

UNITED STATES MARINE CORPS

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

DETAILED INSTRUCTOR GUIDE

LESSON TITLE

DATA BOOK

COURSE TITLE

SUSTAINMENT LEVEL RIFLE MARKSMANSHIP (PHASE <u>I</u>, II, III)



UNITED STATES MARINE CORPS

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

INSTRUCTOR PREPARATION CHECKLIST

ESSENTIAL DATA

| LESSON DESIGNATOR | SLR.11 |
|-------------------------|--|
| LESSON TITLE | Data Book |
| DATE PREPARED | 1 October 1999 |
| TIME | 45 min |
| METHOD | Lecture and demonstration |
| LOCATION | Indoor/outdoor classroom |
| INSTRUCTORS REQUIRED | One Primary Marksmanship Instructor (PMI) |
| REFERENCES | MCRP 3-01A |
| TRAINING AIDS/EQUIPMENT | One data book per Marine and slides (sSLR.11-1 - sSLR.11- 8) |



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DETAILED OUTLINE

DATA BOOK

<u>INTRODUCTION</u> MIN)

1. <u>GAIN ATTENTION</u>. Of all the tools that assist the Marine in firing accurately and consistently, the data book, if properly used, is his most valuable asset. It contains a complete record of every shot fired and the weather conditions and their effects on shooting. When used properly it will assist the Marine in establishing and maintaining a battlesight zero (BZO). It will further provide information for sight settings at each range and will provide a basis for analyzing the performance of both the Marine and the rifle. The most competent Marine cannot consistently hit the center of the target unless he has a record of the conditions that affect his shooting. Once he has this record, he can analyze his shooting and improve his accuracy.

2. <u>OVERVIEW</u>. This lesson will cover the use of the data book before, during, and after firing.

3. <u>INTRODUCE LEARNING OBJECTIVES</u>. The Terminal Learning Objective and Enabling Learning Objective pertaining to this lesson are as follows:

a. <u>TERMINAL LEARNING OBJECTIVE</u>. Given an M16A2 service rifle, sling, cartridge belt, magazines, magazine pouches, ammunition, data book, and targets, engage stationary targets IAW MCRP 3-01A and to achieve a qualifying score IAW MCO 3574.2_. (PVTX.11.5)

b. <u>ENABLING LEARNING OBJECTIVE</u>. Given an M16A2 service rifle, sling, cartridge belt, magazines, magazine pouches, ammunition, data book, and a target, without the aid of references, record data before, during, and after firing IAW MCRP 3-01A. (PVTX.11.5h)

4. <u>METHOD</u>. This lesson will be taught in a classroom setting using lecture and demonstration.

5. <u>EVALUATION</u>. Topics from this lesson will be evaluated via a performance checklist during the Known Distance (KD) Firing Exercises, SLR.18.



<u>TRANSITION</u>: The data book is the most important tool a Marine has to evaluate and improve his shooting. The information recorded in the data book enables the Marine to analyze his performance to establish and maintain a battlesight (BZO).

BODY MIN)

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1. (3 MIN) INTRODUCTION TO THE DATA BOOK

Importance of the Data Book to the Shooter. a. An accurately completed data book will assist in maintaining accurate records of sight settings for each range. Most importantly, the data book is used to establish and maintain a BZO. The data book provides a precise record of weather conditions and their effect from day to day as well as a place to record any observations regarding the application of marksmanship fundamentals. The data book should be retained for future use. These recorded observations provide a daily and future reminder of what errors in firing technique should be avoided and what rifle sight settings should be used under a given set of weather conditions.

b. <u>Rifle Marksmanship Data Book</u>. Your data book was developed to track the Sustainment Level Rifle Marksmanship Training Program and provide a ready reference of the "must know" information for Phase I and II marksmanship. This lesson will present the information to complete the data book during KD firing.

c. <u>Use of the Data Book Before Firing</u>. As soon as the data book is issued, the following information should be recorded on the data book cover:

1) <u>Rank/Name</u>. Your rank and name is recorded for identification purposes.

2) <u>SSN</u>. Your social security number is recorded for identification purposes.

3) <u>Organization</u>. Your organization, down to the unit level, is recorded to ensure return of a lost data book.

4) <u>Blood Type</u>. Your blood type is recorded in the event of injury on the range.

5) <u>Rifle Serial Number</u>. Your rifle's serial number is recorded. Always check the serial number of the rifle against the one recorded on the data book each day as the rifle is drawn from the armory.



6) <u>Detail Number</u>. Your detail number is recorded for identification and record score verification purposes.

7) <u>Range</u>. Your assigned firing range is recorded.

8) <u>Date</u>. The date the data book was issued is recorded.

Confirm by questions.

<u>TRANSITION</u>: Every Marine must learn the correct method of recording detailed information in the data book which can be accurately interpreted at a later date to assist in improving shooting performance. Information is recorded in the data book before, during, and after firing. We will begin by discussing the method for recording data for slow fire stages.

2. (17 MIN) RECORDING DATA FOR 200-YARD TRI-FIRE

INSTRUCTOR'S NOTE: Walk through completion of the 200-yard tri-fire data book page to explain filling out the data book before, during, and after firing. Ensure every Marine has a data book.

Refer to slide sSLR.11-1.

a. <u>Recording Data Before Firing</u>. Recording information in the data book prior to firing saves valuable time on the firing line that should be used to prepare for firing. Some information can be recorded before going to the firing line. In the BEFORE FIRING section of the data book, record the following:

1) Initial Sight Setting or Known BZO

INSTRUCTOR'S NOTE: If Marines do not have a known BZO, they may use the sight setting determined from the 36-yard Grouping Exercise instead of initial sight setting.

a) Initial Sight Setting: Front Elev. Enter the front sight post setting by recording the number of clicks up (\uparrow) or down (\downarrow) under FRONT ELEV. We will start with a 0 initial sight setting on our front sight post and carry this example throughout instruction.





b) <u>Initial Sight Setting: Rear Elev</u>. Circle the 200-yard setting for the rear sight elevation knob, 8/3-2, under REAR ELEV.

c) <u>Initial Sight Setting: Wind</u>. Under the WIND column, the R represents clicks right on the rifle from the initial sight setting and the L represents clicks left on the rifle. Enter the rear sight windage knob setting by recording the number of clicks right (clockwise) or left (counterclockwise) under WIND. In our example, we will start with a 0 initial sight setting for our windage knob setting.

2) <u>Wind.</u> Prior to firing, check the wind. If wind conditions are present, a sight adjustment will have to be made prior to firing to ensure shots group at the center of the target.

a) <u>Direction</u>. Determine the direction of the wind and draw an arrow through the clock indicating the direction the wind is blowing. In our example, there is a wind blowing from 4:30 to 10:30.

NOTE

Remember that your position is Represented in the center of the clock and the target is at 12 o'clock.

b) <u>Value</u>. Look at the clock to determine if the wind is full, half, or no value wind. Under VALUE, circle FULL or HALF to indicate the wind value. In our example, we will circle HALF to indicate a half value wind.

c) <u>Speed</u>. Observe the flag on the range and circle the appropriate flag indicating the wind's velocity (SPEED). In our example, the wind is blowing at 10 MPH so we will circle the flag blowing from right to left (4:30 to 10:30) above 10 MPH.

NOTE

If the flag is blowing from right to left, the windage knob is moved to the right (clockwise) to compensate for a bullet that is being deflected to the left.

If the flag is blowing from left to right, the windage knob is moved to the left (counterclockwise) to compensate for a bullet that is being deflected to the right.





d) <u>Determine any Windage Adjustment</u>. The chart beneath the flag indicates the number of clicks on the rear sight windage knob to offset the effects of the wind at 200 yards. Circle the number of clicks where the wind value and wind speed intersect. In our example, we will circle 1 because the wind is HALF value, blowing 10 MPH.

3) <u>Zero</u>. Determine the zero you will place on your rifle to accommodate wind conditions to begin firing at 200 yards. This ZERO will be the Initial Sight Setting or Known BZO plus the rear sight windage setting to compensate for the effects of wind.

a) <u>Front Elev and Rear Elev</u>. Elevation adjustments are not affected by wind so the same settings will be carried over from the Initial Sight Setting or Known BZO column.

b) <u>Wind</u>. Wind will affect the strike of the round right or left on the target. Therefore, if wind is a factor, the rear sight windage knob must be adjusted to compensate for the effects of wind.

(1) If the wind is blowing from the right, add the number of clicks circled by moving the windage knob to the right. For example, our WIND setting from Initial Sight Setting is 0, and the number of windage clicks circled is 1 for a 10 MPH right wind, so we will move the windage knob 1 click right for a 1 R windage setting for our ZERO.

INSTRUCTOR'S NOTE: Add as many examples from a known BZO as necessary to ensure Marine understanding. Below are some additional examples. To minimize confusion, it is recommended that these examples be given following completion of the BEFORE FIRING section.

Additional Example for Wind Blowing from the Right. If your WIND setting was 3 L, and the number of windage clicks circled is 1 for a 10 MPH right wind, move the windage knob 1 click right for a 2 L windage setting.

Example for Wind Blowing from the Left. If the wind is blowing from the left, add the number of clicks circled by moving the windage knob to the left. If your WIND setting from Known BZO is 3 L, and the number of windage clicks circled is 1 for a 10 MPH left wind, move the windage knob 1 click left for a 4 L windage setting.



(2) Once the windage setting is determined, it is recorded in the WIND column and the rear sight windage knob is adjusted to this setting to begin firing.

b. <u>Recording Data During Firing</u>

1) Fire the First String. Fire the first 3-shot string. While firing the string, make a mental note of any shots called out of the group. Then immediately check the wind flag to see if the speed or direction of the wind changed.

Refer to slide sSLR.11-2.

2) After the String is Fired. After firing the string, and when the target is marked, plot all 3 shots with a dot precisely where they appear on the large target diagram in the block marked PLOT (1ST 3-SHOT GROUP). In our example, we will plot our shot group outside the right shoulder.

3) <u>Sight Setting for 2d String</u>. Make a sight adjustment if required. Triangulate the shot group by drawing a line to form a triangle connecting all 3 shots. Locate the center of the triangle. If the shots form a group, make the necessary sight adjustments off of the center of the triangle. If shots do not form a group (i.e., a group that fits inside the center scoring ring) and do not contain a poor shot, do not make a sight adjustment.

CAUTION

Generally, major sight adjustments from established sight settings are caused by poor application of the fundamentals, inconsistencies in firing positions, inconsistencies in sight picture at different ranges and different positions, and inconsistent tension on the sling. Every effort should be made to correct shooting errors prior to making a sight adjustment on the rifle.

We will determine the sight adjustment by locating the center of the shot group and using the grid lines on the "D"-MOD target in the data book. These grid lines represent the number of inches to bring a shot group center. Looking at the shot group:



NOTE

The plotting targets in the data book for the KD Course of Fire are in inches, requiring you to calculate the number of clicks to center your shot groups.

a) <u>Front Elev</u>. Locate the closest horizontal grid line to the center of the plotted shot group. Follow the line across to the numbered vertical scale to determine the number of inches of elevation the shot group is off of target center. Calculate the number of clicks on your front sight post to bring your shot group center. At 200 yards, 1 click adjustment on the front sight post will move the strike of the round 2 1/2 inches.

(1) To move your shot group up, rotate the post clockwise (in the direction of the arrow marked UP) or to the right.

(2) To move your shot group down, rotate the post counterclockwise or to the left.

(3) For example, our ZERO front sight post setting was 0, and the center of our 3-shot group is approximately 7 inches or 3 clicks above target center. So we will rotate our front sight post 3 clicks counterclockwise for a new setting of $3 \downarrow$ and record this under SIGHT SETTING FOR 2ND STRING.

INSTRUCTOR'S NOTE: Add as many examples as necessary to ensure Marine understanding.

Additional Example. If your ZERO FRONT ELEV setting was 0, and the center of your 3-shot group was 3 clicks below center, rotate your front sight post 3 clicks clockwise for a new setting of $3 \uparrow$.

b) <u>Wind</u>. Locate the closest vertical grid line to the center of the plotted shot group. Follow the line down to the numbered horizontal scale to determine the number of inches of windage the shot group is off of target center. Calculate the number of clicks on your rear sight windage knob to bring your shot group center. At 200 yards, 1 click adjustment on the rear sight windage knob will move the strike of the round 1 inch.



(1) To move your shot group to the right, rotate the rear sight windage knob clockwise (in the direction of the arrow).

(2) To move your shot group to the left, rotate the rear sight windage knob counterclockwise.

(3) For example, our ZERO windage setting was 1 R, and the center of our 3-shot group was approximately 9 inches or 9 clicks to the right of target center, so we will rotate our rear sight windage knob 9 clicks counterclockwise for a new windage setting of 8 L and record this under SIGHT SETTING FOR 2ND STRING.

INSTRUCTOR'S NOTE: Add as many examples as necessary to ensure Marine understanding.

Additional Example. If your ZERO windage setting was 1 R, and the center of your 3-shot group was 9 clicks to the left of target center, rotate your rear sight windage knob 9 clicks clockwise for a new windage setting of 10 R.

4) Repeat steps 1 - 3 and fire the second 3-shot string. We will plot this group center.

5) Additional, Helpful Data. After firing a stage, record any data or information that can be helpful in improving shooting in the future. Anything done or observed should be recorded. These items will be helpful when analyzing daily shooting performance. Record this information in the REMARKS column. What the Marine fails to record may be the information he will need to improve.

c. <u>Recording Data After Firing</u>. In the AFTER FIRING section of the data book, record the following:

Refer to slide sSLR.11-3.

1) Zero. Upon completion of firing, determine the elevation and windage to center the shot group, if necessary, and record this sight setting in the ZERO block of the AFTER FIRING section. In our example, because our 2nd 3-shot string was centered on the target, it will not be necessary to make an additional sight adjustment. Enter the final elevation and windage adjustment setting in the data book:



a) <u>Front Elev</u>. Under the column FRONT ELEV, record the final elevation setting made on the front sight post. In our example, we will record 3 ↓ because our shot group was centered vertically on the target.

b) <u>Rear Elev</u>. Under the column REAR ELEV, record 8/3-2.

c) <u>Wind</u>. Under the column WIND, record the final windage setting made on the rear sight windage knob. In our example, we will record 8 L because our shot group was centered horizontally on the target.

2) <u>Wind</u>. Calculate the prevailing wind.

a) <u>Direction</u>. In our example, the wind was fairly steady, blowing from 4:30 to 10:30.

b) <u>Value</u>. We will circle HALF to indicate a half value wind.

c) <u>Speed</u>. In our example, the wind was blowing at 10 MPH so we will circle the flag blowing from right to left (4:30 to 10:30) above 10 MPH.

d) <u>Determine any Windage Adjustment</u>. We will circle 1 because the wind is HALF value, blowing 10 MPH.

3) <u>True Zero</u>. A true zero is the established zero without the windage adjustments to compensate for the effects of the wind. A true zero is calculated because, the next time you fire, the wind conditions will probably be different. Therefore, the rear sight windage knob adjustments made to compensate for a string of fire's wind will not be the correct setting for wind conditions during other strings or on other days.

a) Front Elev and Rear Elev. Because elevation adjustments are not affected by wind, the same settings will be carried over from ZERO: $3 \downarrow$ and 8/3-2.

b) <u>Wind</u>. Calculate the windage adjustment to compensate for today's wind conditions the same way it was calculated in the BEFORE FIRING information of the data book. The only exception is now windage adjustments are being removed from the rifle rather than added to the rifle.



(1) Because the windage setting is being removed from the rifle, the number of clicks of windage are subtracted right or left from the ZERO windage setting.

(2) If the wind is blowing from the right, subtract the number of clicks circled by moving the windage knob to the left. For example, our WIND setting from our ZERO is 8 L, and the number of windage clicks circled is 1, so we will move the windage knob 1 click left for a 9 L TRUE ZERO windage setting.

INSTRUCTOR'S NOTE: Add as many examples as necessary to ensure Marine understanding.

Additional Example for Wind Blowing From the Left. If the wind is blowing from the left, subtract the number of clicks circled by moving the windage knob to the right. If your WIND setting from your ZERO is 8 L, and the number of windage clicks circled is 1, move the windage knob 1 click right for a 7 L windage setting.

Confirm by questions.

<u>TRANSITION</u>: The method for recording data before and after firing is the same, regardless of the string of fire. Because of the way tri-fire, slow fire stages, and rapid fire stages are shot, data are recorded differently during firing. We will now cover the method for recording data during slow fire stages.

3. (10 MIN) RECORDING DATA FOR SLOW FIRE STAGES

INSTRUCTOR'S NOTE: Walk through completion of the 200-yard slow fire sitting data book page to explain filling out the data book before, during, and after firing.

Refer to slide sSLR.11-4.

a. <u>Recording Data Before Firing</u>

1) <u>True Zero</u>. Record the sight settings determined from 200-yard tri-fire under TRUE ZERO in the AFTER



FIRING portion of the data book page.

2) <u>Wind</u>. Prior to firing, check the wind. In our example, the wind is blowing directly at the shooter's back so it is of no value. We will not have to fill out the rest of this block.

3) <u>Zero</u>. Because wind is not a factor, record the same settings as recorded in the TRUE ZERO block.

b. <u>Recording Data During Firing</u>. The method for calling and plotting slow fire shots in the data book is called "the shot behind method." It allows the Marine to spend less time recording data and more time firing on the target. This is because all the calling and plotting is done while the target is in the pits being marked. This information is recorded in the DURING FIRING portion of the data book page. The proper and most efficient method for recording data during KD slow fire stages is as follows:

1) <u>Fire the First Shot</u>. Fire the first shot. Then immediately check the wind flag to see if the speed or direction of the wind changed.

2) <u>Call the Shot Accurately</u>. As soon as the shot is fired and the target is pulled into the pits, record the exact location where the tip of the front sight post was on the target at the exact instant the shot was fired. Record this on the target provided under number 1 in the block marked CALL.

3) <u>Prepare to Fire the Second Shot</u>. As soon as you have recorded the call for the first shot, prepare to fire the second shot.

4) Look at Where the First Shot Hit. As the target reappears out of the pits, look where the first shot hit the target. Remember this location so it can be plotted after firing the second shot.

5) <u>Fire the Second Shot</u>. Fire the second shot. Then check the wind flag to see if the wind changed speed or direction.

6) <u>Call the Second Shot and Plot the First Shot</u>. As soon as the second shot is fired and the target is pulled into the pits, record the call of the second shot. Now plot the precise location of the first shot by writing the numeral 1 on the large target diagram provided in the block marked PLOT.

7) <u>Prepare to Fire the Third Shot</u>. Repeat steps 1 through 6 until three shots have been fired. Indicate

each slow fire shot with the appropriate number (e.g., 1, 2, 3).



8) Make a Sight Adjustment if Required. Sight adjustments should be made off of a shot group, not a single shot. Determine if a sight adjustment is necessary off of the first three shots fired. If the shots form a group (i.e, a group that fits inside the center scoring ring), but are not where they were called, make the necessary sight adjustment.

CAUTION

Generally, major sight adjustments from established sight settings are caused by poor application of the fundamentals, inconsistencies in firing positions, inconsistencies in sight picture at different ranges and different positions, and inconsistent tension on the sling. Every effort should be made to correct shooting errors prior to making a sight adjustment on the rifle.

Refer to slide sSLR.11-5.

a) <u>Elevation</u>. If an elevation setting change is required, record it under Elevation under CALL 3.

b) <u>Wind</u>. If a windage setting change is required, record it under Wind under CALL 3.

c) In our example, shots #1, #2, and #3 were on call. No windage or front sight elevation adjustments will be made.

9) <u>Prepare to Fire the Fourth Shot</u>. Repeat steps 1 through 8 until the final two shots have been fired. Indicate each slow fire shot with the appropriate number (e.g., 4, 5).

Refer to slide sSLR.11-6.

a) In our example, we will plot shots #4, and #5 on call.

b) No sight adjustments will be made.

c. <u>Recording Data After Firing</u>

1) <u>Zero</u>. Since no additional sight adjustments were made, record the sight settings from the ZERO block under BEFORE FIRING.

2) <u>Wind</u>. In our example, wind was not a factor.



3) <u>True Zero</u>. Because wind is not a factor, record the same settings as the ZERO block.

Confirm by questions.

<u>TRANSITION</u>: In rapid fire, the firing string is different from that of slow fire. We will now discuss recording data in the data book for KD rapid fire.

4. (10 MIN) RECORDING DATA FOR RAPID FIRE STAGES

The following procedure should be used for recording data in the data book for KD rapid fire stages:

INSTRUCTOR'S NOTE: Walk through completion of the rapid fire data book page using 300-yard rapid fire prone as the example.

Refer to slide sSLR.11-7.

a. <u>Recording Data Before Firing</u>. In the BEFORE FIRING section of the data book, record the following:

1) <u>True Zero</u>. The sight setting determined during 200-yard slow fire sitting is entered in this block.

a) <u>Front Elev</u>. In our example, we will record a 3 \downarrow setting on our front sight post.

b) <u>Rear Elev</u>. Because we are firing from 300 yards, we will enter 8/3 on our rear sight elevation knob.

c) <u>Wind</u>. We finished 200-yard slow fire sitting with a 9 L setting on our rear sight windage knob.

2) <u>Wind</u>. Prior to firing, check the wind. If wind conditions are present, a sight adjustment will have to be made prior to firing to ensure shots group at the center of the target.

a) <u>Direction</u>. In our example, the wind is blowing from 3 o'clock to 9 o'clock.

b) <u>Value</u>. In our example, we will circle FULL to indicate a full value wind.





c) <u>Speed</u>. In our example, the wind is blowing at 10 MPH so we will circle the flag blowing from right to left (3 o'clock to 9 o'clock) above 10 MPH.

d) <u>Determine any Windage Adjustment</u>. In our example, we will circle 6 because the wind is FULL value, blowing 10 MPH.

3) <u>Zero</u>

a) <u>Front Elev and Rear Elev</u>. Since wind does not affect elevation, these settings are the same as for TRUE ZERO.

b) <u>Wind</u>

(1) If the wind is blowing from the right, add the number of clicks circled by moving the windage knob to the right; if the wind is blowing from the left, move the windage knob to the left.
(2) For example, our WIND setting from TRUE ZERO is 9 L, and the number of windage clicks circled is 6 for a 10 MPH right wind, so we will move the windage knob 6 clicks right for a 3 L windage setting for our ZERO.

b. <u>Recording Data During Firing</u>. In the DURING FIRING section of the data book, record the following:

1) <u>Mentally Call Shots While Firing</u>. While firing the rapid fire string, make a mental note of any shots called out of the group.

Refer to slide sSLR.11-8.

2) After the String is Fired. After firing the rapid fire string, and when the target is marked, plot all visible hits with a dot precisely where they appear on the large target diagram in the block marked PLOT. In our example, we will plot our shot group centered on the target.

c. <u>Recording Data After Firing</u>. In the AFTER FIRING section of the data book, record the following:

1) <u>Zero</u>. In our example, because our shot group was centered on the target and on call, it will not be necessary to make a sight adjustment.

a) Front Elev. In our example, we made no



elevation change so we will record 3 \downarrow .

b) <u>Rear Elev</u>. The rear sight elevation knob is never moved off of 8/3 when firing at 300 yards so we will circle 8/3.

c) <u>Wind</u>. In our example, we made no windage change so we will record 3 L.

2) <u>Wind</u>. Calculate the prevailing wind.

a) <u>Direction</u>. In our example, the wind remained steady, blowing from 3 o'clock to 9 o'clock, so we will draw this direction on the clock.

b) <u>Value</u>. We will circle FULL to indicate a full value wind.

c) <u>Speed</u>. In our example, the wind is blowing at 10 MPH so we will circle the flag blowing from right to left (3 o'clock to 9 o'clock) above 10 MPH.

d) <u>Determine any Windage Adjustment</u>. We will circle 6 because the wind is FULL value, blowing 10 MPH.

3) <u>True Zero</u>

a) <u>Front Elev and Rear Elev</u>. Since wind does not affect elevation, these settings are the same as for ZERO.

b) <u>Wind</u>

(1) Because the windage setting is being removed from the rifle, the number of clicks of windage are subtracted right or left from the ZERO windage setting.

(2) If the wind is blowing from the right, subtract the number of clicks circled by moving the windage knob to the left. For example, our WIND setting from our ZERO is 3 L, and the number of windage clicks circled is 6 for a 10 MPH right wind, so we will move the windage knob 6 clicks left for a 9 L windage setting for our TRUE ZERO.

Confirm by questions.



<u>TRANSITION</u>: The procedures for completing the data book are the same before and after firing. If you understand and apply the proper procedures for adjusting the rifle's sights and record this information correctly in your data book, you will be able to maintain a combat BZO.

<u>OPPORTUNITY FOR QUESTIONS</u>: MIN) (1

- 1. Respond to questions from the class.
- 2. Prompt Marines with questions to the class.

a. QUESTION: What is the data book's primary purpose?

ANSWER: To record information that allows the Marine to analyze his performance in order to establish and maintain a BZO.

b. QUESTION: What should the rear sight elevation knob be set on when firing at 300 yards?

ANSWER: 8/3.

c. QUESTION: How is the direction of the wind indicated in the data book?

ANSWER: An arrow is drawn through the clock in the direction the wind is blowing.

d. QUESTION: Windage in the data book is decided by wind value and speed. What does the number represent that intersects value and speed in the windage chart?

ANSWER: The number of clicks to offset the effects of the wind.

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

SUMMARY: MIN)

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This lesson covered data book procedures to include the importance of the data book to the shooter and completion of the data book before, during, and after firing. A poorly maintained data book is useless to the Marine. The data book is used to record shooting performance to establish and



maintain a BZO on the rifle. Of all the tools available to the Marine in improving his shooting performance and firing accurately, the data book, if properly filled in, is his most valuable asset.



<u>SLIDES</u>

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