MORTAR FIRE CONTROL SYSTEM

FORMS BOOK

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

NOTES

LHMBC/MFCS DATA SHEET

For use of this form, see TC 3-22.91; The proponent agency is TRADOC.

GEO REF

Ellipsoid: _____

Datum: _____

Min Easting: _____

Min Northing: _____

Zone: _____

Hemi: _____

DATA

TGT Prefix: _____

MIN: _____

MAX: _____

Alarm:

☐ ON ☐ OFF

Next: _____

WEAPON DATA

Firing Unit: _____ mm CAR: Y ☐ N ☐

Unit Name:	Unit Name:
Easting/DIR:	Easting/DIR:
Northing/DIS:	Northing/DIS:
ALT:	ALT:
AZ:	AZ:
DEF:	DEF:
Obs Num:	Obs Num:

Unit Name:	Unit Name:
Easting/DIR:	Easting/DIR:
Northing/DIS:	Northing/DIS:
ALT:	ALT:
AZ:	AZ:
DEF:	DEF:
Obs Num:	Obs Num:

SUBSCRIBERS

FDC IP:

Unit:	URN:	ADR:	Grid:	Alt:	Obs#:

COMMO

COMMO	A	B
Protocol:		
Device Type:		
Modulation:		
Data Rate:		
COMSEC:		
FH Mode:		
EDC Mode:		
NAD Method:		
NET Usage:		
Num Stations:		
Rank:		

AMMUNITION DATA

TEMP _____

Shell Type:					
Lot Number:					
On Hand:					
Received:					
TOTAL:					
RNDS Expended:					
RNDS Remaining:					

TARGET DATA

TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG / CHG	DEFL/ AZ CORR	RANGE CORR	ALT / VI	ALT CORR	DEFL/ AZ	RG / CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

TARGET DATA

TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG / CHG	DEFL/ AZ CORR	RANGE CORR	ALT / VI	ALT CORR	DEFL/ AZ	RG / CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

DAY 1 CLASSROOM SET-UP DATA

UNIT LIST

Unit Name	URN	Long Name	Device	CONFIG
A1	613000	A1 2/7 IN	GUN	Role: FDC
A2	614000	A2 2/7 IN	GUN	This Unit Is: FDC
A3	615000	A3 2/7 IN	GUN	Controlling FSE: FSE1
A4	616000	A4 2/7 IN	GUN	Commo: VMF 6017A (SWB2)
FDC	612000	FDC 2/7 IN	FDC	FBCB2 Connection: NONE
FOS1	617000	HHC FOS1	FO	Mode: TRAINING
FSE1	618000	HHC FSE	FSE	☑ COMMO EMULATION

DATA

Date/Time: ?

Datum: WGS 1984
Audio Alarm: OFF
Target Prefix: AB
Target Number: 0001-0100 next 0001

POSITION

FDC - This Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
FDC	49950	34950	0374	16R	GA	WGE

Position Data Source: Manual

GUN/FO's - Other Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
A1	49910	35125	0374	16R	GA	WGE
A2	49910	35050	0374	16R	GA	WGE
A3	49910	34975	0374	16R	GA	WGE
A4	49910	34900	0374	16R	GA	WGE
FOS1	47200	34700	0445	16R	GA	WGE
FSE1	47200	34700	0445	16R	GA	WGE

MAZ REF: For all guns: 6000 REF: 2800

CHANNEL A

Chn A Net Parameters

DEVICE

SINCGARS SIP, RT1523 C/D, RT-1739C

RADIO MIX

2- SINCGARS, PRC-152

CONFIGURATION

231-SINCGARS_16000_PT_FH

NUMBER OF STATIONS

10

NET USAGE

VOICE & DATA

CHANNEL A PLATOON **!!!DISABLE CHANNEL A!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.029.006	06
A1	☑	172.010.029.009	09
A2	☑	172.010.029.007	07
A3	☑	172.010.029.008	08
A4	☑	172.010.029.010	10

CHANNEL B FIRES **!!!DISABLE CHANNEL B!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.002.007	06
F0S1	☑	172.010.002.005	05
FSE1	☑	172.010.002.004	04

Ammo by Unit

WEAPON M121 CARRIER TEMP 70

Unit	Lot	Shell	Lot Number	Quantity
A1/2/3/4	A	HE M934A1	1234	100
A1/2/3/4	B	IL M930	4567	100
A1/2/3/4	C	WP M929	8901	200

COMPUTER'S RECORD

For use of this form, see TC 3-22.91; the proponent agency is TRADOC

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

DA FORM 2399, MAY 2017 PREVIOUS EDITIONS ARE OBSOLETE. APD LC v1.00

COMPUTER'S RECORD

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ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

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COMPUTER'S RECORD

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ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

DA FORM 2399, MAY 2017 PREVIOUS EDITIONS ARE OBSOLETE. APD LC v1.00

COMPUTER'S RECORD

For use of this form, see TC 3-22.91; the proponent agency is TRADOC

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

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LHMBC/MFCS DATA SHEET

For use of this form, see TC 3-22.91; The proponent agency is TRADOC.

GEO REF	WEAPON DATA		SUBSCRIBERS	COMMO	A	B
Ellipsoid:	Firing Unit: mm CAR: Y ☐ N ☐		FDC IP:	Protocol:		
Datum:	Unit Name:	Unit Name:	Unit: URN: ADR: Grid: Alt: Obs#:	Device Type:		
Min Easting:	Easting/DIR:	Easting/DIR:		Modulation:		
Min Northing:	Northing/DIS:	Northing/DIS:		Data Rate:		
Zone:	ALT:	ALT:		COMSEC:		
Hemi:	AZ:	AZ:		FH Mode:		
DATA	DEF:	DEF:		EDC Mode:		
TGT Prefix:	Obs Num:	Obs Num:		NAD Method:		
MIN:	Unit Name:	Unit Name:		NET Usage:		
MAX:	Easting/DIR:	Easting/DIR:		Num Stations:		
Alarm:	Northing/DIS:	Northing/DIS:		Rank:		
☐ ON ☐ OFF	ALT:	ALT:				
Next:	AZ:	AZ:				
	DEF:	DEF:				
	Obs Num:	Obs Num:				

AMMUNITION DATA TEMP _____

Shell Type:					
Lot Number:					
On Hand:					
Received:					
TOTAL:					
RNDS Expended:					
RNDS Remaining:					

TARGET DATA

TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG CHG	DEFL/ AZ CORR	RANGE CORR	ALT VI	ALT CORR	DEFL/ AZ	RG CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

TARGET DATA

TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG / CHG	DEFL/ AZ CORR	RANGE CORR	ALT / VI	ALT CORR	DEFL/ AZ	RG / CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

DAY 2 CLASSROOM SET-UP DATA

UNIT LIST

Unit Name	URN	Long Name	Device	CONFIG
A1	613000	A1 2/7 IN	GUN	Role: GUN/FDC
A2	614000	A2 2/7 IN	GUN/FDC	This Unit Is: A2, Controlling FDC: A2
A3	615000	A3 2/7 IN	GUN	Controlling FSE: FSE1
A4	616000	A4 2/7 IN	GUN	Commo: VMF 6017A (SWB2)
FDC	612000	FDC 2/7 IN	FDC	FBCB2 Connection: NONE
FOS1	617000	HHC FOS1	FO	Mode: TRAINING
FSE1	618000	HHC FSE	FSE	☑ COMMO EMULATION

DATA

Date/Time: ?

Datum: WGS 1984
Audio Alarm: OFF
Target Prefix: AB
Target Number: 0001-0100 next 0001

POSITION

FDC - This Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
A2	49910	35050	0374	16R	GA	WGE

Position Data Source: Manual

GUN/FO's - Other Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
A1	49910	35125	0374	16R	GA	WGE
A3	49910	34975	0374	16R	GA	WGE
A4	49910	34900	0374	16R	GA	WGE
FDC	49950	34950	0374	16R	GA	WGE
FOS1	47200	34700	0445	16R	GA	WGE
FSE1	47200	34700	0445	16R	GA	WGE

MAZ REF: For all guns: 6000 REF: 2800

CHANNEL A

Chn A Net Parameters

DEVICE

SINCGARS SIP, RT1523 C/D, RT-1739C

RADIO MIX

2- SINCGARS, PRC-152

CONFIGURATION

231-SINCGARS_16000_PT_FH

NUMBER OF STATIONS

10

NET USAGE

VOICE & DATA

CHANNEL A PLATOON **!!!DISABLE CHANNEL A!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.029.006	06
A1	☑	172.010.029.009	09
A2	☑	172.010.029.007	07
A3	☑	172.010.029.008	08
A4	☑	172.010.029.010	10

CHANNEL B FIRES **!!!DISABLE CHANNEL B!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.002.007	06
F0S1	☑	172.010.002.005	05
FSE1	☑	172.010.002.004	04

Ammo by Unit

WEAPON M121 CARRIER TEMP 70

Unit	Lot	Shell	Lot Number	Quantity
A1/2/3/4	A	HE M934A1	1234	100
A1/2/3/4	B	IL M930	4567	100
A1/2/3/4	C	WP M929	8901	200

SAFETY FAN #1 SEGMENT 1
WPNS (ALL)

ZONE	SQR
GRID	
HE WP	ILL IR
LLAZ	RLAZ
MIN RNG	MAX RNG
MIN CHG	MAX CHG

SAFETY FAN #1 SEGMENT 2
WPNS (ALL)

ZONE	SQR
GRID	
HE WP	ILL IR
LLAZ	RLAZ
MIN RNG	MAX RNG
MIN CHG	MAX CHG

SAFETY FAN #1 SEGMENT 3
WPNS (ALL)

ZONE	SQR
GRID	
HE WP	ILL IR
LLAZ	RLAZ
MIN RNG	MAX RNG
MIN CHG	MAX CHG

SAFETY FAN #2 SEGMENT 1
WPNS (A1 & A4)

ZONE	SQR
GRID	
HE WP	ILL IR
LLAZ	RLAZ
MIN RNG	MAX RNG
MIN CHG	MAX CHG

MET DATA

OCTANT	STATION HEIGHT	MDP PRESSURE	LAT	LONG
0	37	977	347	900

LINE	ALT	DIR	SPEED	TEMP	PRESSURE
0	0	160	7	2900	977
1	200	187	11	2887	965
2	500	220	15	2878	937
3	1000	248	17	2868	893
4	1500	278	13	2852	842
5	2000	320	11	2830	793
6	2500	362	13	2796	746
7	3000	378	16	2766	701
8	3500	384	17	2737	659
9	4000	399	20	2705	641
10	4500	415	18	2685	625

CELLS CHANGE COLORS TEMPORARILY WHILE ENTERING DATA:

(1) ORANGE CELLS SHOW A TREND LIMIT WARNING - YOU EXCEEDED THE TREND LIMITS.
(2) RED CELLS SHOW A TREND LIMIT ERROR – INCORRECT DATA WAS ENTERED.

ONCE YOU'VE COMPLETED ALL DATA ENTRY FOR THE NEW MET, IF THE SCREEN SHOWS ORANGE CELLS, THE TREND LIMITS HAVE BEEN EXCEEDED. VERIFY TREND LIMITS WITH MDP. RED CELLS INDICATE YOU HAVE ENTERED THOSE VALUES INCORRECTLY, AND MUST RE-ENTER THE CORRECT VALUE. THEN SAVE AND APPLY NEW MET.

NFA
(NO FIRE AREAS)

NAME	START TIME	END TIME	HE	WP&RP	IL&IR
NFA1	???????	?????			
NFA2	???????	?????			

TYPE: SHAPE
3 OF 3 POINTS

Easting	Northing	Zone	Datum	Hemisphere

Note: This point requires a minimum of three grids.

TYPE: CIRCLE

Radius	Easting	Northing	Zone	Datum	H/P

Note: This requires one grid point and a radius.

FLOT

EST UNIT	NAME	START TIME	END TIME
FSE1	HOG	CURRENT	1700

Easting	Northing	Zone	Datum	H/P

TLW (DA Form 4655-R)

APP 1 (TGT LIST WORKSHEET TO ANNEX D (FIRE SUPPORT) TO OPORD 2-98 2/29 IN (L)

TARGET LIST WORKSHEET

AS OF: DTG

LINE NO	TARGET NO	DESCRIPTION	LOCATION	ALT	ATT	SIZE		SOURCE ACCURACY	REMARKS	A 1 B		
						L	W					
01	AB0020	RP	54590/383670	380				S2				
02	AB0025	Road Intsec.	54935/383675	370	900	300	75	S2				
03	AB0030	FPF	54705/383605	380	1400	300	75	S2	120mm FPF			
04	AB0035	Hill 231	54700/383800	400	800	400	75	S2	Smoke / 8 min dur.			
05	AB0040	MRP	54600/38370	300				S2	2 RDS 155 DPICM	**X**		
06	AB2045	MRP	54591/383690	130				S2	2 RDS 155 DPICM	**X**		
07												
08												
09												
10												
11												
12												
13												
14												

COMPUTER'S RECORD

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ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

DA FORM 2399, MAY 2017 PREVIOUS EDITIONS ARE OBSOLETE. APD LC v1.00

COMPUTER'S RECORD

For use of this form, see TC 3-22.91; the proponent agency is TRADOC

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

DA FORM 2399, MAY 2017 PREVIOUS EDITIONS ARE OBSOLETE. APD LC v1.00

COMPUTER'S RECORD

For use of this form, see TC 3-22.91; the proponent agency is TRADOC

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

DA FORM 2399, MAY 2017 PREVIOUS EDITIONS ARE OBSOLETE. APD LC v1.00

COMPUTER'S RECORD

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METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
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LHMBC/MFCS DATA SHEET

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GEO REF	WEAPON DATA		SUBSCRIBERS	COMMO	A	B
Ellipsoid:	Firing Unit: mm CAR: Y ☐ N ☐		FDC IP:	Protocol:		
Datum:	Unit Name:	Unit Name:	Unit: URN: ADR: Grid: Alt: Obs#:	Device Type:		
Min Easting:	Easting/DIR:	Easting/DIR:		Modulation:		
Min Northing:	Northing/DIS:	Northing/DIS:		Data Rate:		
Zone:	ALT:	ALT:		COMSEC:		
Hemi:	AZ:	AZ:		FH Mode:		
DATA	DEF:	DEF:		EDC Mode:		
TGT Prefix:	Obs Num:	Obs Num:		NAD Method:		
MIN:	Unit Name:	Unit Name:		NET Usage:		
MAX:	Easting/DIR:	Easting/DIR:		Num Stations:		
Alarm:	Northing/DIS:	Northing/DIS:		Rank:		
☐ ON ☐ OFF	ALT:	ALT:				
Next:	AZ:	AZ:				
	DEF:	DEF:				
	Obs Num:	Obs Num:				

AMMUNITION DATA TEMP _____

Shell Type:					
Lot Number:					
On Hand:					
Received:					
TOTAL:					
RNDS Expended:					
RNDS Remaining:					

TARGET DATA

TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG / CHG	DEFL/ AZ CORR	RANGE CORR	ALT / VI	ALT CORR	DEFL/ AZ	RG / CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

TARGET DATA																	
TARGET ID			CHART DATA		FIRING CORRECTIONS				FIRING DATA				INTELLIGENCE			ROUNDS	
TGT NO.	GRID	ALT	DEFL/ AZ	RG / CHG	DEFL/ AZ CORR	RANGE CORR	ALT / VI	ALT CORR	DEFL/ AZ	RG / CHG	FUZE/TIME SETTING	ELEV	TGT DESC.	METHOD OF ENGAGEMENT	SURVEILLANCE	EXP	REM

DA FORM 2188-1, FEB 2017

APD LC v1.01
PAGE 2 OF 2

DAY 3 CLASSROOM SET-UP DATA

UNIT LIST

Unit Name	URN	Long Name	Device	CONFIG
A1	613000	A1 2/7 IN	GUN	Role: GUN/FDC
A2	614000	A2 2/7 IN	GUN/FDC	This Unit Is: A2, Controlling FDC: A2
A3	615000	A3 2/7 IN	GUN	Controlling FSE: FSE1
A4	616000	A4 2/7 IN	GUN	Commo: VMF 6017A (SWB2)
FDC	612000	FDC 2/7 IN	FDC	FBCB2 Connection: NONE
FOS1	617000	HHC FOS1	FO	Mode: TRAINING
FSE1	618000	HHC FSE	FSE	☑ COMMO EMULATION

DATA

Date/Time: ?

Datum: WGS 1984
Audio Alarm: OFF
Target Prefix: AB
Target Number: 0001-0100 next 0001

POSITION

FDC - This Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
A2	49910	35050	0374	16R	GA	WGE

Position Data Source: Manual

GUN/FO's - Other Unit Position

Unit Name	Easting	Northing	Alt	Zone	SQR	Datum
A1	49910	35125	0374	16R	GA	WGE
A3	49910	34975	0374	16R	GA	WGE
A4	49910	34900	0374	16R	GA	WGE
FDC	49950	34950	0374	16R	GA	WGE
FOS1	47200	34700	0445	16R	GA	WGE
FSE1	47200	34700	0445	16R	GA	WGE

MAZ REF: For all guns: 6000 REF: 2800

CHANNEL A

Chn A Net Parameters

DEVICE

SINCGARS SIP, RT1523 C/D, RT-1739C

RADIO MIX

2- SINCGARS, PRC-152

CONFIGURATION

231-SINCGARS_16000_PT_FH

NUMBER OF STATIONS

10

NET USAGE

VOICE & DATA

CHANNEL A PLATOON **!!!DISABLE CHANNEL A!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.029.006	06
A1	☑	172.010.029.009	09
A2	☑	172.010.029.007	07
A3	☑	172.010.029.008	08
A4	☑	172.010.029.010	10

CHANNEL B FIRES **!!!DISABLE CHANNEL B!!!**

Unit Name	En	IP Address	Adr
FDC	☑	172.010.002.007	06
F0S1	☑	172.010.002.005	05
FSE1	☑	172.010.002.004	04

Ammo by Unit

WEAPON M121 CARRIER TEMP 70

Unit	Lot	Shell	Lot Number	Quantity
A1/2/3/4	A	HE M934A1	1234	100
A1/2/3/4	B	IL M930	4567	100
A1/2/3/4	C	WP M929	8901	200

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METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
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SHELL AND FUZE _____	☐ + ☐ -	_____	_____
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TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

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COMPUTER'S RECORD

For use of this form, see TC 3-22.91; the proponent agency is TRADOC

ORGANIZATION	DATE	TIME	OBSERVER ID	TARGET NUMBER

☐ ADJUST FIRE ☐ FIRE FOR EFFECT
☐ IMMEDIATE SUPPRESSION

GRID _____
OT DIRECTION _____
ALTITUDE _____

SHIFT FROM _____
OT DIRECTION _____ ALTITUDE _____

☐ LEFT / ☐ RIGHT _____
☐ ADD / ☐ DROP _____
☐ UP / ☐ DOWN _____

POLAR
OT DIRECTION _____ ALTITUDE _____
DISTANCE _____
VERTICAL INTERVAL
☐ UP / ☐ DOWN _____
VERTICAL ANGLE
☐ + ☐ _____

TARGET DESCRIPTION

METHOD OF ENGAGEMENT

FDC ORDER	INITIAL CHART DATA	INITIAL FIRE COMMAND	ROUNDS EXPENDED
MORTAR TO FFE _____	DEFLECTION _____	MORTAR TO FOLLOW _____	
MORTAR TO ADJ _____	DEFLECTION CORRECTION	SHELL AND FUZE _____	
METHOD OF ADJ _____	☐ L ☐ R	_____	
BASIS FOR CORRECTION _____	RANGE _____	MORTAR TO FIRE _____	
SHEAF CORRECTION _____	VI/ALT CORRECTION	METHOD OF FIRE _____	MAX ORD
SHELL AND FUZE _____	☐ + ☐ -	_____	_____
_____	RANGE CORRECTION	DEFLECTION _____	
METHOD OF FFE _____	☐ + ☐ -	CHARGE _____	TOF
RANGE LATERAL SPREAD _____	CHARGE _____	ELEVATION _____	_____
TIME OF OPENING FIRE _____	RANGE _____	TIME SETTING _____	MARK TIME
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

BATTLE DAMAGE ASSESSMENT (BDA): AIM POINT GRID:

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