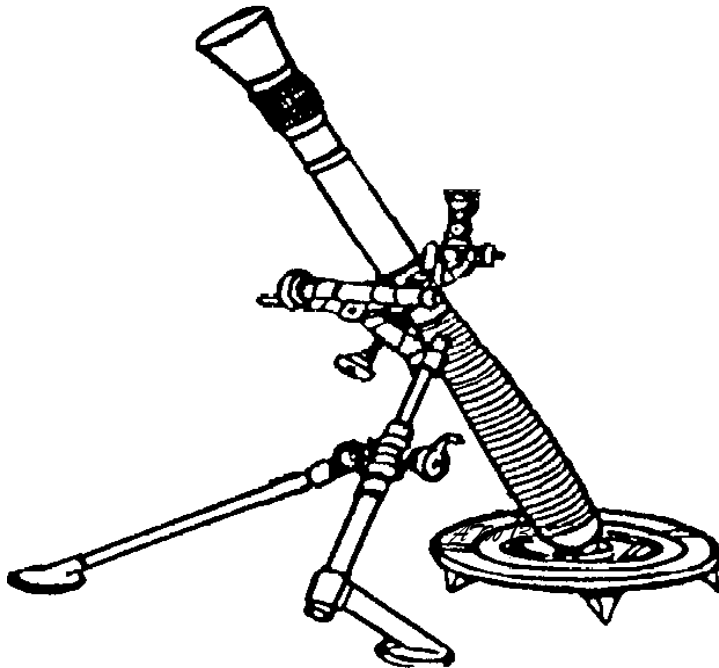


TEAM DRILL #1

81mm M16 PLOTTING BOARD BASIC PROCEDURES



**UNITED STATES ARMY INFANTRY SCHOOL
INFANTRY MORTAR LEADER COURSE
MTR CO 1ST BATTALION 19TH INFANTRY REGIMENT
FT. BENNING, GEORGIA 31905
AUGUST 2021**

TEAM DRILL #1

OBSERVED FIRING CHART (81mm)

PURPOSE: This team drill is intended to give the student a working knowledge of the techniques used in computing on an observed firing chart. When you have successfully completed this drill, you will have the basic working knowledge required of an FDC computer utilizing the observed firing chart.

REFERENCES:

TC 3-22.91

ATP 3-09.30

FT. BENNING MAP

General Situation: You are the computer in an 81mm mortar platoon. Your platoon is moving toward a pre-designated position. You're still required to support your unit even though you are still moving.

SITUATION A: The FDC Chief receives a call for fire. He instructs you to set up an observed firing chart using the available information. He has determined that you are in the vicinity of grid **118 / 893**. Compute the mission and update your data sheet.

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BATTLE DAMAGE ASSESSMENT (BDA):		EST 15% CASUALTIES	AIM POINT GRID:
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Situation Continued: Before you can continue to move, another FO calls for fire. Compute the mission and update your Data sheet.

COMPUTER'S RECORD For use of this form, see TC 3-22.91; the proponent agency is TRADOC											
ORGANIZATION SITUATION A1				DATE		TIME		OBSERVER ID V 38		TARGET NUMBER BB 1002	
☒ ADJUST FIRE ☐ FIRE FOR EFFECT ☐ IMMEDIATE SUPPRESSION				SHIFT FROM BB 1001 OT DIRECTION 2000 ALTITUDE _____ ☐ LEFT / ☒ RIGHT ☒ ADD / ☐ DROP ☐ UP / ☐ DOWN 200 200 _____				POLAR OT DIRECTION _____ ALTITUDE _____ DISTANCE _____ VERTICAL INTERVAL ☐ UP / ☐ DOWN VERTICAL ANGLE ☐ + ☐ _____			
GRID _____ OT DIRECTION _____ ALTITUDE _____											
TARGET DESCRIPTION TROOPS I/WOODLINE											
METHOD OF ENGAGEMENT											
FDC ORDER			INITIAL CHART DATA				INITIAL FIRE COMMAND				ROUNDS EXPENDED
MORTAR TO FFE SEC			DEFLECTION _____				MORTAR TO FOLLOW _____				MAX ORD
MORTAR TO ADJ #2			DEFLECTION CORRECTION				SHELL AND FUZE _____				
METHOD OF ADJ 1 RD			☐ L ☐ R				MORTAR TO FIRE _____				
BASIS FOR CORRECTION _____			RANGE _____				METHOD OF FIRE _____				
SHEAF CORRECTION _____			VI/ALT CORRECTION				DEFLECTION _____				TOF
SHELL AND FUZE HEQ			☐ + ☐ -				CHARGE _____				
METHOD OF FFE 2 RDS			RANGE CORRECTION				ELEVATION _____				MARK TIME
RANGE LATERAL SPREAD _____			☐ + ☐ -				TIME SETTING _____				
TIME OF OPENING FIRE W / R			CHARGE _____				RANGE _____				
MOC TYPE WR ☒ AMC ☐ TOT ☐ OTH ☐			AZIMUTH _____				ANGLE T _____				
OBSERVER CORRECTION			CHART/SAFETY DATA			SUBSEQUENT COMMANDS					
DEV	RANGE	TIME (HEIGHT)	DEF/AZ	RANGE	MORTAR FIRE	METHOD FIRE	AIM AZIMUTH	DEFLECTION	CHARGE	TIME	ELEV
R70	+100										
	-50	FFE									
				EOM							
#3 L20											
BATTLE DAMAGE ASSESSMENT (BDA):			TROOPS DISPERSED				AIM POINT GRID:				

Situation B: You have arrived at your new location; vicinity 108 / 902. Complete your data sheet with the following data: MCS: Left limit: 0830 ~~m~~; Right limit: 1830 ~~m~~; Max Range: 5000; Min Range: 1800. Set up an Observe firing chart using the data sheet.

[illegible]

[illegible]

Situation Continued: The FO spots the round and sends a subsequent call for fire.

COMPUTER'S RECORD

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[illegible]

BATTLE DAMAGE ASSESSMENT (BDA):	
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EST 10% CASUALTIES

AIM POINT GRID:

CASUALTIES
PREVIOUS EDITIONS ARE OBSOLETE.

APD LC v1.00

Situation C: You receive the following call for fire.

[illegible]

COMPUTER'S RECORD

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER
SITUATION D			V 38	BB 1005

☒ ADJUST FIRE ☐ FIRE FOR EFFECT ☐ IMMEDIATE SUPPRESSION	SHIFT FROM _____ OT DIRECTION _____ ALTITUDE _____ ☐ LEFT / ☐ RIGHT _____ ☐ ADD / ☐ DROP _____ ☐ UP / ☐ DOWN _____	POLAR OT DIRECTION <u>1740</u> ALTITUDE _____ DISTANCE <u>1100</u> VERTICAL INTERVAL _____ ☐ UP / ☐ DOWN _____ VERTICAL ANGLE _____ ☐ + ☐ _____
GRID _____ OT DIRECTION _____ ALTITUDE _____		

TARGET DESCRIPTION	RADAR UNIT
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METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE SEC	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ #2	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ 1 RD	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION CONV #2	VII/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE HEQ	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	TOF
METHOD OF FFE 2 RDS	☐ + ☐ -	CHARGE _____	
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE W/R	RANGE _____	TIME SETTING _____	MARK TIME
MOC TYPE WR ☒ AMC ☐ TOT ☐ OTH ☐	AZIMUTH _____		
	ANGLE T _____		

[illegible]

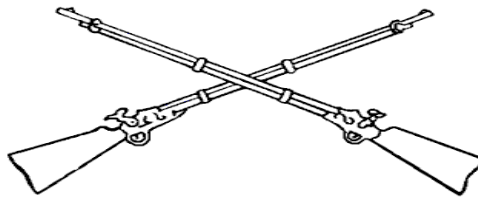
BATTLE DAMAGE ASSESSMENT (BDA): TGT DESTROYED

AIM POINT GRID:

DA FORM 2399, MAY 2017

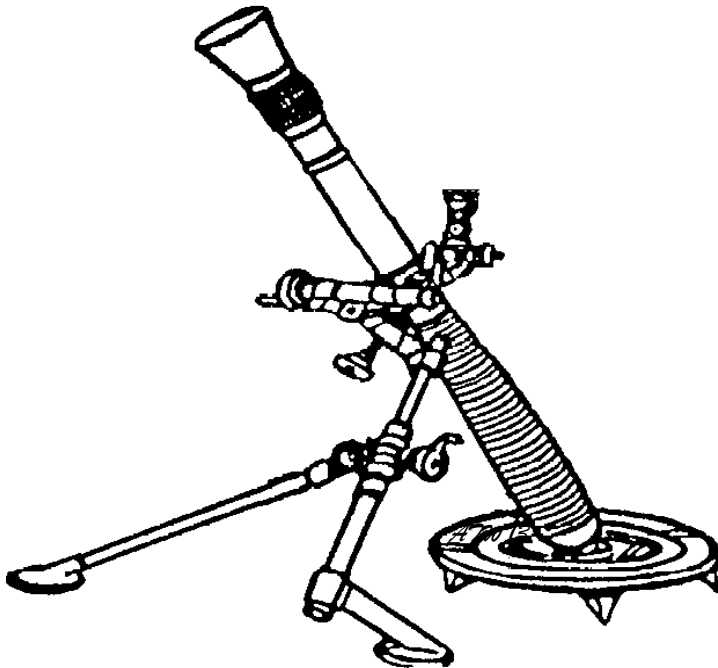
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APD LC v1.00



TEAM DRILL #1 SOLUTIONS

81mm M16 PLOTTING BOARD BASIC PROCEDURES



**UNITED STATES ARMY INFANTRY SCHOOL
INFANTRY MORTAR LEADER COURSE
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AUGUST 2021**

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DA FORM 2399, MAY 2017

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DATA SHEET																	
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SETUP			WEAPON DATA										FO DATA				
TIME OUT:			UNIT:		WPN : DIR : DIS :		WPN : DIR : DIS :		FO		ALT		GRID				
TGT PREFIX: BB																	
TGT NO: 1000-1100			81 MM CAR ☐ YES														
ALARM ☐ ON ☐ OFF			M252 ☒ NO														
MIN E:			BP: #2		WPN : DIR : DIS :		WPN : DIR : DIS :										
MIN N:																	
GD: ☐ E ☐ W			E: 108		WPN : DIR : DIS :		WPN : DIR : DIS :										
LAT: ☐ + ☐ -			N: 902														
LISTEN: ☐ ON ☐ OFF			ALT:		WPN : DIR : DIS :		WPN : DIR : DIS :										
BIT RATE			AZ: 1330 / 1350														
KEY TONE			DEF: 0700		WPN : DIR : DIS :		WPN : DIR : DIS :										
BLK ☐ SNG ☐ DBL			ELE:														
OWNER ID:																	
AMMUNITION DATA																	
TEMPERATURE: TYPE: ☒ HE ☐ WP ☒ ILL ☐ CS ☐ TNG ☒ RP																	
LOT#		M821		M819RP		M301A3											
WHEIGHT/ TYPE																	
ON HAND																	
RECEIVED																	
TOTAL																	
ROUNDS EXPENDED																	
ROUNDS REMAINING																	
TARGET DATA																	
TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE				ROUND
TGT #	GRID	ALT	DEF	RNG /CHG	DEFL CORR	RNG CORR	ALT VI	ALT CORR	DEFL	RNG /CHG	F.S.	ELE	TIME FIRED	TARGET DESCRIPTION	METHOD OF ENGAGEMENT	SURV	EXP
MCS			0720	3400					0720	3	36.6	1069		MCS	1 RD RP	RD OBSV	1
BB 1003			0659	3575					0659	3		1139		Antitank Weapon	SEC 2 RDS HE	10% CAS	9
BB 1004	150 914		0730	4375					0730	4	40.5	1038		AMMO POINT	SEC 5 RDS RP	A/P BRNG	20
BB 1005			0914	3625					0914	3		1130		RDR UNIT	SEC 2 RDS HE	TGT DEST	10

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DA FORM 2399, MAY 2017

AIM POINT GRID:

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