

WEAPONS TRAINING BATTALION
MARINE CORPS COMBAT DEVELOPMENT COMMAND
QUANTICO, VIRGINIA 22134-5040

DETAILED INSTRUCTOR GUIDE

LESSON TITLE

DAYLIGHT TARGET DETECTION

COURSE TITLE

SUSTAINMENT LEVEL RIFLE MARKSMANSHIP (PHASE I, II, III)



Weapons Training Battalion
Marine Corps Combat Development Command
Quantico, Virginia 22134-5040

INSTRUCTOR PREPARATION CHECKLIST

ESSENTIAL DATA

LESSON DESIGNATOR SLR.23

LESSON TITLE Daylight Target Detection

DATE PREPARED 1 October 1999

TIME 1 hr 30 min

METHOD Lecture, practical

application, and performance

evaluation

LOCATION Indoor/outdoor classroom

area

INSTRUCTORS REQUIRED One Primary Marksmanship

Instructor (PMI)

REFERENCE MCRP 3-01A

TRAINING AIDS/EQUIPMENT Targets and slides (sSLR.23-

1 and sSLR.23-2)



Weapons Training Battalion
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DETAILED OUTLINE

DAYLIGHT TARGET DETECTION

<u>INTRODUCTION</u>
MIN)

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- 1. GAIN ATTENTION. In combat, the enemy will not be out in the open waiting for you. Most combat targets are irregularly deployed and use all available cover and concealment to avoid detection. To locate the enemy, you must learn to recognize target indicators and develop effective observation skills. Only after locating the target can you engage it successfully. Effective use of target detection skills will enhance your ability to locate and eliminate targets before you are detected. With practice, daylight target detection techniques will enable you to systematically detect, observe, and eliminate targets in combat conditions.
- 2. <u>OVERVIEW</u>. This lesson will cover use of target indicators and employment of daylight observation skills.
- 3. <u>INTRODUCE LEARNING OBJECTIVES</u>. The Terminal Learning Objective and Enabling Learning Objectives pertaining to this lesson are as follows:
 - a. <u>TERMINAL LEARNING OBJECTIVE</u>. Given an M16A2 service rifle, sling, cartridge belt, magazines, magazine pouches, flak jacket, helmet, suspenders, ammunition, and targets, without the aid of references, engage targets of limited time exposure with the rifle IAW MCRP 3-01A and to achieve a proficiency level IAW MCO 3574.2_. (PVTX.11.6)

b. **ENABLING LEARNING OBJECTIVES**

- 1) Given targets, without the aid of references, identify target indicators IAW MCRP 3-01A. (PVTX.11.6g)
- 2) Given targets, without the aid of references, employ daylight observation skills to detect targets IAW MCRP 3-01A. (PVTX.11.6h)
- 4. <u>METHOD</u>. This lesson will be taught in a classroom setting using lecture. A practical application for recognition of target indicators and conducting hasty and detailed searches will be conducted in an outdoor training area.





5. <u>EVALUATION</u>. Performance will be evaluated via a performance checklist during this class.

TRANSITION: There are certain indicators that will reveal the presence of a target and its location. Target detection will be covered in two phases: first, how to identify target indicators, and second, how to employ observation skills to detect targets.

BODY MIN)

(1 HR 25

1. (10 MIN) TARGET INDICATORS

Most combat targets are detected at close range by smoke, flash, dust, noise, or movement, and are usually seen only momentarily. Target indicators are anything that reveal an enemy's position to an individual. These indicators are grouped into three general areas: movement, sound, and improper camouflage.

- a. <u>Movement</u>. The human eye is attracted to movement, especially sudden movement. You need not be looking directly at an object to notice movement. The degree of difficulty in locating moving targets depends primarily on the speed of movement. A slowly moving target will be harder to detect than one with quick, jerky movements.
- b. <u>Sound</u>. Sound can also be used to detect an enemy position. Sound may be made by movement, rattling equipment, or talking. Sound provides only a general location, making it difficult to pinpoint a target by sound alone. However, sound can alert you to the presence of a target and increase your probability of locating it through other indicators.
- c. <u>Improper Camouflage</u>. There are three indicators caused by improper camouflage: shine, outline, and contrast with the background. Most targets on the battlefield are detected due to improper camouflage. However, many times an observation post or enemy firing position will blend almost perfectly with the natural background. Only through extremely careful, detailed searching will these positions be revealed.
 - 1) <u>Shine</u>. Shine is created from reflective objects such as metal or glass. It may also come from pools of water and even the natural oils from the skin. Shine acts as a beacon to the target's position.



- 2) <u>Outline</u>. Most enemy soldiers will camouflage themselves, their equipment, and their positions. The outline of objects such as the body, head and shoulders, weapons, and web gear are recognizable even from a distance. The human eye will often pick up a recognizable shape and concentrate on it even if the object cannot be identified right away. The reliability of this indicator depends upon visibility and the experience of the observer.
- 3) Contrast With the Background. Indicators in this category include objects that stand out against (contrast with) a background because of differences in color, surface, and shape. For instance, a target wearing a dark uniform is clearly visible in an area of snow or sand. Geometric shapes, such as helmets or rifle barrels, can be easy to detect in a wooded area. Fresh soil around a fighting hole contrasts with the otherwise unbroken ground surface. While observing an area, take note of anything that looks out of place or unusual and study it in more detail. This will greatly increase your chances of spotting a hidden enemy.

Confirm by questions.

TRANSITION: Your ability to recognize target indicators will help you locate targets. Success in locating targets will depend upon your observation position and skill in searching an area.

2. (20 MIN) IDENTIFYING TARGET LOCATION

a. Observation Position

- 1) A good position is one that offers maximum visibility of the area while affording cover and concealment. The optimal observation position should allow you to scan all the areas of observation and offer enough concealment to prevent your position from being detected.
- 2) Avoid positions that are obvious or stand out, such as a lone tree in a field or a pile of rocks on a hill. These positions may be ideal points for easy observation, but they will also make it easier for the enemy to locate you.
- b. <u>Methods for Searching an Area</u>. In searching an area, you will be looking for the target indicators identified



earlier. There are two techniques for searching an area: the hasty search and the detailed search.



Refer to slide sSLR.23-1.

- 1) <u>Hasty Search</u>. When moving into a new area, quickly check for enemy activity which may pose an immediate danger. This search is known as a hasty search and should take about 30 seconds, depending on the terrain.
 - a) Quickly glance at various points throughout the area rather than sweeping the eyes across the terrain in one continuous movement. Search the area nearest you first since it poses the greatest potential for danger.
 - b) This method of search is effective because it takes advantage of peripheral vision. Peripheral vision enables you to detect any movement in a wide area around the object being observed. For this technique to be effective, the eyes must be focused briefly on specific points (i.e., areas that may provide cover or concealment for the enemy).
- 2) <u>Detailed Search</u>. A detailed search is a systematic examination of a specific target indicator or of the entire observation area.
 - a) A detailed search should be conducted immediately on target indicators located during the hasty search. The detailed search should be made from top to bottom or side to side, observing the entire object in exact detail. If multiple indicators were observed during the hasty search, the detailed search should begin with the indicator that appears to pose the greatest threat.
 - b) After a thorough search of target indicators, or if no indicators were located during the hasty search, a detailed search should be made of the entire observation area. The 50-meter overlapping strip method is used.
 - (1) Normally, the area nearest the observer offers the greatest potential danger and should be searched first. Begin the search at one flank, systematically searching the terrain at the front in 180 degree arcs, searching everything in exacting detail, 50 meters in depth.



- (2) After reaching the opposite flank, systematically cover the area between 40 and 90 meters from your position. The second search of the terrain includes about 10 meters of the area examined during the first search. This technique ensures complete coverage of the area.
- (3) Continue the overlapping strip search method for as far as you can see.

c. Maintaining Observation

- 1) <u>Method</u>. The combat situation will dictate the method of maintaining observation of an area. Generally, the method will include a combination of hasty and detailed searches.
- 2) Sequence of Observation. Observation is often conducted by a two-man team. One team member should constantly observe the entire area using the hasty search technique and the other team member should conduct a detailed overlapping strip search. If you are observing as an individual, devise a plan to ensure that the area of observation is completely covered. When entering a new area, immediately conduct a hasty search. Since a hasty search may fail to detect some indicators, periodically conduct a detailed search of the area. A detailed search should also be conducted any time your attention has been diverted from the observation area.
- d. Remembering Target Location. Most targets are seen only briefly and most areas contain multiple targets. Once you have located a target indicator, you will need to remember its location to engage it successfully. To help remember the location of a target, select a known feature and use it as a reference point to determine the distance and general direction to the target.
- e. <u>Preparing a Range Card</u>. When the pace of battle slows or you move into a defensive posture, an observation log or range card can be maintained to record the location of targets, terrain features, etc. This information can be recorded on a sheet of paper or a locally produced form. Recording information is helpful if you will observe from the same position over a period of time or if the area has numerous terrain features or multiple target locations.

Refer to slide sSLR.23-2.

1) A range card is a rough sketch of an observer's



area of responsibility.



- 2) It depicts the range and direction from the observer's position to easily recognizable objects, terrain features, avenues of approach, and possible enemy positions.
- 3) When a potential threat appears, its range can be quickly determined by its relative position to the reference points on the card.

Confirm by questions.

TRANSITION: A Marine can be a skilled marksman but ineffective in combat if he cannot detect targets successfully. Your detection skills will be employed against single, multiple, stationary, and moving targets, almost all of which will be camouflaged. We will now move to the outdoor training area to practice these techniques and evaluate your target detection skills.

3. (55 MIN) PRACTICAL APPLICATION AND EVALUATION FOR DAYLIGHT TARGET DETECTION

a. Exercise Setup

- 1) Conduct the exercise in a field environment that provides cover for potential enemy targets.
- 2) Place objects, equipment, weapons, and other target indicators in the area. (Use the lesson plan to select objects for placement in the area.)

b. Conduct of Exercise

to practice recognition of target indicators and to conduct hasty and detailed searches. Evaluate Marines via the performance checklist. The following points should be practiced and emphasized.

- 1) Recognizing target indicators.
- 2) Hasty search.
- 3) Detailed search.
- 4) Remembering target locations/preparing a range card.



Confirm by questions.

TRANSITION: You must find a target to be able to engage it. This is accomplished by learning to recognize target indicators and by employing search methods. Experience will sharpen your target detection skills.

OPPORTUNITY FOR QUESTIONS: MIN)

(1

- 1. Respond to questions from the class.
- 2. Prompt Marines with questions to the class.
 - a. QUESTION: What are the two techniques for searching an area?

ANSWER: Hasty and detailed.

b. QUESTION: In a 50-meter overlapping strip search method, what area should be searched first? Why?

ANSWER: The area closest to you since it presents the greatest danger.

c. QUESTION: What are the three general types of target indicators?

ANSWER: Movement, sound, and improper camouflage.

INSTRUCTOR'S NOTE: Ask Marines as many questions as necessary to ensure they fully understand the material presented in this lesson.

SUMMARY: (1 MIN)

Before a target can be eliminated, it must be located. Because most combat targets are camouflaged and use all available cover and concealment, their detection is difficult. In fact, at close range, targets are most often located because of their own mistakes—improper camouflage, generation of noise, smoke, etc. When entering a new area, you must immediately conduct a hasty search for the obvious targets, followed by a detailed search of the entire area. Recognizing target indicators will help you to pinpoint a target's exact location so that it can be successfully engaged.







<u>SLIDES</u>

TABLE OF CONTENTS

NUMBER TITLE

sSLR.23-1 METHODS OF SEARCH

sSLR.23-2 RANGE CARD



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PERFORMANCE CHECKLIST

LESSON TITLE

DAYLIGHT TARGET DETECTION

COURSE TITLE

SUSTAINMENT LEVEL RIFLE MARKSMANSHIP (PHASE I, II, $\underline{\text{III}}$)



PERFORMANCE TEST ITEM

TERMINAL LEARNING OBJECTIVE. Given an M16A2 service rifle, sling, cartridge belt, magazines, magazine pouches, flak jacket, helmet, suspenders, ammunition, and targets, without the aid of references, engage targets of limited time exposure with the rifle IAW MCRP 3-01A and to achieve a proficiency level IAW MCO 3574.2_. (PVTX.11.6)

ENABLING LEARNING OBJECTIVES

- a. Given targets, without the aid of references, identify target indicators IAW MCRP 3-01A. (PVTX.11.6g)
- b. Given targets, without the aid of references, employ daylight observation skills to detect targets IAW MCRP 3-01A. (PVTX.11.6h)

TEST ITEM

- 1. INSTRUCTIONS TO THE EVALUATOR:
 - a. Inform the Marine of the time limit for this evaluation.
 - b. Ensure targets are set up with various indicators.
 - c. Tell the Marine to begin.
 - d. Evaluate the Marine via the performance checklist.
- 2. INSTRUCTIONS TO THE MARINE: When the PMI says "Begin," conduct a hasty search to identify target indicators. Follow that with a detailed search of the observation area.

3.	PERFORMANCE CHECKLIST:		<u>PASS</u>	<u>FAIL</u>
	a.	Identified target indicators.		
	b. to	Employed daylight observation skills detect targets.		