071-025-0028	Dismount an AN/PEQ-2A Series Aiming Light from an M240B Machine Gun	Individual TAUGHT
071-025-0029	Zero an AN/PEQ-2A-Series Aiming Light to an M240B Machine Gun	Individual TAUGHT
071-025-0030	Engage Targets with an M240B Machine Gun Using an AN/PEQ-2A-Series Aiming Light	Individual TAUGHT
071-010-0016	Mount an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	Individual TAUGHT
071-010-0017	Dismount an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	Individual TAUGHT
071-010-0018	Zero an AN/PEQ-2 Aiming Light to an M249 Squad Automatic Weapon	Individual TAUGHT
071-010-0019	Engage Targets with an M249 Squad Automatic Weapon using an AN/PEQ-2 Aiming Light	Individual TAUGHT

Additional Non-Standard Tasks

None

4. References:

<u>Reference Number</u>	<u>Reference Title</u>	<u>Date</u>
FM 3-22.68	Crew-Served Machine Guns, 5.56-MM and 7.62-MM	21 Jul 2006
FM 5-19	COMPOSITE RISK MANAGEMENT	21 Aug 2006
TM 11-5855-308-12&P	Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) Target Pointer Illuminator/Aiming Light AN/PEQ-2A AN/PEQ-2A	15 May 2000
TM 9-1005-201-10	OPERATORS MANUAL FOR MACHINE GUN, 5.56-MM, M249 W/EQUIP (NSN 1005-01-127-7510) (EIC: 4BG) {TM 08671A-10/1A} (REPRINTED W/BASIC INCL C1)	26 Jul 1991
TM 9-1005-313-10	OPERATORS MANUAL FOR MACHINE GUN, 7.62MM, M240 (NSN 1005-01-025-8095) M240B (1005-01-412-3129) M240C (1005-01-085-4758) M240D (1005-01-418-6995) M240E1 (1005-01-252-4288) M240G (1005-01-359-2714) M240N (15 Nov 2002

Additional Non-Standard References

Unit Markanmanship SOPs.

5. Resources

TIME: Time of Instruction (Time not specified)

LAND: Classroom, Training Area, and Range Requirements

<u>Id</u>	<u>Name</u>
17833	Range, Machine Gun, Multipurpose, Automated (MPMG)
17801	Range, Firing Zero/ Basic 10m-25m

AMMO: Ammunition Requirements

<u>DODIC</u>	<u>Name</u>
A064	Cartridge, 5.56 Millimeter
A131	Cartridge, 7.62 Millimeter

MISC: Materiel Items and TADSS Requirements

<u>Id</u>	<u>Name</u>
1005-01-127-7510	MACHINE GUN,5.56 MILLIMETER
1005-01-412-3129	MACHINE GUN,7.62 MILLIMETER
1005-01-433-1617	MOUNT,TRIPOD,MACHINE GUN
2330-01-108-7367	Trailer Water: M149A2
4110-01-485-3548	CHEST,ICE STORAGE
5820-01-451-8252	Radio Set: AN/PRC-119F(C)
5855-01-432-0524	Monocular Night Vision Device: AN/PVS-14
5855-01-447-8992	ILLUMINATOR,INFRARED
6135-00-985-7845	Battery, Nonrechargeable, AA
6260-01-178-5559	LIGHT,CHEMILUMINESCENT
6515-00-137-6345	Plug Ear Universal Size 400S
6515-01-472-1863	INTRAVENOUS INJECTION SET
6530-01-290-9964	Litter, Folding, Rigid Pole
6545-01-505-1170	Medical Equipment Set, Combat Lifesaver
6685-01-590-1047	Monitor, Heat Stress: Questemp 44
6760-00-985-6749	Tripod, Photographic
7210-00-081-1417	Sheet, Bed Cotton White
7520-00-053-9580	Pen, Ball-Point, Medium, Black
8960-01-430-4378	ICE
9150-01-079-6124	CLEANER,LUBRICANT AND PRESERVATI
Z40430	TRUCK, CARGO, 4X4, LMTV

(Note: Asterisk before ID indicates a TADSS.)

Additional Non-Standard Resources

None

6. A possible technique to achieve the outcome:

Maximise hands on training time to allow the students to achieve task mastery.
 Grade the Soldiers using the task performance measures.
 Retrain Soldiers who do not receive a GO.
 Re-test Soldiers until they achieve a GO.

7. Conduct AAR with Soldier and Cadre.

AAR's are essential to ensure the quality of the instruction and the efficiency of the course.
 Schedule AAR's with Instructors to solicit feedback on the techniques and procedures in use.
 Schedule AAR's with the Student's to solicit feedback on Instructional techniques, information being presented, and efficiency of the course.

NOTE: Before presenting this lesson, Instructors must be thoroughly prepared by studying the appropriate lesson plan and identified reference material.