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FIRING TABLES AND BALLISTICS US ARMY ARDEC

July 10, 2005

# Firing Tables

for

Cannon, 155mm Howitzer, M185

on

Howitzer, Medium, Self-Propelled, 155mm, M109A1 Howitzer, Medium, Self-Propelled, 155mm, M109A1B Howitzer, Medium, Self-Propelled, 155mm, M109A2 Howitzer, Medium, Self-Propelled, 155mm, M109A3 Howitzer, Medium, Self-Propelled, 155mm, M109A3B and

Howitzer, Medium, Self-Propelled, 155mm, M109A4

and

Cannon, 155mm Howitzer, M284
on
Howitzer, Medium, Self-Propelled, 155mm, M109A5
and
Howitzer, Medium, Self-Propelled, 155mm, M109A6
and
Cannon, 155mm Howitzer, M199
on
Howitzer, Medium, Towed, 155mm, M198
and
Cannon, 155mm Howitzer, XM776
on
Howitzer, Medium, Towed, 155mm, XM777

# Firing

Projectile, HE, M795

NOTE: These firing tables pertain to the following charges: 3G, 4G, 5G, 4W, 5W, 6W, 7W, 7R, 8S

Firing Tables and Ballistics Division ARDEC April 2004

# Firing Tables

for

Cannon, 155mm Howitzer, M185 on Howitzer, Medium, Self-Propelled, 155mm, M109A1 Howitzer, Medium, Self-Propelled, 155mm, M109A1

Howitzer, Medium, Self-Propelled, 155mm, M109A1B Howitzer, Medium, Self-Propelled, 155mm, M109A2 Howitzer, Medium, Self-Propelled, 155mm, M109A3 Howitzer, Medium, Self-Propelled, 155mm, M109A3B and

Howitzer, Medium, Self-Propelled, 155mm, M109A4

and

Cannon, 155mm Howitzer, M284
on
Howitzer, Medium, Self-Propelled, 155mm, M109A5
and
Howitzer, Medium, Self-Propelled, 155mm, M109A6
and
Cannon, 155mm Howitzer, M199
on
Howitzer, Medium, Towed, 155mm, M198
and
Cannon, 155mm Howitzer, XM776

Firing

Howitzer, Medium, Towed, 155mm, XM777

Projectile, HE, M795

This firing table supersedes FT 155-AR-0, dated February 1981.

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## 1. Symbols and Abbreviations

AD Air Density
APERS Antipersonnel
AT Air Temperature
BD Base Detonation
BE Base Ejection

C Ballistic Coefficient, Centigrade (Celsius)

COMP Complementary
CORR Correction
COT Cotangent
CP Concrete Piercing
CS Complementary Site

CAS Complementary Angle of Site

CHG Charge
CTG Cartridge
CW Cross Wind

D Decrease, Deflection
DD Difference in Density

DEC Decrease
DEFL Deflection
DEG Degree

D ELEV Change in Elevation

DEN Air Density

DFS Difference in Fuze Setting
DH Difference in Height
DR Difference in Range
DT Difference in Temperature
DV Difference in Muzzle Velocity
EFC Equivalent Full Charge

EL, ELEV Elevation
ET Electronic Time
F Fahrenheit
FS Fuze Setting

GB Nonpersistent Toxic (Casualty) Nerve Gas

GFT Graphical Firing Table

H Head Wind, Height or Mustard Gas

HB, HOB Height of Burst
HC Hexachlorethane – Zinc
HD Distilled Mustard Gas
HE High Explosive

HEAT-T High Explosive Antitank –Tracer HEP-T High Explosive Plastic – Tracer

I, INC Increase

ICAO International Civil Aviation Organization

L Left LB Pound M Meter

MACS Modular Artillery Charge System MDP Meteorological Datum Plane

MET Meteorological
MO Maximum Ordinate

# FT 155-AR-1 PART 1

MOFA Multi-Option Fuze for Artillery

MPH Miles Per Hour
M/S Meters Per Second
MT Mechanical Time

MTSQ Mechanical Time and Superquick

MV Muzzle Velocity

MVV Muzzle Velocity Variation

N/A Not Applicable PCT Percent PD Point Detonating

PIBD Point Impact Base Detonation

PROJ Projectile
PROX Proximity
PE Probable Error

PT Propellant Temperature PW Projectile Weight QΕ Quadrant Elevation R Range, Right, Rocket RARocket-Assisted RBRange to Burst RWRange Wind SP Self-Propelled SQ Square Tail Wind Τ Time to Burst TB TEMP Air Temperature TMTechnical Manual TML VEL Terminal Velocity VE Velocity Error WTWeight

## 2. General Information

A. Projectile, HE, M795. The tables in Part 1 are based on range firings of projectile, HE, M795 conducted at Yuma Proving Ground, Arizona during the period of April 1998 to May 1998 as reported in Firing Record YPG # 98-050, Volume I of II, dated June 29, 2000. Trajectory computations were performed with a modified point mass trajectory model described in BRL Memorandum Report 1314. The aerodynamic data used in the reduction of the firing tables test results and the ballistic data obtained are recorded in FCI 155-AR-A, dated 20 November 2001. Part 2 of FT 155-AR-1, published separately, contains tables for charges 7R and 8S, and Modular Artillery Charge System (MACS) charges 1L, 2L, 3H. 4H. and 5H.

B. Howitzers, M198, M109A1\* and XM777. All firing table data for Projectile, HE M795 given in Part 1 of FT 155-AR-1 are applicable to Howitzers M109A5 and M109A6. The firing table data are also applicable to the M198, M109A1 and XM777 Howitzers provided additional changes are made to compensate for the muzzle velocity.

	Standard Muzzle Velocity - m/s				
Charge		Howitzer			
	M109A1*	M198	XM777		
		Propelling Charge, M3	A1		
3G	250	250	254		
4G	289	289	293		
5G	349	349	353		
		Propelling Charge, M4.	A2		
3W	N/a	N/a	288**		
4W	323	323	327		
5W	383	383	387		
6W	455	457	461		
7W	544	548	547		
	F	Propelling Charge, M11	9A2		
7R	662	666	665		
	F	Propelling Charge, M20	3A1		
8S	n/a	800	799		

<sup>\*</sup> Muzzle velocities for Howitzer M109A1 are applicable to Howitzers, M109A1B, M109A2, M109A3, M109A3B and M109A4.

<sup>\*\*</sup>If firing charge 3W (M4A2) from the XM777 Howitzer, use the tables for Charge 4G (M3A1) found in Part 1-2

	Cha	ange in Muzzle Velocity	y - m/s
Charge		Howitzer	
	M109A1*	M198	XM777
		Propelling Charge, M3	<b>A</b> 1
3G	+3	+3	+7
4G	+3	+3	+7
5G	+3	+3	+7
		Propelling Charge, M4	A2
3W	n/a	n/a	+2
4W	+3	+3	+7
5W	+3	+3	+7
6W	+2	+4	+8
7W	+0	+4	+3
	F	Propelling Charge, M119	9A2
7R	+3	+7	+6
	F	Propelling Charge, M203	BA1
8S	n/a	+9	+8

C. Muzzle velocities for propelling Charges, M4A1, M119A1 and M203. The muzzle velocities used in Part 1, are standard for the M3A1, M4A2, M119A2 and M203A1 propelling charges. These tables are also applicable to the M4A1, M119A1, and M203 propelling charges provided additional corrections are made to compensate for the following changes in muzzle velocities.

	Standard Muzzle Velocity - m/s					
Charge	Howitzer					
	M109A1*	M109A1* M198 M109A5 and M109A6				
	Propelling Charge, M4A1					
3W	n/a	n/a	n/a	284**		
4W	321	321	317	325		
5W	376	376	374	380		
6W	452	452	452	460		
7W	538	538	541	545		
		Propelling (	Charge, M119A1			
8	660	664	657	663		
		Propelling	Charge, M203			
8R	n/a	800	791	799		

<sup>\*</sup> Muzzle velocities for Howitzer M109A1 are applicable to Howitzers, M109A1B, M109A2, M109A3, M109A3B and M109A4.

<sup>\*\*</sup>If firing charge 3W (M4A2) from the XM777 Howitzer, use the tables for Charge 4G (M3A1) found in Part 1-2.

	Change in Muzzle Velocity - m/s				
Charge	Howitzer				
	M109A1*	M198	M109A5 and M109A6	XM777	
	Propelling Charge, M4A1				
3W	n/a	n/a	n/a	-2	
4W	+1	+1	-3	+5	
5W	-4	-4	-6	0	
6W	-1	+3	-1	+7	
7W	-6	+2	-3	+1	
8	+1	+5	-2	+4	
	Propelling Charge, M203				
8R	n/a	+9	0	+8	

FT 155-AR-1 PART 1

D. Interchangeability of Ammunition. The information that follows specifies the degree of interchangeability of various applicable NATO ammunition for use in the specified cannon. NATO Allied Ordnance Publication (AOP) 29 entitled "NATO Indirect Fire Ammunition Interchangeability," (Part 1) Edition 2, dated 1998, documents the format and symbols used. Please note there may be some minor variation(s) in symbol meanings between what is presented below and AOP-29. The agreement whereby member nations have undertaken to use AOP-29 is recorded in STANAG 4425.

Generally, interchangeability means the use of one nation's ammunition with another nation's weapon. In this context it identifies the ammunition or ammunition components the U.S. can accept from the other NATO member nations for use in U.S. weapons. To this end, various degrees of interchangeability have been established and are based on the form and fit of the ammunition component(s) in a weapon, the function and safety of the ammunition component(s) being fired by the weapon, and the ballistic performance of the projectile after being fired.

What is referred to as ammunition can be broken down into a fuze component, a projectile component, a propelling charge component, and a primer component. At this time, the U.S. can accept legal foreign projectile/propelling charge component combinations as long as both components are provided by a single country. The fuze component must then be provided by the same country providing the projectile/propelling charge combination or legal U.S. fuzes may be used on the foreign projectile.

The following information specifies which primers are legal and the projectile/propelling charge combinations and fuzes and the conditions under which they are legal for use in the appropriate U.S. weapon(s). The first paragraph will concern primers, the subsequent paragraphs up to and including a matrix interchangeability table/chart will concern projectile/propelling charge combinations, and the paragraph(s) following the table up to the last paragraph will concern fuzes. The final paragraph of the section will contain any additional information necessary to use the allowable foreign ammunition components.

<u>Primer(s) required</u>: Only the U.S. M82 primer is authorized for use in U.S. Cannons M185, M199 and M284.

<u>Definitions of country abbreviations in matrix chart headings:</u>

BE: BELGIUM
CA: CANADA
DA: DENMARK
FR: FRANCE
GE: GERMANY

NL: NETHERLANDS
NO: NORWAY
PO: PORTUGAL
SP: SPAIN
TU: TURKEY

GR: GREECE UK: UNITED KINGDOM IT: ITALY US: UNITED STATES

NOTE: The M795 projectile and the XM777 howitzer have not been evaluated for interchangeability.

Please note that any country abbreviations depicted in the pictures to the left of the format/symbol below are for illustrative purposes only.

#### Explanation of heading box symbols in the matrix chart:

BE

A clear heading box; that is, a box with nothing in addition to the country abbreviation, denotes that this particular nation has the specified weapon and agrees with all of the data inserted in the chart by the nation whose heading box contains an asterisk; therefore, this nation has not made its own charts for the specified weapon system and will take its data from the nation whose heading box contains an asterisk.

US\*

A heading box with an asterisk denotes that this particular nation has the specified weapon system and provided the data reflected in the chart.

A heading box crossed by two diagonals denotes that this particular nation has the specified weapon, but does not agree, in part or in total, with the data inserted in the chart by the nation whose heading box contains an asterisk; therefore, this nation will use data found on another chart not contained in this firing table.



A cross hatched heading box denotes that this particular nation does not have the specified weapon.

#### Explanation of information in the matrix chart:

The meaning of each symbol pertaining to the level of safety and assessed ballistic performance is summarized at the bottom of each page of the interchangeability table. The complete definitions of all possible symbols are presented below:



A clear cell showing a projectile(s)/propelling charge(s) combination(s) containing a diagonal with no black dots denotes the particular nations ammunition is safe for use in the specified weapon without additional restrictions to those existing for equivalent U.S. ammunition and the performance of the particular nation's ammunition is a ballistic match to the U.S. projectile/(s)/propelling charge(s) combination(s) in the same row when using the aiming data contained in this firing table. A shaded instead of a clear cell denotes that the particular nation's ammunition is safe for use in the specified weapon with restrictions additional to those existing for equivalent U.S. ammunition and the ammuni-

tion is not authorized for training purposes.





A clear cell showing a projectile(s) propelling charge(s) combination(s) containing a diagonal with one black dot denotes the particular nation's ammunition is safe for use in the specified weapon without additional restrictions to those existing for equivalent U.S. ammunition and the performance of the particular nation's ammunition is accurate to within 1% of range compared to the U.S. projectile(s)/propelling charge(s) combination(s) in the same row when using the aiming data contained in this firing table. A shaded instead of a clear cell denotes that the particular nation's ammunition is safe for use in the specified weapon with restrictions additional to those existing for equivalent U.S.

ammunition and the ammunition is not authorized for training purposes.





A clear cell showing a projectile(s)/propelling charge(s) combination(s) containing a diagonal with two black dots denotes the particular nation's ammunition is safe for use in the specified weapon without additional restrictions to those existing for equivalent U.S. ammunition and the performance of the particular nation's ammunition is accurate to within 5% of range compared to the U.S. projectile(s) propelling charges(s) combination(s) when using the aiming data contained in this firing table A nation's ammunition is safe for use in the specified weapon with restrictions additional to those existing for equivalent U.S. ammunition and the ammunition is not authorized for training purposes.





A completely empty cell either clear or shaded is listed in a column of a country that possesses the specified weapon and agrees with all of the data inserted in the chart; that is a column with a clear heading box. An empty cell denotes the particular nation does not possess projectile(s) and/or propelling charge(s) comparable to those listed in the same row, agrees with the interchangeability data for the other projectile(s) propelling charge(s) combinations(s) in the same row and is willing to accept the combination(s) from the appropriate countries for use in the specified weapon. A clear cell denotes acceptance of the combination(s) at the level of safety listed in the appropriate cell of the same row. A

shaded cell denotes acceptance of the combination(s) in the cell of the same row, the particular nation's ammunition is safe for use in the specified weapon with restrictions additional to those existing for equivalent U.S. ammunition and the ammunition is not authorized for training purposes; this is the interpretation no matter if the cell of the other country is clear. Aiming data must be supplied by the other country providing the ammunition.



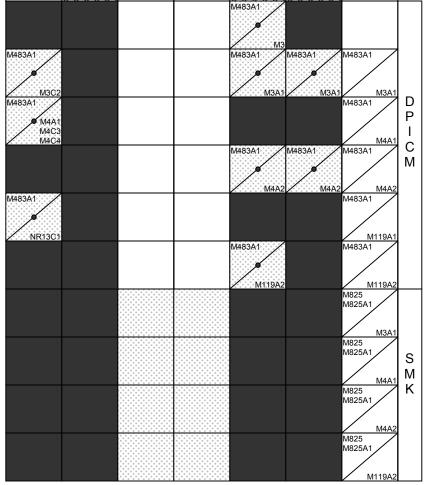
A completely black cell means do not use the particular nation's ammunition in the specified weapon because no comparable ammunition exists in the particular nation. This particular nation does not agree to fire the other projectile(s) propelling charge(s) combinations(s) in the same row or the particular nation's

ammunition is not safe to fire.

# GR BE CA DA M483A1 M483A1 M483A1 M3A1 M3A1BG M483A1 D M483A1 Ρ M4A С M483A1 Μ M4A2 M483A1 M119A2 M825 M825 S Μ M4A Κ M825 M825 M119A SAFE TO FIRE WITH NATIONAL RESTRICTIONS SAFETY: BALLISTIC MATCH **BALLISTICS**: **HEADINGS**: BE POSSESS WEAPON, AGREE WITH DATA

NATO PROJECTILE/CHARGE INTERCHANGEABILITY IN THE

# 155MM HOWITZER M109A1/A2/A3/A4 SELF-PROPELLED (M185 CANNON) NL NO PO SP TU UK US\*



DEEMED INTERCHANGEABLE BUT EITHER LACKING CERTIFICATION OR REQUIRING ADDITIONAL RESTRICTION

RADIAL ERROR IN IMPACT LESS THAN 1% OF RANGE

POSSESS WEAPON, DO NOT AGREE WITH DATA

DO NOT USE OR NOT APPLICABLE

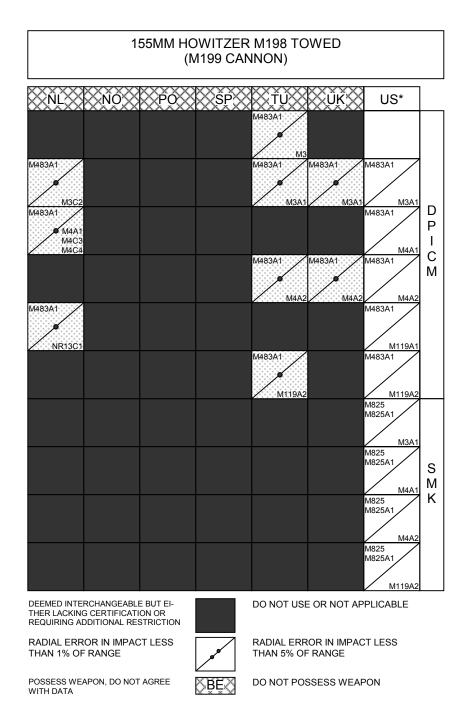
RADIAL ERROR IN IMPACT LESS THAN 5% OF RANGE

DO NOT POSSESS WEAPON

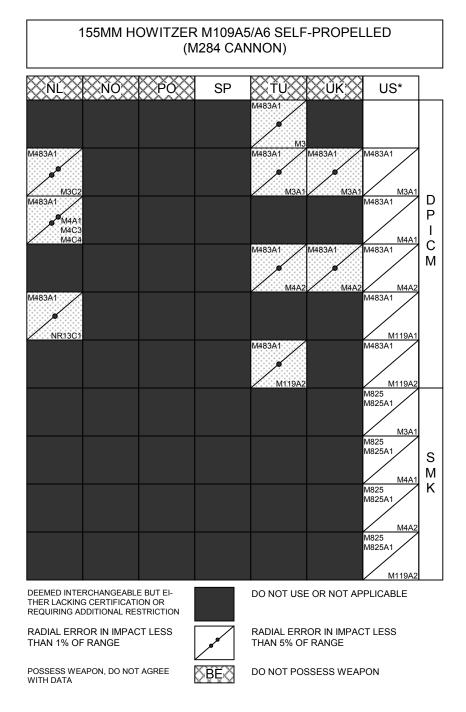
XIII

# GR M483A1 M483A1 M3A1 M3A1BG M483A1 D M483A1 Ρ С M483A1 Μ M4A2 M483A1 M119A2 M825 M825 S Μ M4A Κ M825 M825 M119A SAFE TO FIRE WITH NATIONAL RESTRICTIONS SAFETY: BALLISTIC MATCH **BALLISTICS**: **HEADINGS**: POSSESS WEAPON, AGREE WITH DATA BE

NATO PROJECTILE/CHARGE INTERCHANGEABILITY IN THE



# NATO PROJECTILE/CHARGE INTERCHANGEABILITY IN THE M483A1 M483A1 M3A1 M3A1BG M483A1 D M483A1 Ρ С M483A1 M483A1 Μ M4A2 M119A2 M825 M825 S Μ M4A Κ M825 M825 M119A SAFE TO FIRE WITH NATIONAL RESTRICTIONS SAFETY: BALLISTIC MATCH **BALLISTICS**: **HEADINGS**: POSSESS WEAPON, AGREE WITH DATA BE BE(



XVII

#### Fuze(s) allowed:

On foreign M483A1 projectiles:

On Belgium (BE) provided M483A1 projectiles, only Belgium (BE) provided M577 or M577A1 MTSQ fuzes and all currently fielded U.S. fuzes authorized for use on the U.S. M483A1 projectile are legal.

On Canada (CA) provided M483A1 projectiles, only Canada (CA) provided M577A1 MTSQ fuzes and all currently fielded U.S. fuzes authorized for use on the U.S. M483A1 projectile are legal.

On Netherlands (NL) provided M483A1 projectiles, only Netherlands (NL) provided M577 or M577A1 MTSQ fuzes and all currently fielded U.S. fuzes authorized for use on the U.S. M483A1 projectile are legal.

On Turkey (TU) provided M483A1 projectiles, only Turkey (TU) provided M577 or M577A1 MTSQ fuzes and all currently fielded U.S. fuzes authorized for use on the U.S. M483A1 projectile are legal.

On United Kingdom (UK) provided M483A1 projectiles, only United Kingdom (UK) provided M577 MTSQ fuzes and all currently fielded U.S. fuzes authorized for use on the U.S. M483A1 projectile are legal.

All fuzes listed and used as specified above are considered safe to use and therefore the overall safety associated with a given fuze/projectile/charge combination is dictated by and is denoted by the projectile/charge combinations listed in the preceding matrices.

On foreign M825 projectiles:

On Denmark (DA) provided M825 projectiles, only currently fielded U.S. fuzes authorized for use on the U.S. M825 projectile are legal.

#### Additional information required:

Belgium (BE) and Turkey (TU) provided propelling charge M3 is equivalent to the U.S. M3 which is obsolete; the U.S. propelling charge M3A1 information in the firing table can be used if at first the following muzzle velocity corrections are added to the M3A1 standard muzzle velocities:

<u>Charge</u>	Muzzle Velocity Corre	ection (m/s) by	<u>Weapon</u>
	M109A1/A1B/A2/A3/A3B/A4	<u>M198</u>	M109A5/A6
1G	N/A	N/A	N/A
2G	N/A	N/A	N/A
3G	-3	-3	-3
4G	0	0	0
5G	-3	-3	-3

XVIII

# 3. Weapon Characteristics

A. 155mm, Howitzer, Cannons: M185, M199, M284 and XM776.

Character of rifling, right hand twist

1 turn in 20 calibers

B. Howitzer, Medium, Self-propelled, 155mm, M109A1 series, M198, M109A5 and M109A6, and XM777  $\,$ 

Howitzer	M109 Series*	M198	M109A5 and M109A6	XM777**
Cannon	M185	M199	M284	XM776
Total Traverse - mils	6400	L 400 R 400	6400	L 400 R 400
Maximum Elevation - mils	1300	1275	1344	1275
Minimum Elevation - mils	-36	-75	-38	-43
Change in elevation for one turn of elevating handwheel – mils	5	10	5	10
Change in traverse for one turn of traversing handwheel – mils	10	10	10	10

<sup>\*</sup>Applies to Howitzers M109A1, M109A1B, M109A2, M109A3, M109A3B, and M109A4.

<sup>\*\*</sup>There is a minimum mechanical quadrant elevation of 300 mils when firing propelling charges M119 and M203 series and M232, charges 4H and 5H. See pertinent weapon TM for details

# 4. Projectile/Fuze Combinations and Mean Weights

Projectile	Fuze		Fuze	Weight of Fuzed Projectile (lb)		
	Type	Model	Weights	3 sq	4 sq	5 sq
		M557	2.2	103.1	104.2	105.3
	$PD^{(a)}$	M572	2.3	103.2	104.3	105.4
	PD\	M739	1.5	102.4	103.5	104.6
		M739A1	1.5	102.4	103.5	104.6
	4.)	M582	1.5	102.4	103.5	104.6
	MTSQ <sup>(b)</sup>	M582A1	1.5	102.4	103.5	104.6
HE M705		M564	2.1	103.0	104.1	105.2
HE, M795	ET <sup>(b)</sup>	M767	1.1	102.0	103.1	104.2
	EI	M767A1	1.1	102.0	103.1	104.2
	VT	M732	1.8	102.7	103.8	104.9
		M732A2	1.2	102.1	103.2	104.3
	MOFA <sup>(c)</sup>	M782	1.7	102.6	103.7	104.8
	CP <sup>(a)</sup>	MK399 MOD 1	2.7	103.6	104.7	105.8

- (a) These fuzes have two modes: quick mode and delay mode.
- (b) These fuzes have a point detonating (PD) setting.
- (c) This fuze has four modes: quick, delay, proximity (VT) and electronic time (ET).

# 5. Equivalent Service Rounds

The following may be used to compute the equivalent full charge fatigue and erosion effects for Projectile, HE, M795. The fatigue effects are used to determine the condemnation life for the M185, M199, M284 and XM776 cannons. The erosion effects are used to compute the number of equivalent full charge service rounds to enter the table of approximate losses in muzzle velocity.

		Fati	igue Life	Erosio	on Life
		No. of rds	Equivalent	No. of rds	Equivalent
Charge	Zone	equivalent	fatigue	equivalent	erosion
Charge	Zonc	in fatigue	effect in	in erosion	effect
		to one full	decimals	to one full	in decimals
		chg		chg	
		Cannon, 15	5mm Howitzer	, M185 <sup>(a)</sup>	
M119A1	8	1.00	1.00	1.00	1.00
M119A2	7R	1.33	0.75	1.00	1.00
M4A2	7W	1.33	0.75	3.33	0.30
M4A2	6W	4.00	0.25	8.33	0.12
M4A2	5W	4.00	0.25	25.00	0.04
M4A2	4W	4.00	0.25	(b)	(b)
M3A1	5G	4.00	0.25	25.00	0.04
M3A1	4G	4.00	0.25	(b)	(b)
M3A1	3G	4.00	0.25	(b)	(b)
	Cannor	ns, 155mm Ho	witzer, M199, <sup>(</sup>	c) M284, (d) XM	1776
M203A1	8R	1.00	1.00	1.00	1.00
M119A1	8	4.00	0.25	2.00	0.50
M119A2	7R	4.00	0.25	2.00	0.50
M4A2	7W	6.67	0.15	6.67	0.15
M4A2	6W	20.00	0.05	14.29	0.075
M4A2	5W	20.00	0.05	14.29	0.075
M4A2	4W	20.00	0.05	14.29	0.075
M4A2	3W	20.00	0.05	14.29	0.075
M3A1	5G	20.00	0.05	14.29	0.075
M3A1	4G	20.00	0.05	14.29	0.075
M3A1	3G	20.00	0.05	14.29	0.075

(SEE FOOTNOTES ON NEXT PAGE)

#### **FOOTNOTES**

- (a) Cannon, M185 has dual condemnation criteria of 6375 EFC (fatigue) rounds or 0.150 inches wear (6.250 inches bore diameter) taken at 40.0 inches forward of the rear face of the tube, whichever, comes first.
- (b) Cannon, M185 has no significant wear for these charges.
- (c) Cannon, M199 has a condemnation criterion of 0.105 inches wear (6.205 inches bore diameter) taken at 41.75 inches forward of the rear face of the tube. Fatigue life does not apply to cannon, M199.
- (d) Cannon, M284 has a dual condemnation criteria of 2650 EFC (fatigue) rounds or 0.105 inches wear (6.205 inches bore diameter) taken at 41.75 inches forward of the rear face of the tube, whichever comes first.

## 6. Fatigue

The process of metal fatigue is caused by the repeated application of firing pressures or high stresses from various charges and sustained tube temperatures. Each round of ammunition fired through a cannon reduces tube life due to metal degradation.

For cannon tubes condemned based on metal fatigue, the effective full charge rounds fired will be used to determine remaining tube life and will be used as the foremost criteria in condemnation. However, all tubes should be constantly checked and possibly condemned based on the presence of cracks, defects and other damage which make the cannon unsafe to fire (as determined from borescope, comparison checks and visual inspection). Detailed information on fatigue and tube condemnation is contained in TM 9-1000-202-14. This applies to the following cannons: M185, M199, M284 and XM776.

#### 7. Erosion

The process of erosion removes metal from the bore surface of a cannon by the movement of hot gases and residues generated from the burning of the propellant as well as by the passing of the projectile through the bore. Detailed information on erosion is contained in TM 9-1000-202-14.

For tubes exhibiting uniform wear, the loss in muzzle velocity may be estimated from measurements taken in accordance with instructions given in the publication referred to above. For tubes exhibiting irregular wear, as evidenced principally by stripped lands, the loss in muzzle velocity cannot be estimated reliably from wear measurements. The latter tubes will continue to fire accurately but their velocity levels should be inferred from registration firings or determined using a muzzle velocity measuring device.

The following tables may be used as a guide in estimating muzzle velocity departures from the firing table standard due to uniform wear in cannons: M185 and M199, M284 and XM776.

**Approximate Losses in Muzzle Velocity** 

155mm Howitzer, Cannons: M199, M284 and XM776; Charges: 3G, 4G and 5G

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
100	6.107	0.2
200	6.114	0.4
300	6.121	0.4
400	6.127	0.5
500	6.134	0.6
600	6.141	0.6
700	6.147	0.7
800	6.154	0.7
900	6.160	0.8
1000	6.166	0.8
1100	6.171	0.9
1200	6.176	0.9
1300	6.180	1.0
1400	6.184	1.1
1500	6.188	1.2
1600	6.191	1.3
1700	6.194	1.4
1800	6.197	1.5
1900	6.199	1.7
2000	6.200	1.8
2100	6.201	2.1
2200	6.202	2.4
2300	6.203	2.8
2400	6.204	3.3
2500	6.205	4.1

<sup>\*</sup> The wear measurement is taken 41.75 inches forward of the rear face of the tube.

# Approximate Losses in Muzzle Velocity

# 155mm Howitzer, Cannons: M199, M284 and XM776; Charges: 3W, 4W, 5W, 6W and $7\mathrm{W}$

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
100	6.107	0.3
200	6.114	0.5
300	6.121	0.7
400	6.127	0.8
500	6.134	0.9
600	6.141	1.1
700	6.147	1.2
800	6.154	1.3
900	6.160	1.4
1000	6.166	1.5
1100	6.171	1.6
1200	6.176	1.7
1300	6.180	1.9
1400	6.184	2.0
1500	6.188	2.1
1600	6.191	2.3
1700	6.194	2.5
1800	6.197	2.7
1900	6.199	2.9
2000	6.200	3.2
2100	6.201	3.5
2200	6.202	3.9
2300	6.203	4.4
2400	6.204	5.0
2500	6.205	5.8

<sup>\*</sup> The wear measurement is taken 41.75 inches forward of the rear face of the tube.

Approximate Losses in Muzzle Velocity

155mm Howitzer, Cannons: M199, M284 and XM776; Charges: 7R and 8S

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
100	6.107	0.4
200	6.114	0.8
300	6.121	1.2
400	6.127	1.5
500	6.134	1.9
600	6.141	2.3
700	6.147	2.7
800	6.154	3.1
900	6.160	3.5
1000	6.166	3.8
1100	6.171	4.1
1200	6.176	4.4
1300	6.180	4.7
1400	6.184	5.1
1500	6.188	5.6
1600	6.191	6.0
1700	6.194	6.4
1800	6.197	7.0
1900	6.199	7.3
2000	6.200	7.6
2100	6.201	7.8
2200	6.202	8.1
2300	6.203	8.3
2400	6.204	8.6
2500	6.205	9.0

<sup>\*</sup> The wear measurement is taken 41.75 inches forward of the rear face of the tube.

# Approximate Losses in Muzzle Velocity

155mm Howitzer, Cannon M185; Charges: 3G, 4G and 5G

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
200	6.109	0.6
400	6.118	0.8
600	6.122	1.0
800	6.128	1.1
1000	6.134	1.2
1200	6.140	1.3
1400	6.146	1.4
1600	6.152	1.5
1800	6.157	1.6
2000	6.163	1.7
2200	6.168	1.8
2400	6.172	1.9
2600	6.177	2.0
2800	6.181	2.1
3000	6.186	2.3
3200	6.190	2.4
3400	6.193	2.6
3600	6.196	2.9
3800	6.200	3.1
4000	6.203	3.5
4200	6.206	3.9
4400	6.208	4.5
4600	6.210	5.3
4800	6.212	6.4
5000	6.214	8.2

<sup>\*</sup> The wear measurement is taken 39.6 inches forward of the rear face of the tube.

Approximate Losses in Muzzle Velocity

155mm Howitzer, Cannon M185; Charges: 3W, 4W, 5W, 6W and 7W

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
200	6.109	0.7
400	6.118	1.2
600	6.122	1.5
800	6.128	1.8
1000	6.134	2.1
1200	6.140	2.3
1400	6.146	2.5
1600	6.152	2.7
1800	6.157	2.9
2000	6.163	3.0
2200	6.168	3.2
2400	6.172	3.4
2600	6.177	3.7
2800	6.181	3.9
3000	6.186	4.2
3200	6.190	4.4
3400	6.193	4.8
3600	6.196	5.1
3800	6.200	5.6
4000	6.203	6.1
4200	6.206	6.7
4400	6.208	7.4
4600	6.210	8.4
4800	6.212	9.6
5000	6.214	11.2

<sup>\*</sup> The wear measurement is taken 39.6 inches forward of the rear face of the tube.

# Approximate Losses in Muzzle Velocity

# 155mm Howitzer, Cannon M185; Charge 7R

Number of equivalent full service rounds (erosion)	Wear measurement (inches)*	Muzzle Velocity Loss (m/s)
0	6.100	0.0
200	6.109	0.9
400	6.118	1.7
600	6.122	2.5
800	6.128	3.4
1000	6.134	4.2
1200	6.140	5.0
1400	6.146	5.9
1600	6.152	6.7
1800	6.157	7.4
2000	6.163	8.0
2200	6.168	8.6
2400	6.172	9.3
2600	6.177	10.0
2800	6.181	10.7
3000	6.186	11.3
3200	6.190	12.0
3400	6.193	12.6
3600	6.196	13.2
3800	6.200	13.7
4000	6.203	14.3
4200	6.206	15.0
4400	6.208	15.6
4600	6.210	16.0
4800	6.212	16.4
5000	6.214	16.8

<sup>\*</sup> The wear measurement is taken 39.6 inches forward of the rear face of the tube.

## 8. Explanation of Tables

Firing tables contain data based on standard and nonstandard trajectories for a given weapon and combination of projectile, fuze and propelling charge. A standard trajectory fired at a given elevation is one theoretically existing under arbitrarily chosen conditions of weather and materiel. A nonstandard trajectory is one existing under conditions of weather and materiel differing from the arbitrarily chosen standard conditions. Standard firing data and the corrections needed to compensate for significant variations from standard conditions may be determined from the firing tables. The following variations from standard conditions were used in preparing the firing tables.

Muzzle Velocity (decrease and increase)	10 m/s
Range Wind (head and tail)	50 knots
Cross Wind (left and right)	50 knots
Ballistic Air Temperature (decrease and increase)	10 percent
Ballistic Air Density (decrease and increase)	10 percent
Projectile Weight (decrease and increase)	1 square
Angle of Site (+ site and - site)	50 mils

The ranges in the tables are distances along the surface of a sphere concentric with the earth and passing through the muzzle of the tube. The point at which the descending branch of the trajectory intersects this concentric sphere is designated the level point. Targets at zero height are at the level point. Other targets are considered to be directly above or below the level point.

In general, plus signs are omitted from these tables. Therefore, numbers without signs are to be considered positive. Negative quantities are shown with a minus sign.

A. The contents of these tables are described below.

Table

- A Line Number of Meteorological Message Digits which represent preselected standard heights. The height zones represented by the line numbers are given as a function of quadrant elevation. If quadrant elevation is known, or can be reasonably inferred, Table A should be used for line number. Otherwise, line number may be obtained from Table B as a function of range and height of target above gun.
- B Complementary Range Line Number Range corrections corresponding to the complementary angle of site, and line numbers of the meteorological message. The range corrections are tabulated as a function of range and height of target above the gun. For a target at some height other than zero, the complementary range correction is added to the chart range to obtain a range to be used for entering Table F. The line number is tabulated in the margins of the table. Each particular line number is applicable to all target points lying between the heavy dividing lines containing that number.

## Table

- C Components of a One Knot Wind A wind of one knot, blowing from the chart direction, divided into two components; the cross wind, perpendicular to the plane of fire, and the range wind, parallel to the plane of fire. These components are to be multiplied by the wind speed from the appropriate line of the met message to obtain the total cross and range wind to be used in the particular fire problem.
- D Air Temperature and Density Corrections Corrections added to the ballistic air temperature and the ballistic air density to compensate for the difference in altitude between the firing battery and the meteorological station.
- E Effects on Muzzle Velocity Due to Propellant Temperature The changes in muzzle velocity produced by variations in the propellant temperature. Whenever possible, the temperature of the propellant itself should be measured, rather than assuming that it is the same as the air temperature. The velocity effect obtained from this table is converted to a range correction by use of column 10 or 11 in Table F.
- F Basic Data and Correction Factors A compilation of the basic data required for the solution of the gunnery problem. The data are arranged in 19 columns, each column of which is a function of the listed range. Since all of these quantities have been computed for a target at the level point, Table F applies primarily to targets at the same altitude as the gun. Sufficient information may be found to produce a graze burst on a target at the level point. For targets above or below the level point, Table F is entered with a range first determined from Table B.

Following is an explanation of the content of each column of Table F.

#### Column

- 1–9 Basic Data
- 1 Range The distance, measured on the surface of a sphere concentric with the earth, from the muzzle to a target at the level point.
- Elev (Elevation) The angle of the gun in the vertical plane required to reach the range tabulated in column 1. The maximum elevation shown represents the highest angle at which predictable projectile flight is possible under standard conditions of met and materiel. This number varies with nonstandard conditions of met and materiel and is particularly sensitive to changes in range wind. Some of the elevations listed may exceed the maximum weapon elevation, but they can be achieved through modification of the weapon position.

#### Table Column

- F
- 3 FS for Graze Burst (Fuze Setting for a Graze Burst) Numbers to be set on fuzes MTSQ, M582 and ET, M767 that will produce a graze burst at the level point when firing under standard conditions. This setting will produce a graze burst at the time of flight listed in column 7.
- 4 DFS per 10 M Dec (Change in Fuze Setting for 10 Meters Decrease in Height of Burst) The adjustment to fuze setting required to decrease the height of burst 10 meters. To increase the height of burst 10 meters, change the sign of the value given in the table.
- 5 DR per 1 Mil D Elev (Change in Range for One Mil Change in Elevation) Adjustment in range corresponding to a one mil change in the angle of elevation.
- 6 Fork The change in the angle of elevation necessary to produce a change in range at the level point equivalent to four probable errors in range.
- 7 Time of Flight The projectile travel time, under standard conditions, from the muzzle to the level point at the range in column 1. Time of flight is used as fuze setting for the following fuzes: MTSQ, M582 and ET, M767.
- 8-9 Azimuth Corrections The angular changes in the horizontal plane necessary to compensate for a departure of the projectile from the vertical plane of fire. Any deviation of the projectile from the vertical plane of fire is considered a deflection effect. The corrections tabulated in columns 8 and 9 are used in determining the change in traverse angle needed to offset the effects of drift and cross wind, two of the phenomena that create a deflection effect. Although drift exists in a standard trajectory, it is assumed, for simplicity, to be a deflection effect.
- 8 Drift (Corr to L) (Azimuth Corrections to Compensate for Drift) Because of the right hand twist of the tube, the drift of the projectile is to the right of the vertical plane of fire. This drift must be compensated for by a correction to the left.
- 9 CW of 1 Knot (Azimuth Corrections to Compensate for a Cross Wind of 1 Knot) Ballistic cross wind components may be from either the right or the left, and the weapon must be traversed into the cross wind to compensate for the deflection effect to the right for a cross wind blowing from the right of the plane of fire, to the left for a cross wind blowing from the left. In the wind components, Table C, the directions of the azimuth corrections, right and left, are indicated by the letters R and L.

Table Column

F 10-19

Range Correction Factors – Corrections to range to compensate for the effects of nonstandard conditions. Although the corrections given in columns 10 through 19 are tabulated for a unit decrease and a unit increase in the nonstandard conditions, they are actually mean values based on an expected decrease and increase in the nonstandard conditions. The columns of corrections for an increase in the nonstandard conditions are shaded to aid in identification. A tail wind is considered to be an increase in wind for this purpose.

- 10-11 Muzzle Velocity 1 M/S (Range Corrections for a Decrease (Increase) of One Meter per Second in Muzzle Velocity) Corrections to range to compensate for variations from the standard muzzle velocity that appears on the title page for each charge.
- 12-13 Range Wind 1 Knot (Range Corrections for a Head Wind (Tail Wind) of 1 Knot). In computing a standard trajectory it is assumed that no wind is blowing. In the wind component's table, Table C, a head wind is designated by the symbol H and a tail wind, by T. If the symbol is H, enter column 12 and if T, enter column 13.
- 14-15 Air Temp 1 Pct (Range Corrections for a Decrease (Increase) of One Percent in Air Temperature). Standard air temperature at sea level is 15.0 degrees Centigrade (59.0° F). On the absolute scale, the equivalent temperature is 288.2 degrees Kelvin. Standard air temperatures at finite heights above sea level have been established as part of the ICAO standard atmosphere (U.S. standard atmosphere, 1962). Temperature at any given height is recorded and transmitted as a percent of the standard absolute temperature for that height. The drag that a projectile encounters is a function of Mach number (ratio of the velocity of the projectile to the velocity of sound). The drag varies appreciably with Mach number, particularly near Mach one where the velocity of the projectile and the velocity of sound are equal. Since the velocity of sound is a function of air temperature, it follows that changes in air temperature will change the Mach number, thereby changing the drag and consequently the range. This effect is sometimes called the elasticity effect. It should not be confused with the distinctly separate effect which air temperature produces through its influence on air density.

#### Table Column

F 16-17

Air Density 1 Pct (Range Corrections for a Decrease (Increase) of 1 Percent in Air Density). Standard air density at sea level is 1225.0 grams per cubic meter. Standard air densities at finite heights above sea level have been established as part of the ICAO Standard Atmosphere (U.S. Standard Atmosphere, 1962). Air density at any given height is recorded and transmitted as a percent of the standard absolute density for that height. Air density affects the drag exerted upon the projectile. Therefore, changes in air density will change the drag and consequently the range.

18-19 Proj Wt of 1 Sq (4 Sq Std) (Range Corrections for a Decrease (Increase) of 1 Square in Projectile Weight). The standard projectile weight for this table is 103.5 pounds. Correction should be made for difference in projectile weight as indicated by the number of squares. A decrease in projectile weight increases the muzzle velocity, the effect of which is to lengthen the range. But it also decreases the ballistic coefficient, the effect of which is to shorten the range. The combined effect may be either an increase or a decrease in range depending upon which individual effect is predominant. Under certain conditions these two effects tend to cancel each other.

G Supplementary Data – A table of supplementary data containing probable error information and certain trajectory elements.

#### Column

- 1 Range (See Table F)
- 2 Elevation (See Table F)
- 3–7 Probable Errors These probable errors were computed from uncorrected firing data obtained from all available sources and are estimates of the average probable errors. On a given occasion the observed probable error may be greater or less than the average probable error in accordance with the laws of probability. The probable errors indicate the round-to-round variation of a single piece fired on a single occasion and do not reflect the variation of the mean of either a single piece fired on different occasions or different pieces fired on the same occasion.

## Table Column

G

3

- R (Probable Error in Range to Impact) A value which when added to and subtracted from the expected range, will produce an interval, along the line of fire, that should contain 50 percent of the rounds fired. Variations in muzzle velocity, in angle of departure, and in total drag during flight all contribute to the probable error in range to impact. For those projectiles that are fired with rocket assist, variations in time to the delayed ignition and in thrust performance of the rocket motor are combined with those parameters mentioned above to produce the probable error in range.
- D (Probable Error in Deflection at Impact) A value which, when added both to the right and to the left of the expected impact point, will produce an interval, perpendicular to the line of fire at the expected range, that should contain 50 percent of the rounds fired. Variations in angle of departure and various aerodynamic terms produce dispersion in deflection at impact.
- HB (Probable Error in Height of Burst) A value which, when added to and subtracted from the expected height of burst, will produce a vertical interval that should contain 50 percent of the rounds fired. The factors that contribute to the probable error in height of burst are not only those that produce dispersion in range to impact, but also those factors attributed to variations in the functioning of the time fuze.
- TB (Probable Error in Time to Burst) A value which, when added to and subtracted from the expected time to burst, will produce a time interval that should contain 50 percent of the rounds fired.
- RB (Probable Error in Range to Burst) A value which, when added to and subtracted from the expected range to burst, will produce an interval, along the line of fire, that should contain 50 percent of the rounds fired. The factors that contribute to the probable error in range to burst are not only those that produce dispersion in range to impact, but also those factors attributed to variations in the functioning of the time fuze.
- 8 Angle of Fall The least angle measured clockwise from the horizontal to a line tangent to the trajectory at the level point.

Table Column

- G 9 Cot Angle of Fall (Cotangent of Angle of Fall) The trigonometric function of the angle of fall given in column 8.
  - 10 TML VEL (Terminal Velocity) The speed of the projectile at the level point.
  - MO (Maximum Ordinate) The maximum height above the gun of the trajectory fired, under standard conditions, to the range in column 1.
  - 12-13 Comp Site for Angle of Site (Complementary Angle of Site for Each Mil Angle of Site) The correction which must be added algebraically to each mil of actual angle of site to compensate for the nonrigidity of the trajectory. Use column 12 when the target is above the gun in altitude, column 13 when the target is below the gun.
- H Rotation Range (Corrections to Range, in Meters, to Compensate for the Rotation of the Earth) Range corrections required to offset the effects on range produced by the rotation of the earth.
- I Rotation Azimuth (Corrections to Azimuth, in Mils, to Compensate for the Rotation of the Earth) - Azimuth corrections required to offset the effects on deflection produced by the rotation of the earth.
- J Fuze Correction Factors Corrections to fuze setting to compensate for the effects of nonstandard conditions. The data are arranged in 11 columns, each of which gives values for the various quantities as a function of the fuze setting tabulated in the first column. Since all of these quantities have been computed for a target at the level point, Table J applies primarily to targets at the same altitude as the gun. Sufficient information may be found to produce a graze burst on a target at the level point. For targets above or below the level point, Table J is entered with a fuze setting determined from Table F. The exact procedure to follow for either case is explained in the examples of problems in paragraph 11. Although the corrections given in columns 2 through 11 are tabulated for a unit decrease and a unit increase in the nonstandard conditions, they are actually mean values based on an expected decrease and increase in the nonstandard conditions. A tail wind is considered to be an increase in wind for this purpose.

Following is a listing of the contents of Table J. For a detailed explanation of columns 2 through 11, see the explanation of columns 10 through 19 in Table F. In these explanations, substitute fuze corrections for range corrections.

Table	Column	
J	1	FS (Fuze Setting)
	2-3	Muzzle Velocity 1 M/S (Fuze Corrections for a Decrease (Increase) of 1 Meter per Second in Muzzle Velocity)
	4-5	Range Wind 1 Knot (Fuze Corrections for a Head Wind (Tail Wind) of 1 Knot)
	6-7	Air Temp 1 Pct (Fuze Corrections for a Decrease (Increase) of 1 Percent in Air Temperature)
	8-9	Air Density 1 Pct (Fuze Corrections for a Decrease (Increase) of 1 Percent in Air Density)
	10-11	Proj Wt of 1 Sq (4 Sq Std) (Fuze Corrections for a Decrease (Increase) of 1 Square in Projectile Weight)

K Corrections to Fuze Setting – The amount to be added to or subtracted from the fuze setting of Fuze, MTSQ, M582 to obtain the fuze setting for Fuze, MTSQ, M564.

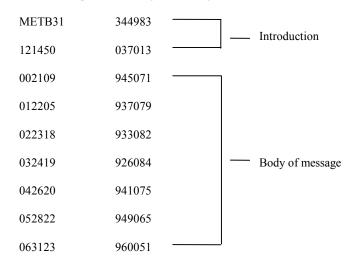
B. Appendices. Appendix A through Appendix K follow the main body of the table They contain trajectory charts for Projectile, HE, M795. Altitude in meters is plotted against range in meters for every 100 mils of elevation up to the maximum trailing angle. Time of flight, by five-second intervals, is marked on each trajectory.

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## 9. Explanation of Meteorological Message

A. Composition of Meteorological Message. The ballistic met message as described in STANAG 4061 (Edition No. 3), 19 May 1969, is divided into two parts – the introduction containing, primarily, identification information and the body of the message containing meteorological information. The introduction consists of two lines broken into four groups of letters and numbers and the body of the message consists of a sequence of up to sixteen lines, each broken into two groups of six digit numbers. The various parts of a met message are explained as follows:

Sample Meteorological Message



## (1) Introduction

- (a) Group 1– METB31
- Met Indicates that the transmission is a meteorological message.
- B Indicates that the message is a ballistic met message.
- 3 Indicates that the message is for surface-to-surface fire.
- Indicates the octant of the globe in which the meteorological message is applicable, and is numerically coded as follows:

Code Number	Octant
0	North Latitude, 0° to 90° West Longitude
1	North Latitude, 90° to 180° West Longitude
2	North Latitude, 180° to 90° East Longitude
3	North Latitude, 180° to 90° East Longitude
4	Not used
5	South Latitude, 0° to 90° West Longitude
6	South Latitude, 90° to 180° West Longitude
7	South Latitude, 1800° to 90° East Longitude
8	South Latitude, 90° to 0° East Longitude
9	Used for coded identification

## (b) Group $2 - 344983^*$

- Indicates the latitude of the center of the area of applicability expressed to the nearest tenth of a degree.
- 983 Indicates the longitude of the center of the area of applicability expressed to the nearest tenth of a degree. When the longitude is 100 degrees or greater (possible when in octant 1, 2, 6, or 7) the initial digit 1 is omitted.

### (c) Group 3 - 121450

- 12 Indicates the day of the month the period of the validity of the message begins.
- Indicates, to the nearest tenth of an hour in Greenwich Mean Time, the hour the period of validity begins.
- Indicates the duration of the period of validity in hours. For U.S. Armed Forces, the meteorological data are presumed valid until a later message is provided.

## (d) Group 4 - 037013

- 037 Indicates, in tens of meters, the altitude of the meteorological station or meteorological datum plane (MDP) above mean sea level.
- Indicates the atmospheric pressure at the MDP. This value is rounded to the nearest 0.1 percent of standard atmospheric pressure at sea level. When this value is 100 or greater, the initial digit 1 is omitted.

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<sup>\*</sup>When group 1 has code 9 for octant, group 2 identifies the area by name or code.

Thus, the introduction to the sample message indicates that it is a ballistic meteorological message applicable to surface fire in octant 1 of the globe. Specifically, it is applicable to an area whose center is latitude 34.4 degrees north and whose longitude is 98.3 degrees west. The message is valid on the 12th of the month starting at 1430 Greenwich Mean Time. The atmospheric pressure at the MDP, which is 370 meters above mean sea level, is 101.3 percent of standard at sea level.

(2) Body of the Message. All 16 lines of the body of the message have the same form. The initial line is identified by the first pair of digits (00) and deals with surface meteorological conditions. Each subsequent line furnishes information applicable to firings for which the maximum ordinate of the trajectory is equal to the standard height associated with the first pair of digits of the line. These two digits are the line number indicating the standard height relative to the MDP.

Line Number	Standard Height meters
00	0
01	200
02	500
03	1000
04	1500
05	2000
06	3000
07	4000
08	5000
09	6000
10	8000
11	10000
12	12000
13	14000
14	16000
15	18000

Because all of the lines in the body of the message have the same form, a detailed explanation of one line will serve as a sample for any line. Assume that the appropriate line number is 05.

- (a) Group 1 052822
  - 05 is the line number indicating the standard height relative to the MDP.
  - 28 is the direction from which the ballistic wind is blowing, measured clockwise from geographic north, transmitted in hundreds of mils.
  - is the ballistic wind speed to the nearest knot.

### (b) Group 2 - 949065

- 949 is the ballistic air temperature to the nearest 0.1 percent of standard. When this value is 100 or greater, the initial digit 1 is omitted.
- 065 is the ballistic air density to the nearest 0.1 percent of standard. When this value is 100 or greater, the initial digit 1 is omitted.

Thus, the applicable portion of the body of the meteorological message states that for a trajectory whose maximum ordinate is 2000 meters, the ballistic wind is blowing from 2800 mils at 22 knots, the ballistic air temperature is 94.9 percent of standard and the ballistic air density is 106.5 percent of standard.

B. Ballistic Atmosphere. As indicated above, each line of the body of the meteorological message contains the ballistic wind, ballistic air temperature and ballistic air density for the indicated height. When this height is zero, these quantities are the actual wind, air temperature and air density at the MDP. For other heights, there are certain effective mean values of the actual atmospheric structure, which are used in conjunction with the data given in the firing table to determine the effects of the actual atmospheric structure. These mean values are computed, at the meteorological station, to apply to a trajectory having a maximum ordinate exactly equal to a particular standard height. For firings where the maximum ordinate is not equal to one of the standard heights, it is sufficient to use the ballistic wind, temperature and density computed for that standard height which is nearest to the maximum ordinate of the firing.

A projectile following a trajectory whose maximum ordinate is equal to some particular standard height passes through layers of the atmosphere where winds are blowing in various directions and at various speeds. The ballistic wind for this standard height is that wind which is constant in speed and direction and which produces the same effect on the range, height and deflection of the projectile as the actual wind.

Definitions of ballistic air temperature and ballistic air density are essentially the same as that of ballistic wind, but differ in that there are, in these cases, no deflection effects. Trajectories for standard conditions are computed for an atmospheric structure in which the air temperature and air density decrease with increasing height according to the laws defining the ICAO Standard Atmosphere (U. S. Standard Atmosphere, 1962). The ratio of the actual air temperature to the standard air temperature, expressed as a percentage, is called the relative air temperature structure for which the relative air temperature is constant at all heights and which has the same effect on range as the actual structure. This constant relative air temperature is called the ballistic air temperature. Similarly, the ratio of the actual air density to the standard air density, expressed as a percentage, is called the relative air density. Corresponding to any actual density structure, there is a hypothetical density structure for which the relative air density is constant at all heights and which has the same effect on range as the actual structure. This constant relative air density is called the ballistic air density.

- C. Corrections to Temperature and Density. As stated, the heights referred to in the preceding discussion are heights above the MDP, which is the horizontal plane containing the meteorological station. Ballistic air temperature and ballistic air density must be corrected for the difference in altitude between the battery and the MDP. The necessary corrections are contained in Table D, Temperature and Density Corrections. The ballistic wind, however, is not corrected for the difference in altitude of the battery and MDP because, unlike air temperature and air density, wind does not follow a predictable variation with height.
- D. Types of Meteorological Message. Currently, two types of met messages (identified as 2 or 3) are in use. Each is adapted to a certain large class of guns and ammunition. The type 2 message is for surface-to-air firing, and the type 3 message is for surface-to-surface firing. For this firing table use type 3 message at all elevations of all charges.

#### 10. Problem

- A. General. Firing tables contain the data needed to determine the quadrant elevation and deflection that will produce detonation of the projectile at the target when firing under all conditions of weather and materiel. In the field, graphical equipment is utilized in conjunction with these tables to increase the speed of fire. The sample problem in paragraph 11 illustrates the numerical solution of the fire problem and thus does not incorporate the use of graphical equipment.
- B. Arithmetic Precision. In the computation of the problem that follows, certain rules and principles affecting the arithmetic precision of the solution are stated or implied. These are guidelines only. Greater arithmetic precision could be achieved by more stringent rules. However, the improvement in the effectiveness of fire would generally be negligible and certainly not justify the added complexity. The following list presents various rules and principles affecting the arithmetic precision.
  - Interpolation in a given table cannot result in a value with more decimal places than the values listed in that table.
  - Chart range to a target is normally determined to the nearest 10 meters and chart direction (deflection) to the nearest mil.
  - The NATO met message describes wind to the nearest 100 mils of direction and to the nearest 1 knot of speed. Computed values of the chart direction of the wind, and the range and cross wind components, should be expressed to the nearest 100 mils and to the nearest knot.
  - The expression and application of a velocity variation from standard should be to the nearest tenth of a meter per second.

## C. Round-off Rules

(1) General. When rounding off to the nearest whole number, round to the nearest even number when the value ends in 0.5; when rounding to the nearest tenth, round to the nearest even tenth when the value ends in 0.05. This same principle applies to rounding off to the nearest ten and to the nearest hundred. Round-off in the sample problem is expressed by  $\Rightarrow$ .

(2) Firing Table Data

(2)	riffing rable Data		T 4 1 7 7 7 7		
	Argume		Extracted Value		
Table	Enter With	Expressed to the Nearest	Value Obtained	Expressed to the Nearest	
A	Quadrant Elevation	As Given	Line Number	As Listed	
В	Chart Range Vertical Interval	100 m 1 m (a)	Complementary Range	As Listed	
В	Chart Range Vertical Interval	100 m 100 m	Line Number	As Listed	
С	Chart Direction of Wind	100 mils	Unit Cross Wind Comp Unit Range Wind Comp	As Listed As Listed	
D	DH	10 m	DT DD	As Listed As Listed	
Е	Propellant Temperature	1° F	Velocity Effect	0.1 m/s	
F	Entry Range  Corrected Entry Range	100 m 10 m	Range Corrections (b) Azimuth Corrections (c) Elevation Fuze Setting Time of Flight	As Listed As Listed 0.1 mil 0.1 0.1 sec	
G	Chart Range	100 m	Supplementary Data	As Listed	
Н	Entry Range Azimuth Latitude	As Listed As Listed 10 °	Range Correction for Rotation (d)	As Listed	
Ι	Latitude Entry Range Azimuth	10 ° As Listed As Listed	Azimuth Correction for Rotation	As Listed	
J	Fuze Setting	1	Fuze Correction	As Listed	
K	Fuze Setting	0.1	Corrections To Fuze Setting	As Listed	

- (a) To determine an entry range for solution of a meteorological message, enter with the vertical interval to the nearest 100 meters.
- (b) The corrections to range for a single element, the unit correction multiplied by the variation from standard, should be retained to the nearest tenth of a meter. The algebraic sum of these corrections is rounded to the nearest meter.
- (c) The correction to the azimuth for a cross wind, the unit correction multiplied by the magnitude of the cross wind, should be retained to the nearest tenth of a mil. The azimuth correction to compensate for the drift of the projectile should be retained to the value listed in the tables.
- (d) Correction for latitude other than 0 degrees should be multiplied by the latitude factor.

(3) Fire Commands. Information given in the fire commands to a firing battery is announced as follows.

Command	Expressed to the nearest	
Time (Fuze Setting)	0.1	
Deflection	1 mil	
Quadrant	1 mil	

## 11. Sample Problems

Two problems are given in the following sections:

Problem 1: Determination of Position Constants

Problem 2: Met + VE Technique (Subsequent Met)

The determination of position constants for Projectile, HE, M795 armed with fuze, MTSQ, M582 is described in problem 1. Problem 2 illustrates procedures to be used to obtain corrected firing data to the target for Projectile, HE, M795, armed with fuze, MTSQ, M582 using a subsequent met message.

In Problem 2, certain details similar to those for Problem 1 have been omitted or simplified to emphasize the basic procedures involved. Each problem is written with the explanation on one page and the corresponding computations on the facing page.

### A. Problem 1: Determination of Position Constants

To place accurate fire on a target of known chart location, it is necessary to apply corrections to fuze setting (if applicable) and to chart data (deflection and range) to compensate for the effects of nonstandard conditions. A registration is conducted in order to establish a total range correction, a deflection correction and a total fuze correction. A concurrent met is solved to determine a position VE, position deflection and a position fuze correction. Using these position constants and a valid met message, accurate firing data can be determined.

# (1) Known Data

# (a) Weapon/Ammunition Data.

Altitude of Battery above Sea Level	516 m
Latitude of Battery	34° N
Battery Laying	
Azimuth	6100 mils
Deflection	3200 mils
MVV	2.4 m/s
Projectile Weight	3 sq
Propellant Temperature	81° F

# (b) High Burst Registration Data

Charge	8S, M203A1
Adjusted QE	430 mils
Adjusted Time Setting (Fuze M582)	47.1
Chart Deflection	3156 mils
Adjusted Deflection	3175 mils
Azimuth Corresponding to Adjusted Deflection	6125 mils
Chart Range	18330 m
Height of Burst Above Battery	112 m

# (c) Concurrent Met Message

METB31	344983
121450	037013
002109	945071
012215	937079
022318	933082
032419	926084
042620	941075
052822	949065
063123	960051

(2) Met Line Number and Entry Range

- Tables A, B
- (a) Met Line Number. Enter Table A, Charge 8S, M203A1 with the adjusted QE (430 mils) and select the met message line number to be used (line number 6).
- (b) Entry Range. Because the ranges in a firing table are distances to the level point under standard conditions, a value for complementary range due to the vertical interval of the target above or below the level point is obtained. This complementary range is added to the chart range and the resulting entry range is used to enter the tables to correct for nonstandard conditions and to account for the earth's rotation. Enter Table B with the known chart range to the high burst location (18330 m), and the height of burst above the battery (112 m), expressed to the nearest 100 meters (18300 and 100 m), to obtain the complementary range. For this range (18300 m) and chart height (100 m) extract the complementary range (+3 m). Add, algebraically, the complementary range to the chart range to obtain the entry range. The entry range, expressed to the nearest 100 meters (18300 m), will be used as the argument to obtain corrections given in Table F.
- (c) Determination of Met Line Number Prior to Registration. If a met message is being solved before firing, no adjusted QE is known. In such cases, the line number is determined by entering Table B at the chart range and the height of target (or desired burst height) above (below) the gun, both to the nearest 100 meters.
- (d) Met Values. Met message items to be used in the problem are the altitude of the MDP and the information given in line number 6.
- (3) Weather and Velocity Conditions

Tables C, D, E

- (a) Winds. The ballistic wind must be resolved in components perpendicular to the plane of fire (cross wind) and parallel to the plane of fire (range wind).
  - (a.1) Chart Direction of the Wind. Find the chart direction of the wind by subtracting the azimuth of fire to the point, expressed to the nearest 100 mils (6100 mils), from the direction of the wind (3100 mils), adding 6400 mils to the wind direction, when necessary.
  - (a.2) Wind Components. From Table C, select the components of a one knot wind having a chart direction of 3400 mils. Multiply these unit cross and range wind components by the ballistic wind speed (23 knots) to obtain the wind velocity components. Express each result to the nearest knot.

6

Complementary Range +3 mEntry Range  $(18330 + 3) = 18333 \Rightarrow 18300 \text{ m}$ 

Met Line Number (from Table B) 6
Altitude of MDP (from met message) 370 m
Line 6 063123 960051

Direction of the Wind (3100 + 6400) =

Chart Direction of the Wind (9500 - 6100) = 3400 mils

Cross Wind (CW)  $23 \times 0.20 = L4.60 \Rightarrow$  L5 knots

Range Wind (RW)  $23 \times T0.98 = T22.54 \Rightarrow$  T23 knots

XLIX

9500 mils

- (b) Ballistic Air Temperature and Air Density. Correct the ballistic air temperature and the ballistic air density given in line 6 of the met message for the difference between the altitude of the battery and the MDP.
  - (b.1) Height of Battery. Compute the height of the battery above or below the MDP by finding the difference DH, between the altitude of the MDP (370 m), given in the met message introduction and the known altitude of the battery, expressed to the nearest 10 meters (520).
  - (b.2) Corrected Ballistic Air Temperature and Air Density. Enter Table D with DH (150 m) to determine the corrections for height of battery above the MDP and add these corrections, algebraically, to the ballistic air temperature (AT) and to the ballistic air density (AD).
- (c) Propellant Temperature. Compute the correction for the effect of nonstandard propellant temperature (PT) on muzzle velocity. Enter Table E with the known PT (81° F) and interpolate to the nearest tenth of a meter per second. Record this for subsequent use in determination of VE.

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Height of Battery above MDP (DH) 
$$520 - (+370) =$$
 +150 m

Corrected Ballistic AT  $96.0 + (-0.3) =$  95.7 %

Corrected Ballistic AD  $105.1 + (-1.5) =$  103.6 %

Correction to MV for PT  $3.1 + (0.1 \times (6.3 - 3.1)) = 3.1 + 0.3 =$  3.4 m/s

## (4) Met Range Correction

Tables F, H

- (a) Variations from Standard. Nonstandard projectile weight and the rotation of the earth are considered to be part of the met range corrections. Compensate for the nonstandard conditions and for the rotation of the earth by comparing the previously determined nonstandard conditions with the standard conditions.
  - (a.1) Unit Corrections. Enter Table F with the entry range determined on page XLIII, expressed to the nearest 100 meters (18300 m), to obtain the unit range corrections for the nonstandard conditions (columns 10-19). If the variation from standard is an increase (decrease), enter the column of Table F headed increase (decrease). In the case of range wind, if the variation from standard is preceded by the letter H, enter the unit head wind column; if preceded by the letter T, enter the unit tail wind column. The unit range corrections obtained from Table F (columns 10-19) are listed on the opposite page and utilized below. The drift corrections and the cross wind unit correction extracted from columns 8 and 9 will be used below to compute the met deflection correction.
  - (a.2) Range Correction for the Rotation of the Earth. Enter Table H with entry range (18300 m) expressed to the nearest listed range (18000 m) and azimuth of fire expressed to the nearest listed azimuth (6200 mils) to obtain a range correction for 0 degrees latitude. Multiply this correction by the factor given at the bottom of Table H for the known battery latitude of 34° north, expressed to the nearest 10 degrees (30° N). Express the result to the nearest tenth of a meter.
- (b) Met Range Correction. The met range correction is equal to the algebraic sum of the range corrections required to compensate for nonstandard meteorological conditions, nonstandard projectile weight, and the rotation of the earth. Compute each range correction for a nonstandard condition by multiplying the variation from standard by its unit correction. Express the result to the nearest tenth. Add separately those individual range corrections which increase the range correction by adding algebraically the totals of the range corrections in the plus and minus columns. Express the result to the nearest whole meter.

# **Unit Range Corrections**

Parameter	Known Values	Standard Values	Variations from Standard		Unit Corrections
Range Wind	Т Н	0	T H	23	-16.0
Air Temperature	95.7	100	<b>D</b> I	4.3	-8.0
Air Density	103.6	100	D I	3.6	+95.9
Projectile Weight	3 sq	4 sq	<b>D</b> I	1	35.0

**Deflection Corrections** 

Drift L16.8 Cross Wind 0.66

Range Correction for Rotation of Earth

 $12 \times 0.87 = 10.44 \implies 10.4 \text{ m}$ 

# **Met Range Correction**

Parameter		nown alues	Unit Corrections	Range Corrections + (Positive)	Range Corrections - (Negative)
Range Wind	T H	23	-16.0		368.0
Air Temperature	<b>D</b> I	4.3	-8.0		34.4
Air Density	D I	3.6	+95.9	345.2	
Projectile Weight	<b>D</b> I	1	35.0	35.0	
Rotation of Earth				10.4	
Total				390.6	402.4

Met Range Correction

 $(+390.6) + (-402.4) = -11.8 \implies$ 

-12 m

### (5) Met Deflection Correction

Table I

The met deflection correction is the algebraic sum of the rotation of the earth, the drift correction and the cross wind correction.

- (a) Rotation of the Earth Correction. Enter the page of Table I which contains data for latitude 30 degrees North (the known latitude of the battery expressed to the nearest 10 degrees). Find the rotation correction to deflection (azimuth) opposite the entry range expressed to the nearest listed range (18000 m) and under the nearest listed deflection (azimuth of target: 6000 mils). Do not interpolate.
- (b) Drift Correction. Use the drift correction previously extracted from Table F when unit corrections for range were determined.
- (c) Cross Wind Correction. Multiply the cross wind component (L5), previously determined on page XLIII, by the cross wind unit correction (0.66), previously extracted (page XLVII), to determine the cross wind correction. Express the result to the nearest tenth of a mil.
- (d) Met Deflection Correction. Determine the met deflection correction by adding, algebraically, the rotation of the earth correction (L1.1), the drift correction (L16.8) and the cross wind correction (L3.3). Express to the nearest mil.

## (6) Position Deflection Correction

The position deflection is obtained for subsequent use in a Met + VE transfer.

- (a) Total Deflection Correction. Subtract the chart deflection (3156 mils) from the adjusted deflection (3175 mils) to determine the total deflection correction.
- (b) Position Deflection Correction. Subtract the met deflection correction (L21) from the total deflection correction (L19) to determine the position deflection correction.

Deflection (Azimuth) Correction for Rotation of Earth (from Table I)	L1.1 mils
Drift Correction	L16.8 mils
Cross Wind Correction $L5 \times 0.66 = L3.30 \Rightarrow$	L3.3 mils
Met Deflection (Azimuth) Correction $L1.1 + L16.8 + L3.3 = L21.2 \Rightarrow$	L21 mils
Total Deflection Correction 3175 – 3156 =  Position Deflection Correction	L19 mils

L19 - L21 =

R2 mils

### (7) Position Velocity Error (VE)

Tables F, G

Those variations from firing table standards that cannot be measured and for which the resultant range correction can be determined only by firing, are grouped together in one quantity and termed position velocity error (VE). VE is expressed in meters per second. Known variations from firing table standards are accounted for by met range corrections and the propellant temperature correction.

### (a) Range Corresponding to Adjusted Elevation.

(a.1) Angle of Site. Angles of site less than 100 mils are computed by dividing the height of burst above battery (112 m) by the chart range expressed in thousands of meters to the nearest hundred meters (18.3 m). Angles of site greater than 100 mils must be computed by using the formula: the tangent of the angle of site equals the vertical interval divided by the chart range.

(a.2) Site. Enter Table G with the chart range of the high burst location, expressed to the nearest 100 meters (18300 m), to obtain the complementary angle of site factor by linear interpolation in column 12 or 13 (column 12 in this case since the angle of site is positive). Complementary angle of site is the product of the complementary angle of site factor and the numerical value of the angle of site. Site is the sum of the angle of site and the complementary angle of site. Express site to the nearest mil. (Site may also be determined by use of a graphical site table.)

(a.3) Range Corresponding to Adjusted Elevation. Determine the adjusted elevation by subtracting site from the known adjusted QE (430 mils). Enter Table F with the adjusted elevation to obtain, by interpolation in column 1, the range corresponding to the adjusted elevation. Express the result to the nearest meter.

(b) Total Range Correction. Determine the total range correction by subtracting the chart range (18330 m) from the range corresponding to the adjusted elevation.

## (c) DV

(c.1) DV Range Correction. Determine the DV range correction in meters by subtracting, algebraically, the met range correction from the total range correction.

(c.2) MV Unit Correction. Enter Table F with the entry range expressed to the nearest 100 meters (18300) to find the muzzle velocity (MV) unit correction. If the DV range correction in meters is positive, enter the column headed decrease; if negative, enter the column headed increase. Convert the DV range correction to a DV in meters per second, expressed to the nearest tenth, by dividing the DV range correction in meters by the MV unit correction. If the MV unit correction is obtained from the decrease column, the sign of DV is negative; if the correction is obtained from the increase column, the sign is positive.

(d) Position VE. Compute the Position VE by subtracting the correction to muzzle velocity for propellant temperature (page LI) and the MVV from DV.

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$$112 / 18.3 = 6.12 \Rightarrow$$

6.1 mils

Unit Complementary Angle of Site (by interpolation)
Complementary Angle of Site

0.073 mils

Complementary Angle of Site  $6.1 \times 0.073 =$ 

0.445 mils

Site

$$6.1 + 0.445 = 6.545 \Rightarrow$$

7 mils

Adjusted Elevation

$$430 - (+7) =$$

423 mils

Range Corresponding to Adjusted EL

$$\begin{array}{ccc}
X - 17900 & 2.6 \\
----- & 5.1
\end{array}$$

$$X = 17900 + \frac{2.6 \times 100}{5.1} = 17950.1 \Rightarrow 17950 \text{ m}$$

Total Range Correction

$$17950 - 18330 =$$
 -380 m

DV Range Correction

$$-380 + (-12) =$$
  $-392 \text{ m}$ 

MV Unit Correction (by inspection) -26.4 m per m/s DV

$$-392 / (-26.4) = +14.8 \text{ m/s}$$

Position VE

$$14.8 - (3.4) - (2.4) =$$
 +9.0 m/s

LVII

## (8) Average Position Velocity Error

- (a) A VE is computed whenever a registration and met message are concurrent. Minor errors of weapon, ammunition, firing chart, met and survey are compensated for by the VE range correction. The errors may vary from registration to registration and are unpredictable in amount and direction. To smooth out these errors, each new VE is averaged with the old VE. The old VE is the previously determined average VE, if one exists. This method gives most importance to the most recently determined VE but does not disregard the previous VE's.
- (b) A VE is considered valid only for the position, weapon charge and propellant lot for which it was determined. However, until registration is accomplished in a new position, the average VE should be used with a current met message. The results achieved will usually be more accurate than those achieved using uncorrected data.

### (9) Fuze Correction

Tables F, J

The fuze setting corresponding to the adjusted elevation plus complementary angle of site approximates the correct fuze setting. Since fuze setting varies at a rate different from that of elevation, a more accurate setting can be obtained by correcting the fuze setting corresponding to the adjusted elevation plus complementary angle of site for nonstandard conditions. Fuze correction factor tables are designed to compensate for the same nonstandard conditions that affect the range. In low angle fire, complementary angle of site is usually negligible and has little effect on fuze setting. For this reason, complementary angle of site is normally considered only for firing large vertical angles or extreme ranges. In the case of a high-burst registration, the vertical angle is considered to be large when the vertical interval to the high burst location is greater than 100 meters.

- (a) Fuze Setting Corresponding to EL + CS. Determine EL + CS by adding the previously determined CS (+0.4 mils) to the adjusted elevation (423 mils). Enter Table F with the EL + CS expressed to the nearest mil and interpolate (when necessary) for the corresponding setting. Express to the nearest tenth of a fuze setting increment.
- (b) Total M582 Fuze Correction. The total fuze correction is determined by subtracting the fuze setting corresponding to the adjusted elevation plus complementary angle of site (47.1) from the adjusted time (47.1).

EL + CS  

$$423 + 0.4 = 423.4 \Rightarrow$$
 423 mils  
M582 Fuze Setting (by interpolation) 47.1

Total Fuze Correction 
$$47.1 - 47.1 = 0.0$$

- (c) Unit Fuze Correction Factors. Those nonstandard conditions of weather, velocity and projectile weight that affect the range and fuze setting have already been determined and are summarized on page LXI. Enter Table J with the fuze setting determined above (47.1), expressed to the nearest whole increment (47), to obtain the unit fuze correction factors for the nonstandard conditions listed. If the variation from standard is an increase (decrease), enter the column of Table J headed increase (decrease). In the case of range wind, if the variation from standard is preceded by the letter H, enter the unit head wind; if by the letter T, the unit tail wind column. Although rotation of the earth affects fuze setting, its effect is so small it is negligible for use with Table J.
- (d) Met Fuze Correction. The met fuze correction is equal to the algebraic sum of the fuze corrections required to compensate for the variations from standard conditions determined on page LIII. Compute each fuze correction for a nonstandard condition by multiplying the variation from standard by its unit correction factor. Express the result to the nearest thousandth, and add separately those individual corrections that increase the fuze setting and those that decrease the fuze setting. Compute the met fuze correction by adding, algebraically, the totals of the fuze corrections in the plus and minus columns. Express the result to the nearest tenth.
- (e) Fuze Correction. Compute the fuze correction by subtracting the met fuze correction (0.5) from the total fuze correction (0.0).
- (f) Average Fuze Correction. Because of minor variations in the manufacturing process, the same type of fuze mechanism will produce slightly different fuze running times. When it is possible to determine the fuze corrections more than once, the value of the fuze correction should be altered by averaging the currently determined correction with the previously determined value in the same manner as done for the VE.

## **Met Fuze Corrections**

Parameter	Variations from		Unit	Fuze Corrections	
1 at afficter	Standar	d	Correction	+ (Positive)	- (Negative)
DV	D				
	I 14	.8	+0.044	0.651	
Range	T 2	3	+0.003	0.069	
Wind	Н				
Air	D4.	.3	+0.047	0.202	
Temperature	I				
Air	D				
Density	I3	.6	-0.118		0.425
Projectile	D	1	-0.021		0.021
Weight	I				
Total				0.922	0.446

Met Fuze Correction 
$$0.922 + (-0.446) = +0.476 \Rightarrow +0.5$$
 Fuze Correction 
$$0.0 - (+0.5) = -0.5$$

# (10) Summary

The previous problem yields the information necessary to solve the gunnery problem for projectile, HE, M795.

Range Correction	-380 m
Correction to MV for PT	+3.4  m/s
Drift Correction	L16.8 mils
Met Deflection (Azimuth) Correction	L21 mils
Position Deflection Correction	R 2 mils
Range Corresponding to Adjusted EL	17950 m
Position VE	+9.0  m/s
Fuze Correction	-0.5

## B. Problem 2: Met + VE Technique (Subsequent Met)

The best means of determining the total correction for all nonstandard conditions is to conduct a registration and then determine the difference between chart data and adjusted data. It is frequently undesirable, however, to register each time the weather changes or to perform enough registrations to obtain corrections for the entire zone of fire. Corrections closely approximating additional registration corrections can be obtained by applying the Met + VE technique. Although the corrections may be applied to all ranges, caution must be exercised, as corrections determined for targets close to the maximum range of the charge are not reliable. The procedures employed in the computation of corrected firing data and the conversion to fire commands when using the Met + VE technique are given below.

## (1) Known Data

## (a) Weapon/Ammunition Data.

Altitude of Battery above Sea Level	516 m
Latitude of Battery	46° N
Battery Laying	
Azimuth	6100 mils
Deflection	3200 mils
Position VE*	+9.0  m/s
MVV	+2.4  m/s
VE	+11.4  m/s
Position Deflection Correction*	R 2 mils
Position Fuze Correction*	-0.5
Projectile Weight	3 sq
Propellant Temperature	83° F

## (b) Target Data.

Charge	8S, M203A1
Chart Deflection to Target	4156 mils
Chart Range to Target	19130 m
Altitude of Target above Sea Level	584 m
Height of Burst above Target	0 m
Altitude of Burst above Sea Level	584 m
Height of Burst above Battery	68 m

<sup>\*</sup>Determined in Problem 1.

### (2) Current Met Correction

Tables B, E, F, I

Determine corrections to the desired point of burst for the current met conditions. These corrections consist of a deflection correction, a met range correction and a met fuze correction.

- (a) Met Line Number. For a Met + VE transfer to a target, the method of selecting a line number is a matter of judgment. If the QE can be reasonably inferred, the line number is selected from Table A with this inferred QE. The QE can be best inferred when a valid GFT setting exists. When the GFT setting is not considered valid because of a significant change in weather since the last registration and the GFT has not been corrected for recent met conditions, then the QE cannot be inferred and Table B is used. Assume that the QE cannot be inferred. Enter Table B with chart range to the target (19130 m) and at the height of burst above the battery (68 m), both expressed to the nearest 100 meters (19100 m and 100 m). Select the met message line number to be used.
- (b) Met Range Correction. The entry range and the met range correction for current nonstandard conditions are computed in the manner illustrated in problem 1.

### (c) Deflection.

- (c.1) Met Deflection Correction. Compute the deflection correction for nonstandard conditions to the desired point of burst in the same manner as in Problem 1. The met deflection correction (effects of rotation, drift and cross wind) to the Met + VE target is 23.52 mils. Express the met deflection correction to the nearest mil.
- (c.2) Total Deflection Correction. The total deflection correction is the algebraic sum of the position deflection correction, (R2), and the new met deflection correction (L24).
- (c.3) Corrected Deflection. Combine the new total deflection correction (L22 mils) with the known chart deflection to the target (4156 mils) to obtain the corrected deflection.

Met Line Number (Table B)

Met Deflection Correction (Assumed)

 $L23.52 \Rightarrow$ 

**Total Deflection Correction** 

Entry Range

$$19130 + 7 = 19137 \Rightarrow$$

$$19100 \text{ m}$$
Met Range Correction (Assumed)
$$-400.5 \Rightarrow$$

$$-400 \text{ m}$$

R2 + L24 = L 22 mils

Corrected Deflection 4156 + L22 = 4178 mils

7

L 24 mils

## (d) Total Range Correction

- (d.1) Correction to Muzzle Velocity for Propellant Temperature. Enter Table E with the known nonstandard propellant temperature  $(83^{\circ} \text{ F})$  to determine the correction to muzzle velocity. Record the result to the nearest tenth of a m/s.
  - (d.2) Add this correction to the VE to determine DV.
- (d.3) DV Range Correction. Enter Table F with the entry range determined from the solution of the met range correction (19137 m), expressed to the nearest 100 meters (19100 m), to find the unit correction for an increase in muzzle velocity. Multiply the computed DV above (+15.5 m/s) by the value extracted to find the range correction and give the DV range correction the sign of the unit correction. Record the result to the nearest meter.
- (d.4) Total Range Correction. Add, algebraically, the DV range correction to the met range correction to find the total range correction.
- (e) Corrected Range. Add, algebraically, the total range correction (-823 m) to the chart range (19130 m) to obtain the corrected range. Record the result to the nearest 10 meters.

### (3) Quadrant Elevation and Fuze Setting

Tables F, J

### (a) Quadrant Elevation

- (a.1) Enter Table F with the corrected range (18310 m) and inter- polate for elevation and fuze setting (determined as a function of elevation plus complementary angle of site).
- (a.2) Quadrant Elevation. Add, algebraically, the elevation and the site to determine the quadrant elevation. Express the result to the nearest mil.
- (b) Met Fuze Correction. Compensate for the same nonstandard conditions that affect the range. Assume that the met fuze correction computed for current nonstandard conditions was computed in the manner illustrated in Problem 1.
- (c) Adjusted Fuze Setting. Add, algebraically, the met fuze correction (+0.3) and the fuze correction (-0.5) to the fuze setting determined above (48.8) to obtain the adjusted fuze setting.

## (d) Met + VE Fire Commands

Time (Assumed)	48.6
Deflection	4178
Quadrant	446

Correction to MV for PT (by interpolation)	+4.1 m/s
DV 11.4 + 4.1 =	+15.5 m/s
DV Range Correction +15.5 × (-27.3) = -423.2 $\Rightarrow$	-423 m
Total Range Correction	222
-423 + (-400) =	-823 m
Corrected Range $19130 + (-823) = 18307 \Rightarrow$	18310 m
Elevation (by interpolation) Fuze Setting M582 (by interpolation) Angle of Site =	442 mils 48.8
68 / 19.1 =	+3.6 mils
Complementary Angle of Site $3.6 \times 0.073 = 0.26 \Rightarrow$ Site	0.0 mils
3.6 + 0.0 = 3.6 =	+3.6 mils
Quadrant Elevation $442 + 3.6 = 445.6 \Rightarrow$	446 mils
Met Fuze Correction (Assumed)	+0.3
Adjusted Fuze Setting $48.8 + 0.3 + (-0.5) =$	48.6

## 12. Supplementary Tables

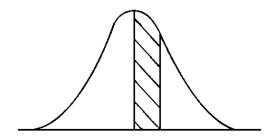
Explanation of Components of a One Knot Wind

The table of components of a one knot wind, Table C, resolves a wind of one knot, blowing from any chart direction, into its cross wind and range wind components. Chart direction is the azimuth of the wind direction (increased by 6400 when necessary) minus the azimuth of the direction of fire. There are two distinct problems which are solved with Table C. These are outlined below.

- A. Azimuth Correction for Ballistic Wind. Enter column 1 of Table C with the applicable chart direction and obtain from column 2 a cross wind component. This component will be preceded by an R or an L. The product of the observed wind, the component just determined, and the correction factor from column 9 of Table F is the azimuth correction to compensate for the ballistic wind. This correction is applied to the right if the component is preceded by an R, to the left, if by an L.
- B. Range Correction for Ballistic Wind. Enter column 1 of Table C with the applicable chart direction and obtain from column 3 a range wind component. This component will be preceded by an H or a T. If the wind component is preceded by an H, enter column 12 of Table F to obtain the correction factor; if by a T, enter column 13. The product of the observed wind, the component just obtained, and the correction factor from Table F is the correction to range to compensate for the ballistic wind.

## **Explanation of Probability Table**

- A. The probability table consists of an argument, T, for entering the table and a body of figures representing areas under the normal probability curve.
- B. The first vertical column gives the value of T for entry to the nearest one-tenth of a probable error (PE). The top horizontal line permits entry using a value of T expressed to the nearest one-hundredth.
- Example 1. It is desired to locate the area under the normal curve that corresponds to 1.4 probable errors. Locate 1.4 in the first vertical column. Since the required number of probable errors is expressed only to the nearest one-tenth, read the answer .3275 in the horizontal column headed 0.00. Had the value of T been expressed as 1.44, the answer would appear as .3343 in the column headed 0.04.
- C. The figures in the body of the table represent areas under the normal probability curve. The entire area under this curve is assumed to be 1. Therefore, the probability that an event will occur within the given limits is represented by some corresponding area under the curve. Thus, the probability that an artillery round will fall somewhere between the true center of impact and a point one probable error beyond this center is represented by the hatched area in the figure below. This area, compared to the total area under the curve, is one fourth or 0.25.



Therefore, each decimal fraction in the body of the table expresses the probability that the deviation, in one direction only, of the point of impact of a projectile from an adjusting point will not be greater than T probable errors.

Example 2. An artillery piece registers upon an adjusting point. The probable error is 30 meters. One round is fired under the adjusted conditions. The probability that this round will fall beyond the adjusting point, a distance not to exceed 30 meters, is determined as follows. One probable error is equal to 30 meters. Enter the table using a value of T equal to 1.0. In the column headed 0.00 the probability is found to be 0.2500 for an impact beyond the target (over) not to exceed 30 meters. The same probability would be read for an impact short of the target (short) not to exceed 30 meters. The probability of a round falling on either side of the adjusting point within 30 meters cannot be read directly in the table. To express this condition, the probability for an over must be added to the probability for a short. In the previous example, this probability would be 0.5000.

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D. The probability of a round falling within any given distance of the target can be found in the table by first converting the given distance to probable errors.

Example 3. With a probable error of 30 meters the probability that a single round will be over and will fall within 49 meters of the target is determined as follows: 49 meters equals 1.63 probable errors. Reading directly from the table the probability is 0.3642.

E. The Probability Table permits the calculation of the probability of a round falling within limits that do not include the adjusting point.

Example 4. Given a probable error of 26 meters, the probability of a round falling between 26 and 35 meters over the adjusting point is determined as follows: 26 meters equals 1.00 PE, 35 meters equals 1.35 PE. The probability of the round falling over the adjusting point a distance of 35 meters or less is 0.3187. The probability of the round falling over the adjusting point a distance of 26 meters or less is 0.2500. To find the probability of the round falling between the given limits, subtract 0.2500 from 0.3187. The result is a probability of 0.0687.

F. The values in the table may be interpolated using direct proportion.

Example 5. The probability that a round will fall short within a distance of 1.503 probable errors from the adjusting point is determined as follows. The probability corresponding to 1.50 equals 0.3442, and corresponding to 1.51 equals 0.3458. The probability for 1.503 PE occurs three-tenths of the way between 0.3442 and 0.3458, and therefore equals 0.3447.

### **Probability Table**

Т	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0000	.0027	.0054	.0081	.0108	.0135	.0162	.0189	.0216	.0243
0.1	.0269	.0296	.0323	.0350	.0377	.0404	.0431	.0457	.0484	.0511
0.2	.0538	.0565	.0591	.0618	.0645	.0672	.0699	.0725	.0752	.0778
0.3	.0804	.0830	.0856	.0882	.0908	.0934	.0960	.0986	.1012	.1038
0.4	.1064	.1089	.1115	.1140	.1166	.1191	.1217	.1242	.1268	.1293
0.5	.1319	.1344	.1370	.1395	.1421	.1446	.1472	.1497	.1522	.1547
0.6	.1572	.1597	.1622	.1647	.1671	.1695	.1719	.1743	.1767	.1791
0.7	.1815	.1839	.1863	.1887	.1911	.1935	.1959	.1983	.2007	.2031
0.8	.2054	.2077	.2100	.2123	.2146	.2169	.2192	.2214	.2236	.2258
0.9	.2280	.2302	.2324	.2346	.2368	.2390	.2412	.2434	.2456	.2478
1.0	.2500	.2521	.2542	.2563	.2584	.2605	.2626	.2647	.2668	.2689
1.1	.2709	.2730	.2750	.2770	.2790	.2810	.2830	.2850	.2869	.2889
1.2	.2908	.2927	.2946	.2965	.2984	.3003	.3022	.3041	.3060	.3078
1.3	.3097	.3115	.3133	.3151	.3169	.3187	.3205	.3223	.3240	.3258
1.4	.3275	.3292	.3309	.3326	.3343	.3360	.3377	.3393	.3410	.3426
1.5	.3442	.3458	.3474	.3490	.3506	.3521	.3537	.3552	.3567	.3582
1.6	.3597	.3612	.3627	.3642	.3657	.3671	.3686	.3700	.3714	.3728
1.7	.3742	.3756	.3770	.3784	.3798	.3811	.3825	.3838	.3851	.3864
1.8	.3877	.3890	.3903	.3915	.3928	.3940	.3952	.3964	.3976	.3988
1.9	.4000	.4012	.4024	.4035	.4047	.4058	.4069	.4080	.4091	.4102
2.0	.4113	.4124	.4135	.4146	.4156	.4167	.4177	.4187	.4197	.4207
2.1	.4217	.4227	.4237	.4246	.4256	.4265	.4274	.4283	.4292	.4301
2.2	.4310	.4319	.4328	.4336	.4345	.4353	.4361	.4369	.4377	.4385
2.3	.4393	.4401	.4409	.4417	.4425	.4433	.4441	.4448	.4456	.4463
2.4	.4470	.4477	.4484	.4491	.4498	.4505	.4512	.4519	.4526	.4533
2.5	.4540	.4547	.4553	.4560	.4566	.4572	.4578	.4584	.4590	.4596
2.6	.4602	.4608	.4614	.4620	.4625	.4630	.4636	.4641	.4646	.4651
2.7	.4657	.4662	.4667	.4672	.4677	.4682	.4687	.4692	.4697	.4701
2.8	.4705	.4710	.4714	.4718	.4722	.4727	.4731	.4735	.4739	.4743
2.9	.4748	.4752	.4756	.4760	.4764	.4768	.4772	.4776	.4780	.4783
3.0	.4787	.4790	.4793	.4796	.4800	.4803	.4806	.4809	.4812	.4815

### **Probability Table (Cont.)**

Т	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
3.0	.4787	.4970	.4793	.4796	.4800	.4803	.4806	.4809	.4812	.4815
3.1	.4818	.4821	.4824	.4827	.4830	.4833	.4836	.4839	.4842	.4845
3.2	.4848	.4851	.4853	.4855	.4857	.4859	.4862	.4864	.4866	.4868
3.3	.4870	.4873	.4875	.4877	.4879	.4881	.4883	.4885	.4886	.4888
3.4	.4890	.4892	.4893	.4895	.4897	.4899	.4901	.4902	.4904	.4906
3.5	.4908	.4909	.4911	.4913	.4915	.4916	.4917	.4919	.4921	.4922
3.6	.4923	.4924	.4926	.4927	.4928	.4929	.4931	.4933	.4934	.4935
3.7	.4936	.4938	.4939	.4940	.4941	.4942	.4944	.4945	.4946	.4947
3.8	.4948	.4949	.4950	.4951	.4952	.4953	.4953	.4954	.4955	.4956
3.9	.4957	.4958	.4959	.4960	.4960	.4961	.4962	.4963	.4964	.4965
4.0	.4965	.4966	.4967	.4967	.4968	.4969	.4969	.4970	.4971	.4972
4.1	.4972	.4973	.4973	.4974	.4974	.4975	.4975	.4976	.4976	.4977
4.2	.4978	.4978	.4979	.4979	.4980	.4980	.4980	.4981	.4981	.4981
4.3	.4982	.4982	.4982	.4983	.4983	.4983	.4983	.4984	.4984	.4985
4.4	.4985	.4985	.4986	.4986	.4986	.4987	.4987	.4987	.4988	.4988
4.5	.4988	.4989	.4989	.4989	.4989	.4990	.4990	.4990	.4990	.4991
4.6	.4991	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4992	.4992
4.7	.4993	.4993	.4993	.4993	.4993	.4993	.4994	.4994	.4994	.4994
4.8	.4994	.4994	.4994	.4995	.4995	.4995	.4995	.4995	.4995	.4995
4.9	.4995	.4996	.4996	.4996	.4996	.4996	.4996	.4996	.4996	.4996
5.0	.4996	.4996	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997
5.1	.4997	.4997	.4997	.4997	.4998	.4998	.4998	.4998	.4998	.4998
5.2	.4998	.4998	.4998	.4998	.4998	.4998	.4998	.4998	.4998	.4998
5.3	.4998	.4998	.4998	.4998	.4998	.4998	.4999	.4999	.4999	.4999
5.4	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999
5.5	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999
5.6	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999
5.7	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999	.4999
5.8	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
5.9	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
6.0	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000

### **Natural Trigonometric Functions**

Mil	Sin	Cos	Tan	Cot	
0	.0000	1.0000	.0000		1600
10	.0098	1.0000	.0098	101.9	90
20	.0196	.9998	.0196	50.92	80
30	.0295	.9996	.0295	33.94	70
40	.0393	.9992	.0393	25.45	60
50	.0491	.9988	.0491	20.36	50
60	.0589	.9983	.0590	16.96	40
70	.0687	.9976	.0688	14.53	30
80	.0785	.9969	.0787	12.71	20
90	.0882	.9961	.0886	11.29	10
100	.0980	.9952	.0985	10.15	1500
10	.1078	.9942	.1084	9.224	90
20	.1175	.9931	.1184	8.449	80
30	.1273	.9919	.1283	7.793	70
40	.1370	.9906	.1383	7.230	60
50	.1467	.9892	.1483	6.741	50
60	.1564	.9877	.1584	6.314	40
70	.1661	.9861	.1685	5.936	30
80	.1758	.9844	.1786	5.600	20
90	.1855	.9827	.1887	5.299	10
200	.1951	.9808	.1989	5.027	1400
10	.2047	.9788	.2091	4.781	90
20	.2143	.9768	.2194	4.558	80
30	.2239	.9746	.2297	4.353	70
40	.2334	.9724	.2401	4.165	60
50	.2430	.9700	.2505	3.992	50
60	.2525	.9676	.2610	3.832	40
70	.2620	.9651	.2715	3.684	30
80	.2714	.9625	.2820	3.546	20
90	.2809	.9597	.2927	3.417	10
300	.2903	.9569	.3034	3.297	1300
10	.2997	.9540	.3141	3.184	90
20	.3090	.9511	.3249	3.078	80
30	.3183	.9480	.3358	2.978	70
40	.3276	.9448	.3468	2.884	60
50	.3369	.9415	.3578	2.795	50
60	.3461	.9382	.3689	2.711	40
70	.3553	.9348	.3801	2.631	30
80	.3645	.9312	.3914	2.555	20
90	.3736	.9276	.4028	2.483	10
400	.3827	.9239	.4142	2.414	1200
	Cos	Sin	Cot	Tan	Mil

Mil	Sin	Cos	Tan	Cot	
400	.3827	.9239	.4142	2.414	1200
10	.3917	.9201	.4258	2.349	90
20	.4008	.9162	.4374	2.286	80
30	.4097	.9122	.4492	2.226	70
40	.4187	.9081	.4610	2.169	60
50	.4276	.9040	.4730	2.114	50
60	.4364	.8998	.4850	2.062	40
70	.4452	.8954	.4972	2.011	30
80	.4540	.8910	.5095	1.963	20
90	.4627	.8865	.5220	1.916	10
500	.4714	.8819	.5345	1.871	1100
10	.4800	.8773	.5472	1.827	90
20	.4886	.8725	.5600	1.786	80
30	.4972	.8677	.5730	1.745	70
40	.5057	.8627	.5861	1.706	60
50	.5141	.8577	.5994	1.668	50
60	.5225	.8526	.6128	1.632	40
70	.5308	.8475	.6264	1.596	30
80	.5391	.8422	.6401	1.562	20
90	.5474	.8369	.6541	1.529	10
600	.5556	.8315	.6682	1.497	1000
10	.5637	.8260	.6825	1.465	90
20	.5718	.8204	.6970	1.435	80
30	.5798	.8148	.7116	1.405	70
40	.5878	.8090	.7265	1.376	60
50	.5957	.8032	.7416	1.348	50
60	.6036	.7973	.7570	1.321	40
70	.6114	.7914	.7725	1.294	30
80	.6191	.7853	.7883	1.268	20
90	.6268	.7792	.8044	1.243	10
700	.6344	.7730	.8207	1.219	900
10	.6420	.7668	.8372	1.194	90
20	.6494	.7604	.8541	1.171	80
30	.6569	.7540	.8712	1.148	70
40	.6643	.7475	.8886	1.125	60
50	.6716	.7410	.9064	1.103	50
60	.6788	.7343	.9244	1.082	40
70	.6860	.7276	.9428	1.061	30
80	.6931	.7208	.9615	1.040	20
90	.7001	.7140	.9806	1.020	10
800	.7071	.7071	1.000	1.000	800
	Cos	Sin	Cot	Tan	Mil

### **Charge Selection Table**

# Probable Error In Range (Meters) Versus Range (Meters) And Charge

RANGE METERS		CHARGE								
	3G	4G	5G	4W	5W	6W	7W	7R	8S	
0	2	3	5	4	6	8	11	16	24	
1000	6	5	5 6	6	6	8	11	16	23	
2000	11	8	6	9	8	8	10	16	22	
3000	16	12	7	12	10	9	10	16	21	
4000	21	15	8	15	12	11	10	17	21	
5000	25	19	10	19	14	13	11	18	21	
6000		23	12	23	16	14	13	20	22	
7000			15	27	19	16	14	22	23	
8000			18	32	21	18	16	24	25	
9000					25	20	18	27	26	
10000						22	19	29	28	
11000						25	21	31	31	
12000							23	33	33	
13000							25	35	36	
14000							27	37	38	
15000								39	41	
16000								40	43	
17000								42	46	
18000									48	
19000									51	
20000									53	
21000									56	
22000									59	

<sup>\*</sup>Highlighted areas represent the smallest PE for each entry range

#### **Conversion Factors**

Multiply	By	To Obtain
yards	0.9144	meters
mph	0.8690	knots
degrees	17.7778	mils
minutes	0.2963	mils

Multi-	By	To Obtain
ply		
meters	1.0936	yards
knots	1.1508	mph
mils	0.05625	degrees
mils	3.375	minutes

Percent of Standard Temperature 100 + 0.1928 (Air Temperature -  $59^{\circ}$  F)

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### Part 1

Projectile, HE, M795

Fuze, PD, M739A1

Charge	Muzzle Velocity	Propelling Charge
	M/S	M3A1 (Green Bag)
3G	247	Base and Increments 2 and 3
4G	286	Base and Increments 2, 3, and 4
5G	346	Base and Increments 2, 3, 4, and 5
		M4A2 (White Bag)
4W	320	Base and Increment 4
5W	380	Base and Increments 4 and 5
6W	453	Base and Increments 4, 5, and 6
7W	544	Base and Increments 4, 5, 6, and 7
		M119A2 (Red Bag)
7R	659	Base Section 7
		M203A1
8S	791	Base Section 8

### FT 155-AR-1 PART 1

Part 1

Charge 3G

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-247\ M/S$ 

Propelling Charge M3A1 - Base and Increments 2 and 3  $\,$ 

FT 155-AR-1 PART 1 FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A LINE NUMBER CHARGE 3 G

LINE NUMBER OF METEOROLOGICAL MESSAGE

THE NUMBER OF	WIL I LOIN	DEGGIOAL MEGGA			
QUADRANT ELEVATIO MILS		LINE NUMBER			
0.0- 18	5.8	0			
185.9- 35 357.1- 54 542.6- 73 735.1- 92	2.5 5.0	1 2 3 4			
920.5- 125	8.1	5			
1258.2- 128	0.0	6			

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	100 200 300 400					0 0 0 0	1 2 2 3	2 4 5 7	3 6 8 11
	500					0	4	9	14
	600 700 800 900					0 0 0	5 6 6 7	10 12 13 15	16 19 21 24
	1000					0	8	17	26
	1100 1200 1300 1400				-9 -10 -11	0 0 0	9 10 11 11	18 20 22 23	29 31 34 36
	1500				-11	0	12	25	39
0	1600 1700 1800 1900		-42	-24 -25 -27 -29	-12 -13 -14 -15	0 0 0	13 14 15 16	27 29 30 32	42 44 47 50
	2000		-44	-30	-16	0	17	34	53
	2100 2200 2300 2400	-64 -67 -71	-47 -49 -52 -54	-32 -34 -35 -37	-16 -17 -18 -19	0000	18 18 19 20	36 38 40 42	56 58 61 64
	2500	-74	-57	-39	-20	0	21	44	68
	2600 2700 2800 2900	-78 -81 -85 -89	-60 -63 -65 -68	-41 -43 -45 -47	-21 -22 -23 -24	0 0 0 0	22 23 24 25	46 48 50 52	71 74 77 81
	3000	-93	-71	-49	-25	0	27	55	84
	3100 3200 3300 3400	-97 -101 -105 -109	-74 -77 -81 -84	-51 -53 -55 -57	-26 -27 -28 -29	0 0 0	28 29 30 31	57 59 62 64	88 91 95 99
1	3500	-113	-87	-60	-31	0	33	67	103
_		l	1					2	

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 3 G

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	ETERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
4 8 12	11 16	13 19	16 23	19 28	22 32	37	100 200 300	
15	20	25	30	36	42	48	400	
19	25	31	37	44	51	59	500	
22 26 29 33	29 34 38 42	36 42 47 53	44 51 57 64	52 60 68 75	61 70 79 88	70 80 91 101	600 700 800 900	
36	47	58	70	83	97	111	1000	
39 43 46 50	51 56 60 65	64 69 75 80	77 83 90 97	91 98 106 114	106 115 124 133	121 132 142 153	1100 1200 1300 1400	
54	69	86	103	122	142	163	1500	
57 61 65 68	74 79 83 88	92 97 103 109	110 117 124 131	130 138 147 155	151 161 171 180	174 185 196 207	1600 1700 1800 1900	3
72	93	115	139	164	190	219	2000	
76 80 84 88	98 103 109 114	121 128 134 141	146 154 162 170	173 182 191 200	201 211 222 233	231 243 255 268	2100 2200 2300 2400	
93	119	148	178	210	244	281	2500	
97 101 106 111	125 131 137 143	155 162 169 177	186 195 204 213	220 230 240 251	256 268 280 293	294 308 323 338	2600 2700 2800 2900	
116	149	184	222	263	306	354	3000	
120 126 131 136	155 162 169 176	192 201 210 219	232 242 253 264	275 287 300 314	320 335 351 367	370 388 406 426	3100 3200 3300 3400	
142	184	228	276	328	385	447	3500	
	2				•	3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE NUMBERS OF METEOROLOGICAL MESSAGE											
LINE	RANGE		HEI	GHT OF	TARGET	ABOVE G	UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	3500	-113	-87	-60	-31	0	33	67	103		
1	3600 3700 3800 3900	-118 -122 -127 -132	-91 -94 -98 -102	-62 -64 -67 -70	-32 -33 -34 -36	0 0 0 0	34 35 37 38	70 73 76 79	108 112 117 122		
-	4000	-137	-105	-72	-37	0	40	82	127		
	4100 4200 4300 4400	-142 -148 -154 -160	-110 -114 -118 -123	-75 -78 -81 -85	-39 -40 -42 -44	0 0 0 0	41 43 45 47	86 89 93 98	133 139 145 153		
	4500	-166	-128	-88	-46	0	49	102	161		
2	4600 4700 4800 4900	-173 -180 -188 -196	-134 -139 -146 -152	-92 -96 -101 -105	-48 -50 -52 -55	0 0 0	52 54 57 61	108 114 121 129	170 180 193 210		
2	5000	-205	-160	-111	-58	0	65	141	238		
	5100 5200 5300	-215 -226 -239	-168 -178 -189	-117 -125 -134	-62 -66 -73	0 0 0	71 82	161			
	5300 5200 5100	-538 -571 -602	-384 -409 -434	-241 -259 -276	-111 -122 -131	****** 0 0 0	****** 99 114	201	*****		
	5000	-634	-458	-292	-140	0	124	230	304		
5	4900 4800 4700 4600	-666 -698 -731 -766	-481 -505 -530 -555	-309 -325 -341 -357	-148 -156 -164 -172	0 0 0 0	133 142 150 158	250 269 286 302	346 377 405 431		
	4500	-803	-582	-374	-181	0	167	319	456		
	4400 4300 4200 4100	-842 -884 -930 -981	-609 -639 -670 -704	-392 -411 -431 -452	-189 -198 -208 -217	0 0 0 0	175 184 192 202	336 352 370 387	481 506 531 557		
	4000	-1040	-742	-474	-228	0	211	406	584		
· '					5	•					

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 3 G

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
142	184	228	276	328	385	447	3500	
148 155 161 168	192 200 209 218	238 249 260 273	289 302 317 332	344 360 378 398	404 424 446 471	470 495 523 555	3600 3700 3800 3900	3
176	229	286	349	419	499	593	4000	
184 193 202 213	239 251 265 280	300 316 335 356	368 389 414 444	444 473 508 555	532 573 628 738	640 705	4100 4200 4300 4400	
225	297	381	484	640			4500	
239 256 278 315	318 346 393	415 472	553				4600 4700 4800 4900	
							5000	
							5100 5200 5300	4
*****	*****	*****	*****	*****	******	*****	******* 5300 5200 5100	
							5000	
408 463 504 541	510 579 631	693					4900 4800 4700 4600	
576	677	755	804				4500	
610 643 677 711	720 763 805 847	811 863 914 964	877 942 1003 1063	909 994 1069 1139	1106 1191		4400 4300 4200 4100	5
745	889	1015	1121	1207	1269	1305	4000	
				5				-

CHARGE 3 G

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEIG	HT OF	TARGET A	ABOVE G	UN - ME1	TERS				
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	4000	-1040	-742	-474	-228	0	211	406	584			
5	3900 3800 3700 3600		-784 -833	-499 -526 -557 -592	-239 -251 -265 -280	0 0 0 0	221 232 243 255	425 445 466 489	612 641 671 703			
	3500				-296	0	268	512	736			
	3400 3300				-315 -337	0	282 297	538 566	772 810			
	3200 3100		ļ			0	314 333	596 628	851 895			
6	3000					0	354	664	943			
	2900 2800 2700					0	377	704	995			
	6											

CHARGE 3 G

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
745	889	1015	1121	1207	1269	1305	4000	
781 818 857 897	933 978 1024 1072	1066 1119 1172 1228	1180 1240 1301 1363	1274 1341 1409 1477	1346 1420 1495 1571	1392 1477 1559 1641	3900 3800 3700 3600	
939	1122	1285	1427	1548	1647	1724	3500	5
984 1031 1082 1136	1175 1231 1289 1351	1345 1408 1473 1543	1493 1563 1635 1710	1620 1695 1773 1853	1725 1805 1887 1973	1807 1892 1979 2068	3400 3300 3200 3100	
1193	1418	1616	1789	1938	2061	2159	3000	
1256 1323	1488 1564	1694 1777	1873 1961	2026 2118	2153 2248	2254 2351	2900 2800	
	1004	,		2216	2348	2452	2700	
				6				

3 G

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

		0.1.2.1.1.0 0.	ĺ	A ONE KNOT WIT		
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

CHARGE 3 G

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-											-0.4+ -1.9+
+200-	DT DD	-0.5+ -2.0+	-0.5+ -2.1+	-0.5+ -2.2+	-0.6+ -2.3+	-0.6+ -2.4+	-0.6+ -2.5+	-0.6+ -2.6+	-0.7+ -2.7+	-0.7+ -2.8+	-0.7+ -2.9+
+300-											-0.9+ -3.9+

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-3.3	-40.0
-30	-3.0	-34.4
-20	-2.8	-28.9
-10	-2.5	-23.3
0	-2.2	-17.8
10	-1.9	-12.2
20	-1.6	-6.7
30	-1.3	-1.1
40	-1.0	4.4
50	-0.6	10.0
60	-0.3	15.6
70	0.0	21.1
80	0.3	26.7
90	0.7	32.2
100	1.0	37.8
110	1.3	43.3
120	1.7	48.9
130	2.0	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

The color of th									
N	1	2	3	4	5	6	7	8	9
E         FUZE M582         HOB         M         MIL SEC         MIL MIL MIL MIL           0         0.0         12         1         0.0         0.0         0.00           100         8.2         12         1         0.4         0.2         0.00           200         16.4         12         1         0.4         0.2         0.00           400         32.9         1.6         1.26         12         1         1.2         0.5         0.01           500         41.3         2.0         1.01         12         1         2.0         0.8         0.02           600         49.7         2.5         0.84         12         1         2.5         1.0         0.03           700         58.2         2.9         0.72         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.3         1.3         0.04           1100         84.0         4.2         0.50         11         2         4.2         1.6         0.05           1100         82.8         4.6         0.45         11         2	l A	E L E	GRAZE	PER	PER	0	OF		
0         0.0         12         1         0.0         0.0         0.00           100         8.2         12         1         0.0         0.00         0.00           200         16.4         12         1         0.8         0.3         0.01           300         24.6         12         1         1.2         0.5         0.01           400         32.9         1.6         1.26         12         1         1.6         0.6         0.02           500         41.3         2.0         1.01         12         1         2.0         0.8         0.02           600         49.7         2.5         0.84         12         1         2.5         1.0         0.03           800         66.7         3.3         0.62         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.7         1.5         0.04           1000         84.0         4.2         0.50         11         2         4.2         1.6         0.05           1100         92.8         4.6         0.45         11         2	G	V			D ELEV	K		( CORR	OF
100         8.2         12         1         0.4         0.2         0.00           300         24.6         12         1         0.8         0.3         0.01           400         32.9         1.6         1.26         12         1         1.6         0.6         0.02           500         41.3         2.0         1.01         12         1         1.6         0.6         0.02           600         49.7         2.5         0.84         12         1         2.5         1.0         0.03           700         58.2         2.9         0.72         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.7         1.5         0.04           1000         84.0         4.2         0.50         11         2         4.2         1.6         0.05           1100         92.8         4.6         0.45         11         2         4.6         1.8         0.05           1200         101.6<	М	MIL			М	MIL	SEC	MIL	MIL
200         16. 4         12         1         0.8         0.3         0.01           300         24.6         12         1         1.2         0.5         0.01           500         41.3         2.0         1.01         12         1         1.6         0.6         0.02           600         49.7         2.5         0.84         12         1         2.5         1.0         0.03           700         58.2         2.9         0.72         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.3         1.3         0.04           900         75.3         3.7         0.55         12         2         3.7         1.5         0.04           1000         84.0         4.2         0.50         11         2         4.2         1.6         0.05           1100         92.8         4.6         0.45         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         2         4.6         1.8         0.05           1200         10	0	0.0			12	1	0.0	0.0	0.00
600         49.7         2.5         0.84         12         1         2.5         1.0         0.03           700         58.2         2.9         0.72         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.3         1.3         0.04           900         75.3         3.7         0.55         12         2         3.7         1.5         0.04           1000         84.0         4.2         0.50         11         2         4.6         1.8         0.05           1100         92.8         4.6         0.45         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         3         5.4         2.2         0.06           1300         110.5         5.4         0.38         11         3         5.4	200 300	16.4 24.6	1.6	1.26	12 12	1	0.8 1.2	0.3 0.5	0.01 0.01
700         58.2         2.9         0.72         12         2         2.9         1.1         0.03           800         66.7         3.3         0.62         12         2         3.3         1.3         0.04           1000         84.0         4.2         0.50         11         2         4.2         1.6         0.05           1100         92.8         4.6         0.45         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         2         5.0         2.0         0.06           1300         110.5         5.4         0.38         11         3         5.9         2.3         0.07           1500         128.6         6.3         0.33         11         3         6.8         2.7         0.07           1600         137.8         6.8         0.31         11         3         6.8         2.7         0.07           1700         147.0         7.2         0.29         11         3         7.2         2.9         0.08           1800         156.4         7.7         0.27         11         4         7.7	500	41.3	2.0	1.01	12	1	2.0	0.8	0.02
1100         92.8         4.6         0.45         11         2         4.6         1.8         0.05           1200         101.6         5.0         0.41         11         2         5.0         2.0         0.06           1300         110.5         5.4         0.38         11         3         5.4         2.2         0.06           1400         119.5         5.9         0.35         11         3         5.9         2.3         0.07           1500         128.6         6.3         0.33         11         3         6.8         2.7         0.07           1600         137.8         6.8         0.31         11         3         6.8         2.7         0.07           1700         147.0         7.2         0.29         11         3         7.2         2.9         0.08           1800         156.4         7.7         0.27         11         4         7.7         3.1         0.08           1900         165.9         8.1         0.26         10         4         8.6         3.5         0.09           2000         175.5         8.6         0.24         10         4         8.6 <td>700 800</td> <td>58.2 66.7</td> <td>2.9 3.3</td> <td>0.72 0.62</td> <td>12 12</td> <td>2</td> <td>2.9 3.3</td> <td>1.1 1.3</td> <td>0.03 0.04</td>	700 800	58.2 66.7	2.9 3.3	0.72 0.62	12 12	2	2.9 3.3	1.1 1.3	0.03 0.04
1300         110.5         5.4         0.38         11         3         5.4         2.2         0.06           1400         119.5         5.9         0.35         11         3         5.9         2.3         0.07           1500         128.6         6.3         0.33         11         3         6.3         2.5         0.07           1600         137.8         6.8         0.31         11         3         6.8         2.7         0.07           1700         147.0         7.2         0.29         11         3         7.2         2.9         0.08           1800         156.4         7.7         0.27         11         4         7.7         3.1         0.08           1900         165.9         8.1         0.26         10         4         8.1         3.3         0.09           2000         175.5         8.6         0.24         10         4         8.6         3.5         0.09           2100         185.2         9.0         0.23         10         4         9.0         3.7         0.10           2200         195.1         9.5         0.22         10         5         9.5 <td>1000</td> <td>84.0</td> <td>4.2</td> <td>0.50</td> <td>11</td> <td>2</td> <td>4.2</td> <td>1.6</td> <td>0.05</td>	1000	84.0	4.2	0.50	11	2	4.2	1.6	0.05
1600         137.8         6.8         0.31         11         3         6.8         2.7         0.07           1700         147.0         7.2         0.29         11         3         7.2         2.9         0.08           1800         156.4         7.7         0.27         11         4         7.7         3.1         0.08           1900         165.9         8.1         0.26         10         4         8.1         3.3         0.09           2000         175.5         8.6         0.24         10         4         8.6         3.5         0.09           2100         185.2         9.0         0.23         10         4         9.0         3.7         0.10           2200         195.1         9.5         0.22         10         5         9.5         3.9         0.10           2300         205.0         10.0         0.21         10         5         10.0         4.1         0.11           2400         215.2         10.5         0.20         10         5         10.0         4.1         0.11           2500         225.4         10.9         0.19         10         5         1	1200 1300	101.6 110.5	5.0 5.4	0.41 0.38	11 11	3	5.0 5.4	2.0 2.2	0.06 0.06
1900         165.9         8.1         0.26         10         4         8.1         3.3         0.09           2000         175.5         8.6         0.24         10         4         8.6         3.5         0.09           2100         185.2         9.0         0.23         10         4         9.0         3.7         0.10           2200         195.1         9.5         0.22         10         5         9.5         3.9         0.10           2300         205.0         10.0         0.21         10         5         10.0         4.1         0.11           2400         215.2         10.5         0.20         10         5         10.5         4.3         0.11           2500         225.4         10.9         0.19         10         5         10.9         4.5         0.12           2600         235.8         11.4         0.18         10         6         11.4         4.8         0.12           2700         246.4         11.9         0.18         9         6         11.9         5.0         0.13           2800         257.2         12.4         0.17         9         6         <	1500	128.6	6.3	0.33	11	3	6.3	2.5	0.07
2100         185.2         9.0         0.23         10         4         9.0         3.7         0.10           2200         195.1         9.5         0.22         10         5         9.5         3.9         0.10           2300         205.0         10.0         0.21         10         5         10.0         4.1         0.11           2400         215.2         10.5         0.20         10         5         10.5         4.3         0.11           2500         225.4         10.9         0.19         10         5         10.9         4.5         0.12           2600         235.8         11.4         0.18         10         6         11.4         4.8         0.12           2700         246.4         11.9         0.18         9         6         11.9         5.0         0.13           2800         257.2         12.4         0.17         9         6         12.4         5.2         0.13           2900         268.1         12.9         0.16         9         7         12.9         5.5         0.14           3000         279.3         13.4         0.16         9         7	1700 1800	147.0 156.4	7.2 7.7	0.29 0.27	11 11		6.8 7.2 7.7 8.1	2.7 2.9 3.1 3.3	0.08 0.08
2200         195.1         9.5         0.22         10         5         9.5         3.9         0.10           2300         205.0         10.0         0.21         10         5         10.0         4.1         0.11           2400         215.2         10.5         0.20         10         5         10.5         4.3         0.11           2500         225.4         10.9         0.19         10         5         10.9         4.5         0.12           2600         235.8         11.4         0.18         10         6         11.4         4.8         0.12           2700         246.4         11.9         0.18         9         6         11.9         5.0         0.13           2800         257.2         12.4         0.17         9         6         12.4         5.2         0.13           2900         268.1         12.9         0.16         9         7         12.9         5.5         0.14           3000         279.3         13.4         0.16         9         7         13.4         5.7         0.15           3100         302.3         14.5         0.14         9         8	2000	175.5	8.6	0.24	10	4	8.6	3.5	0.09
2600         235.8         11.4         0.18         10         6         11.4         4.8         0.12           2700         246.4         11.9         0.18         9         6         11.9         5.0         0.13           2800         257.2         12.4         0.17         9         6         12.4         5.2         0.13           2900         268.1         12.9         0.16         9         7         12.9         5.5         0.14           3000         279.3         13.4         0.16         9         7         13.4         5.7         0.15           3100         290.7         14.0         0.15         9         7         14.0         6.0         0.15           3200         302.3         14.5         0.14         9         8         14.5         6.3         0.16           3300         314.1         15.0         0.14         8         8         15.0         6.5         0.16           3400         326.2         15.6         0.13         8         9         15.6         6.8         0.17	2200 2300	195.1 205.0	9.5 10.0	0.22 0.21	10 10	5	9.5 10.0	3.9 4.1	0.10 0.11
2700         246.4         11.9         0.18         9         6         11.9         5.0         0.13           2800         257.2         12.4         0.17         9         6         12.4         5.2         0.13           2900         268.1         12.9         0.16         9         7         12.9         5.5         0.14           3000         279.3         13.4         0.16         9         7         13.4         5.7         0.15           3100         290.7         14.0         0.15         9         7         14.0         6.0         0.15           3200         302.3         14.5         0.14         9         8         14.5         6.3         0.16           3300         314.1         15.0         0.14         8         8         15.0         6.5         0.16           3400         326.2         15.6         0.13         8         9         15.6         6.8         0.17	2500	225.4	10.9	0.19	10	5	10.9	4.5	0.12
3100     290.7     14.0     0.15     9     7     14.0     6.0     0.15       3200     302.3     14.5     0.14     9     8     14.5     6.3     0.16       3300     314.1     15.0     0.14     8     8     15.0     6.5     0.16       3400     326.2     15.6     0.13     8     9     15.6     6.8     0.17	2700 2800	246.4 257.2	11.9 12.4	0.18 0.17	9 9	6 6	11.9 12.4	5.0 5.2	0.13 0.13
3200     302.3     14.5     0.14     9     8     14.5     6.3     0.16       3300     314.1     15.0     0.14     8     8     15.0     6.5     0.16       3400     326.2     15.6     0.13     8     9     15.6     6.8     0.17	3000	279.3	13.4	0.16	9	7	13.4	5.7	0.15
3500 338.6 16.1 0.13 8 9 16.1 7.1 0.17	3200 3300	302.3 314.1	14.5 15.0	0.14 0.14		8 8	14.5 15.0	6.3 6.5	0.16 0.16
	3500	338.6	16.1	0.13	8	9	16.1	7.1	0.17

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 3 G TABLE F

CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R A				RANGE	CORREC	TIONS F	OR			
N G E	VELO	ZLE CITY M/S		NGE ND NO T	T	IR EMP PCT	AI DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	М	M	M	M	М	М	М	М	М
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.9 1.7 2.6 3.4	-0.8 -1.5 -2.3 -3.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-1 -2 -3 -4	1 2 3 4
500	4.2	-3.8	0.1	0.0	0.0	0.0	-0.1	0.1	-5	5
600 700 800 900	5.1 5.9 6.7 7.5	-4.5 -5.2 -6.0 -6.7	0.1 0.1 0.1 0.1	-0.1 -0.1 -0.1 -0.1	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-0.1 -0.1 -0.2 -0.2	0.1 0.1 0.2 0.2	-6 -7 -8 -9	6 7 8 9
1000	8.4	-7.4	0.2	-0.1	0.0	0.0	-0.3	0.3	-10	10
1100 1200 1300 1400	9.2 10.0 10.8 11.6	-8.2 -8.9 -9.6 -10.3	0.2 0.2 0.2 0.3	-0.2 -0.2 -0.2 -0.2	0.0 0.0 0.0	0.0 0.0 0.0 0.0	-0.3 -0.4 -0.5 -0.5	0.3 0.4 0.5 0.5	-11 -12 -12 -13	11 12 13 14
1500	12.4	-11.0	0.3	-0.3	0.0	0.0	-0.6	0.6	-14	15
1600 1700 1800 1900	13.1 13.9 14.7 15.5	-11.7 -12.4 -13.1 -13.8	0.3 0.4 0.4 0.5	-0.3 -0.3 -0.4 -0.4	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-0.7 -0.8 -0.9 -1.0	0.7 0.8 0.9 1.0	-15 -16 -17 -18	16 16 17 18
2000	16.2	-14.5	0.5	-0.5	0.0	0.0	-1.1	1.1	-18	19
2100 2200 2300 2400	17.0 17.8 18.5 19.3	-15.2 -15.9 -16.5 -17.2	0.6 0.6 0.7 0.7	-0.5 -0.5 -0.6 -0.6	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-1.2 -1.3 -1.4 -1.5	1.2 1.3 1.4 1.6	-19 -20 -21 -22	20 21 21 22
2500	20.0	-17.9	0.8	-0.7	0.0	0.0	-1.7	1.7	-22	23
2600 2700 2800 2900	20.7 21.5 22.2 22.9	-18.6 -19.2 -19.9 -20.6	0.8 0.9 0.9 1.0	-0.7 -0.8 -0.8 -0.9	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-1.8 -1.9 -2.1 -2.2	1.8 2.0 2.1 2.3	-23 -24 -25 -25	24 25 25 26
3000	23.7	-21.2	1.1	-1.0	0.0	0.0	-2.4	2.4	-26	27
3100 3200 3300 3400	24.4 25.1 25.8 26.5	-21.9 -22.5 -23.2 -23.8	1.2 1.2 1.3 1.4	-1.0 -1.1 -1.1 -1.2	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-2.5 -2.7 -2.9 -3.0	2.6 2.7 2.9 3.1	-27 -27 -28 -29	28 28 29 30
3500	27.2	-24.5	1.5	-1.3	0.0	0.0	-3.2	3.3	-29	30

CHARGE 3 G

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	338.6	16.1	0.13	8	9	16.1	7.1	0.17
3600 3700 3800 3900	351.4 364.4 377.9 391.8	16.7 17.3 17.9 18.5	0.13 0.12 0.12 0.11	8 8 7 7	10 10 11 11	16.7 17.3 17.9 18.5	7.4 7.7 8.1 8.4	0.18 0.19 0.19 0.20
4000	406.1	19.1	0.11	7	12	19.1	8.8	0.20
4100 4200 4300 4400	421.0 436.4 452.6 469.5	19.8 20.4 21.1 21.8	0.11 0.10 0.10 0.10	7 6 6 6	13 14 15 16	19.8 20.4 21.1 21.8	9.2 9.6 10.0 10.5	0.21 0.22 0.22 0.23
4500	487.3	22.6	0.09	5	17	22.6	11.0	0.24
4600 4700 4800 4900	506.2 526.5 548.4 572.6	23.4 24.2 25.1 26.0	0.09 0.09 0.08 0.08	5 5 4 4	18 20 23 26	23.4 24.2 25.1 26.0	11.6 12.2 12.9 13.7	0.25 0.26 0.27 0.28
5000	599.9	27.1	0.08	3	30	27.1	14.6	0.29
5100 5200 5300	632.0 673.1 748.1	28.3 29.9 32.6	0.08 0.07 0.07	3 2	38 61	28.3 29.9 32.6	15.8 17.4 20.7	0.30 0.32
*****	******	******	*****	******	****	******	******	******
5300 5200 5100	812.9 887.8 928.8	34.7 37.1 38.3	0.06 0.06 0.06	2	61 38	34.7 37.1 38.3	24.0 28.7 31.7	0.46 0.48
5000	960.8	39.2	0.06	3	30	39.2	34.3	0.51
4900 4800 4700 4600	987.9 1011.9 1033.7 1053.8	39.9 40.6 41.1 41.6	0.05 0.05 0.05 0.05	4 4 5 5	26 22 20 18	39.9 40.6 41.1 41.6	36.7 39.1 41.4 43.8	0.53 0.56 0.58 0.60
4500	1072.5	42.1	0.05	6	17	42.1	46.2	0.63
4400 4300 4200 4100	1090.1 1106.7 1122.6 1137.7	42.5 42.9 43.2 43.6	0.05 0.05 0.05 0.05	6 6 7	15 14 13 12	42.5 42.9 43.2 43.6	48.7 51.2 53.9 56.7	0.65 0.68 0.71 0.74
4000	1152.2	43.9	0.05	7	12	43.9	59.6	0.78

FT 155-AR-1 TABLE F CHARGE 3 G CORRECTION FACTORS

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 12 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE RANGE AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC INC HEAD TAIL DEC INC DEC INC DEC INC M M M M M M M M M М M 3500 27.2 -24.5 1.5 0.0 0.0 3.3 30 -1.3 -3.2-29 27.9 28.6 29.3 3.4 3.6 3.8 4.0 3600 0.0 0.0 -25.1 1.5 -1.4 -3.4-30 31  $\begin{array}{r}
-25.7 \\
-26.4 \\
-27.0
\end{array}$ -1.4 -1.5 0.0 0.0 0.0 1.6 1.7 0.0 0.0 0.0 -3.6 -3.8 -31 -31 32 32 3700 3800 30.0 1.8 33 3900 -1.6 -4.0-32 4000 30.7 -27.6 1.9 -1.7 0.0 0.0 -4.24.2 -33 34 2.0 2.1 2.2 2.4 -28.2 -28.9 -29.5 -30.1 -1.7 -1.8 -1.9 -2.0 0.0 0.0 0.0 0.0 4.4 4.7 4.9 5.1 4100 31.4 32.1 32.7 34 35 0.0 -4.4 -33 -4.6 -4.8 -5.0 0.0 4200 -34 0.0 4300 -35 36 33.4 -35 36 4400 4500 34.1 -30.72.5 -2.10.0 0.0 -5.25.3 -36 37 2.6 2.8 2.9 3.1 4600 34.7 35.4 0.0 0.0 -5.5 -5.7 5.6 5.8 -2.2 -2.3 -36 -37 37 38 -31.3 -31.9 4700 4800 36.0 -2.40.0 0.0 -6.0 6.1 -32.5-37 36.6 0.0 0.0 6.4 39 -6.2-38 5000 3.3 0.0 -6.5 -38 -33.7 -2.60.0 6.7 40 -34.3 -34.9 -35.5 -2.8 -2.9 0.0 0.0 0.0 0.0 0.0 0.0 5100 3.6 -6.8 -7.1 -7.4 7.0 7.4 -39 40 5200 -39 40 5300 -35.0 -3.6 0.0 0.0 -7.8 -7.7 7.7 7.6 5200 -34.4-3.50.0 0.0 -38 40 5100 -33.73.9 -3.5 0.0 0.0 -37 39 4.0 0.0 -7.5 7.5 38 5000 -**33.1** -3.4 0.0 -36 4900 -7.4 7.4 7.2 7.1 36.4 -32.44.0 -3.30.0 0.0 -35 37 -31.8 -31.2 0.0 0.0 -7.2 -7.0 4.1 -35 -34 35.7 -3.24800 36 -3.0 34.9 35 4600 34.2 -30.54.0 -2.90.0 0.0 **-6.8** 6.9 -33 35 4500 4.0 34 33.5 -**29.9** -2.70.0 0.0 -6.6 6.7 -32 4400 32.8 -29.3 3.9 -2.5 0.0 0.0 -6.5 6.5 -32 33 -28.7-28.03.9 -2.3 -2.00.0 6.4 6.2 6.0 4300 32.1 0.0 -6.2-31 32 31 4200 31.3 0.0 -6.0 -30 -27.4 -5.8 -29 4100 30.6 3.7 -1.7 0.0 0.0 31

4000

29.9

**-26.8** 

3.6

-1.3

0.0

30

-5.6

5.8

-28

0.0

CHARGE 3 G

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A	E L	FS FOR GRAZE	DFS PER	DR PER	F O	TIME OF		MUTH CTIONS
N G E	L E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
4000	1152.2	43.9	0.05	7	12	43.9	59.6	0.78
3900 3800 3700 3600	1166.1 1179.5 1192.4 1204.8	44.2 44.4 44.7 44.9	0.05 0.05 0.05 0.05	7 8 8 8	11 10 10 9	44.2 44.4 44.7 44.9	62.8 66.2 70.0 74.1	0.82 0.86 0.90 0.96
3500	1216.7	45.2	0.05	9	8	45.2	78.7	1.02
3400 3300 3200 3100	1228.2 1239.3 1250.0 1260.1	45.4 45.6 45.8 46.0	0.05 0.05 0.05 0.05	9 9 10 10	8 7 7	45.4 45.6 45.8 46.0	84.0 89.9 96.9 105.1	1.08 1.16 1.25 1.36
3000	1269.9	46.2	0.05	11		46.2	114.9	
2900	1279.1	46.5	0.05			46.5	126.7	
2890	1280.0							

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 3 G TABLE F

CORRECTION FACTORS

<del>. •, .</del>	<del></del>									
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RANGE WIND 1 KNOT		WIND TEMP DENSI		AIR DENSITY 1 PCT		PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	M	M	М	M	M	М	М	M
4000	29.9	-26.8	3.6	-1.3	0.0	0.0	-5.6	5.8	-28	30
3900 3800 3700 3600	29.2 28.5 27.8 27.1	-26.2 -25.6 -25.0 -24.4	3.5 3.4 3.3 3.1		0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-5.4 -5.1 -4.9 -4.6	5.6 5.3 5.1 4.9	-28 -27 -26 -25	29 28 27 27
3500	26.4	-23.8	3.0		0.0	0.0	-4.4	4.6	-24	26
3400 3300 3200 3100	25.7 25.1 24.4 23.7	-23.2 -22.7 -22.1	2.8 2.6 2.3 2.0		0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-4.1 -3.7 -3.4	4.4 4.1 3.8 3.5	-23 -23 -22 -21	25 24 23 22
3000	23.1		1.7		0.0	0.0		3.1	-20	21
2900	22.5		1.2		0.0	0.0		2.7		20

CHARGE 3 G

TABLE G
SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R	Ę		PROBABLE ERRORS				ANGLE OF	COT	TML VEL	MO		SITE
A N	E V			F	UZE M5	82	FALL	ANGLE OF FALL	VEL			OR OF SITE  -1 MIL
G E	V	R	D	НВ	ТВ	RB		FALL			SITE	SITE
М	MIL	М	M	М	SEC	M	MIL		M/S	M	MIL	MIL
0	0.0	2	0				0		247	0	0.000	0.00
500 1000 1500 2000	41.3 84.0 128.6 175.5	4 6 8 11	0 0 1 1	0 1 1 2	0.04 0.04 0.04 0.04	10 10 10 11	42 87 134 186	24.3 11.7 7.5 5.4	242 237 232 227	5 21 49 89	0.002 0.007 0.016 0.031	-0.002 -0.006 -0.015 -0.030
2500	225.4	13	1	3	0.04	11	241	4.1	223	146	0.054	-0.051
3000 3500 4000 4500	279.3 338.6 406.1 487.3	16 18 21 23	1 2 2 3	4 5 6 8	0.04	12 13 14 15	302 370 448 540	3.3 2.6 2.1 1.7	219 216 213 211	220 317 445 620	0.089 0.144 0.238 0.434	-0.129 -0.205
5000	599.9	25	3	11	0.05	16	665	1.3	209	893	1.284	-0.715
****	******	****	****	****	*****	***	*****	*****	****	*****	*****	*****
5000	960.8	25	4	22	0.05	16	1031	0.6	214	1855	-2.296	1.72
4500 4000 3500 3000	1072.5 1152.2 1216.7 1269.9	23 20 18	4 4 4 3	25 27 28 29	0.06 0.06 0.06 0.06	14 13 11 10	1137 1213 1278 1338	0.5 0.4 0.3 0.3	216 217 217 217	2129 2303 2429 2519	-1.441 -1.240 -1.139 -1.076	1.35 1.20 1.12 1.07

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### TABLE H ROTATION - RANGE

CHARGE 3 G

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

		AZIMUTH OF TARGET - MILS											
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600				
500 1000 1500 2000	0 0 0 0	0 -1+ -1+ -1+	-1+ -1+ -2+ -3+	-1+ -2+ -3+ -4+	-1+ -2+ -4+ -5+	-1+ -3+ -4+ -5+	-2+ -3+ -5+ -6+	-2+ -3+ -5+ -6+	-2+ -4+ -5+ -7+				
2500	0	-2+	-3+	-4+	-6+	-7+	-7+	-8+	-8+				
3000 3500 4000 4500	0 0 0	-2+ -2+ -2+ -2+	-3+ -4+ -4+ -4+	-5+ -6+ -6+ -6+	-6+ -7+ -8+ -8+	-8+ -8+ -9+ -9+	-8+ -9+ -10+ -10+	-9+ -10+ -11+ -11+	-9+ -10+ -11+ -11+				
5000	0	-2+	-4+	-6+	-7+	-9+	-10+	-10+	-11+				
*****	****	*****	*****	*****	*****	*****	*****	*****	*****				
5000	0	-1+	-1+	-1+	-2+	-2+	-2+	-3+	-3+				
4500 4000 3500 3000	0 0 0 0	0 +1- +1- +2-	0 +2- +3- +4-	+1- +2- +4- +6-	+1- +3- +5- +7-	+1- +3- +6- +9-	+1- +4- +6- +10-	+1- +4- +7- +10-	+1- +4- +7- +10-				
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800				
			A	ZIMUTH (	OF TARG	ET - MII	LS						

- NOTES 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
  2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
  3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
  4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	. 9 4	. 87	. 77	. 64	. 50	. 34

### TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

		AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200			
500 1000 1500 2000	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0			
2500	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R			
3000 3500 4000 4500	R0.1L R0.1L R0.2L R0.3L	R0.1L R0.1L R0.2L R0.3L	R0.1L R0.1L R0.1L R0.2L	0.0 R0.1L R0.1L R0.1L	0.0 0.0 0.0 0.0	0.0 L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.2R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R			
5000	R0.4L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.4R			
*****	******	*****	*****	*****	*****	*****	******	******	*****			
5000	R1.3L	R1.2L	R0.9L	R0.5L	0.0	L0.5R	L0.9R	L1.2R	L1.3R			
4500 4000 3500 3000	R1.7L R2.2L R2.6L R3.1L	R1.6L R2.0L R2.4L R2.9L	R1.2L R1.5L R1.9L R2.2L	R0.7L R0.8L R1.0L R1.2L	0.0 0.0 0.0 0.0	L0.7R L0.8R L1.0R L1.2R	L1.2R L1.5R L1.9R L2.2R	L1.6R L2.0R L2.4R L2.9R	L1.7R L2.2R L2.6R L3.1R			
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400			
			AZ I	MUTH OF	TARGET	r - MILS						

### 0 DEGREES LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 3 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R		
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R		
3000 3500 4000 4500	L0.1R L0.1R 0.0 0.0	L0.1R L0.1R L0.1R 0.0	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.2R L0.3R	L0.2R L0.3R L0.3R L0.4R	L0.2R L0.3R L0.4R L0.5R	L0.3R L0.3R L0.4R L0.5R	L0.3R L0.3R L0.4R L0.6R		
5000	R0.1L	R0.1L	0.0	L0.2R	L0.3R	L0.5R	L0.6R	L0.7R	L0.8R		
*****	******	*****	*****	*****	******	******	******	******	*****		
5000	R0.8L	R0.7L	R0.4L	0.0	L0.5R	L1.0R	L1.4R	L1.6R	L1.7R		
4500 4000 3500 3000	R1.2L R1.6L R2.0L R2.5L	R1.1L R1.4L R1.9L R2.3L	R0.7L R1.0L R1.3L R1.6L	R0.1L R0.3L R0.5L R0.6L	L0.5R L0.5R L0.5R L0.5R	L1.2R L1.3R L1.5R L1.7R	L1.7R L2.0R L2.4R L2.7R	L2.1R L2.5R L2.9R L3.4R	L2.2R L2.7R L3.1R L3.6R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGET	- MILS	;				

### 10 DEGREES SOUTH LATITUDE

### TABLE I ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 20 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	L0.1R L0.1R L0.1R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R		
2500	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
3000 3500 4000 4500	L0.2R L0.3R L0.3R L0.3R	L0.3R L0.3R L0.3R L0.3R	L0.3R L0.3R L0.3R L0.4R	L0.3R L0.3R L0.4R L0.5R	L0.3R L0.4R L0.5R L0.6R	L0.4R L0.4R L0.5R L0.7R	L0.4R L0.5R L0.6R L0.7R	L0.4R L0.5R L0.6R L0.8R	L0.4R L0.5R L0.6R L0.8R		
5000	L0.3R	L0.3R	L0.4R	L0.5R	L0.7R	L0.8R	L0.9R	L1.0R	L1.1R		
*****	*****	*****	*****	*****	*****	******	******	******	*****		
5000	R0.2L	R0.2L	L0.1R	L0.5R	L0.9R	L1.4R	L1.8R	L2.0R	L2.1R		
4500 4000 3500 3000	R0.6L R1.0L R1.4L R1.8L	R0.5L R0.8L R1.2L R1.6L	R0.1L R0.4L R0.7L R1.0L	L0.4R L0.3R L0.1R R0.1L	L1.0R L1.0R L1.1R L1.1R	L1.6R L1.8R L2.0R L2.2R	L2.2R L2.5R L2.8R L3.1R	L2.5R L2.9R L3.3R L3.8R	L2.6R L3.1R L3.5R L4.0R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGET	- MILS	;				

### 20 DEGREES SOUTH LATITUDE

- NOTES 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
  2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
  3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
  4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 3 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R		
2500	L0.3R	L0.3R	L0.4R								
3000 3500 4000 4500	L0.4R L0.5R L0.5R L0.6R	L0.4R L0.5R L0.5R L0.6R	L0.4R L0.5R L0.6R L0.6R	L0.5R L0.5R L0.6R L0.7R	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.9R	L0.5R L0.7R L0.8R L1.0R	L0.6R L0.7R L0.8R L1.0R	L0.6R L0.7R L0.9R L1.0R		
5000	L0.6R	L0.6R	L0.7R	L0.8R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R		
*****	******	*****	*****	*****	******	******	******	******	*****		
5000	L0.3R	L0.4R	L0.6R	L1.0R	L1.4R	L1.8R	L2.2R	L2.4R	L2.5R		
4500 4000 3500 3000	0.0 R0.3L R0.7L R1.1L	L0.1R R0.2L R0.5L R0.9L	L0.4R L0.2R R0.1L R0.3L	L0.9R L0.8R L0.7R L0.5R	L1.5R L1.5R L1.6R L1.6R	L2.0R L2.2R L2.4R L2.6R	L2.5R L2.9R L3.2R L3.4R	L2.9R L3.3R L3.7R L4.0R	L3.0R L3.4R L3.8R L4.2R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGET	- MILS	;				

### 30 DEGREES SOUTH LATITUDE

### TABLE I ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 40 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS									
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
2000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	
3000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	
3500	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	
4000	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	
4500	L0.8R	L0.8R	L0.9R	L1.0R	L1.0R	L1.1R	L1.2R	L1.2R	L1.3R	
5000	L0.9R	L0.9R	L1.0R	L1.1R	L1.2R	L1.4R	L1.5R	L1.5R	L1.6R	
5000	******* L0.8R	L0.9R	****** L1.1R	L1.4R	L1.8R	L2.1R	L2.5R	L2.7R	L2.7R	
4500	L0.6R	L0.7R	L1.0R	L1.4R	L1.9R	L2.4R	L2.8R	L3.1R	L3.2R	
4000	L0.3R	L0.4R	L0.8R	L1.3R	L2.0R	L2.6R	L3.1R	L3.5R	L3.6R	
3500	0.0	L0.1R	L0.6R	L1.2R	L2.0R	L2.8R	L3.4R	L3.9R	L4.0R	
3000	R0.4L	R0.2L	L0.3R	L1.1R	L2.0R	L2.9R	L3.7R	L4.2R	L4.4R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			ΑZΙ	MUTH OF	TARGE T	- MILS	;			

### 40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 3 G ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 50 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200			
500 1000 1500 2000	L0.1R L0.2R L0.3R L0.5R	L0.1R L0.2R L0.3R L0.5R	L0.1R L0.2R L0.3R L0.5R	L0.1R L0.2R L0.3R L0.5R	L0.1R L0.2R L0.4R L0.5R	L0.1R L0.2R L0.4R L0.5R	L0.1R L0.2R L0.4R L0.5R	L0.1R L0.2R L0.4R L0.5R	L0.1R L0.2R L0.4R L0.5R			
2500	L0.6R											
3000 3500 4000 4500	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L1.0R L1.1R	L0.7R L0.9R L1.0R L1.2R	L0.7R L0.9R L1.1R L1.2R	L0.8R L0.9R L1.1R L1.3R	L0.8R L1.0R L1.1R L1.4R	L0.8R L1.0R L1.2R L1.4R	L0.8R L1.0R L1.2R L1.4R			
5000	L1.2R	L1.2R	L1.3R	L1.4R	L1.5R	L1.6R	L1.7R	L1.7R	L1.8R			
*****	*****	*****	*****	*****	*****	******	******	******	*****			
5000	L1.3R	L1.4R	L1.5R	L1.8R	L2.1R	L2.4R	L2.7R	L2.9R	L2.9R			
4500 4000 3500 3000	L1.2R L0.9R L0.7R L0.4R	L1.2R L1.1R L0.8R L0.5R	L1.5R L1.4R L1.2R L1.0R	L1.8R L1.8R L1.7R L1.6R	L2.3R L2.3R L2.4R L2.4R	L2.7R L2.9R L3.0R L3.1R	L3.0R L3.3R L3.6R L3.8R	L3.3R L3.6R L3.9R L4.2R	L3.4R L3.7R L4.1R L4.4R			
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400			
			AZI	MUTH OF	TARGET	- MILS	i					

### 50 DEGREES SOUTH LATITUDE

### TABLE I ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 60 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
1500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
2000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R		
2500	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R		
3000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R		
3500	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R		
4000	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R		
4500	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R		
5000	L1.5R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R		
5000	******* L1.8R	****** L1.8R	****** L1.9R	****** L2.2R	******* L2.4R	L2.6R	L2.8R	L3.0R	L3.0R		
4500	L1.7R	L1.8R	L1.9R	L2.2R	L2.6R	L2.9R	L3.2R	L3.4R	L3.4R		
4000	L1.6R	L1.6R	L1.9R	L2.2R	L2.6R	L3.1R	L3.4R	L3.6R	L3.7R		
3500	L1.4R	L1.5R	L1.8R	L2.2R	L2.7R	L3.2R	L3.6R	L3.9R	L4.0R		
3000	L1.1R	L1.3R	L1.6R	L2.1R	L2.7R	L3.3R	L3.8R	L4.1R	L4.2R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGE T	- MILS	i				

#### 60 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 3 G ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.3R L0.4R L0.6R										
2500	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R		
3000 3500 4000 4500	L0.9R L1.0R L1.2R L1.4R	L0.9R L1.1R L1.2R L1.4R	L0.9R L1.1R L1.2R L1.4R	L0.9R L1.1R L1.3R L1.5R	L0.9R L1.1R L1.3R L1.5R	L0.9R L1.1R L1.3R L1.6R	L0.9R L1.1R L1.3R L1.6R	L0.9R L1.1R L1.4R L1.6R	L0.9R L1.1R L1.4R L1.6R		
5000	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R	L2.0R		
*****	******	*****	*****	*****	******	******	******	******	*****		
5000	L2.2R	L2.2R	L2.3R	L2.4R	L2.6R	L2.8R	L2.9R	L3.0R	L3.0R		
4500 4000 3500 3000	L2.2R L2.1R L2.0R L1.9R	L2.2R L2.2R L2.1R L1.9R	L2.4R L2.3R L2.3R L2.2R	L2.5R L2.6R L2.6R L2.5R	L2.8R L2.9R L2.9R L2.9R	L3.0R L3.2R L3.3R L3.3R	L3.2R L3.4R L3.6R L3.7R	L3.3R L3.6R L3.8R L3.9R	L3.4R L3.6R L3.8R L4.0R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGET	· - MILS	;				

#### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J FT 155-AR-1
3G PART 1
FUZE CORRECTION FACTORS PROJ, HE, M795
FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	CITY		IGE ND (NOT	AI TEN 1 P		DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	008 012 016	0.008 0.012 0.016	0.000 0.000 0.000	0.000 0.000 0.000		0.000 0.000 0.000	0.000 0.000 0.000	0.000	0.010 0.016 0.021	010 016 021
5	020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.026	026
6 7 8 9	024 028 032 035	0.024 0.028 0.031 0.035	0.000 0.000 001 001	0.000 0.000 0.001 0.001	0.000	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001	001 001 001 001	0.030 0.035 0.040 0.045	030 035 040 045
10	039	0.039	001	0.001	0.000	0.000	0.002	002	0.049	050
11 12 13 14	043 047 051 054	0.043 0.047 0.050 0.054	001 001 001 001	0.001 0.001 0.001 0.001		0.000 0.000 0.000 0.000	0.002 0.002 0.003 0.003	<i>002</i>	0.054 0.059 0.063 0.067	054 059 063 068
15	058	0.058	001	0.001	0.000	0.000	0.004	003	0.072	072
16 17 18 19	062 066 069 073	0.061 0.065 0.069 0.072	001 001 002 002	0.001 0.002 0.002 0.002	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.004 0.004 0.005 0.005	004 005	0.076 0.081 0.085 0.089	077 081 085 090
20	077	0.076	002	0.002	0.000	0.000	0.006	006	0.093	094
21 22 23 24	080 084 087 091	0.080 0.083 0.087 0.090	002 002 002 002	0.002 0.002 0.002 0.003		0.000 0.000 0.000 0.000	0.007 0.007 0.008 0.008	006 007 008 008	0.097 0.102 0.106 0.110	098 102 106 111
25	095	0.094	003	0.003	0.000	0.000	0.009	009	0.114	115
26 27 28 29	098 102 106 109	0.098 0.101 0.105 0.108	003 003 003 003	0.003 0.003 0.003 0.003	0.000	0.000 0.000 0.000 0.000	0.009 0.010 0.011 0.011	009 010 011 011	0.118 0.122 0.126 0.130	119 123 127 131
30	113	0.112	003	0.004	0.000	0.000	0.012	012	0.134	135
31 32 33 34	116 120 123 127	0.115 0.119 0.122 0.126	003 004 004 004	0.004 0.004 0.004 0.004		0.000 0.000 0.000 0.000	0.013 0.013 0.014 0.015	013 013 014 015	0.138 0.142 0.146 0.150	139 143 147 152
35	131	0.129	004	0.004	0.000	0.000	0.015	015	0.154	156

TABLE J

CHARGE 3 G

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

FUZE CORRECTION FACTORS

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	TY		IGE ND (NO T	AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ WT OF 1 SQ (4 SQ STD)	
	DEC INC		HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	131	0.129	004	0.004	0.000	0.000	0.015	015	0.154	156
37 38	138 141	0.133 0.137 0.140 0.144	004 005	0.005 0.005 0.005 0.005	0.000		0.017 0.018	016 017 017 018	0.158 0.162 0.166 0.171	164 168
40	149	0.147	005	0.005	0.000	0.000	0.019	019	0.175	177
42 43	159	0.151 0.154 0.158 0.162	005	0.006 0.006 0.007 0.010			0.020 0.021	019 020 021 021	0.179 0.184 0.188 0.193	186 190
45	167	0.165	007		0.000	0.000	0.023	022	0.199	201
46	169	0.168	009		0.000	0.000	0.025	024	0.207	208

CHARGE TABLE K FT 155-AR-1
3G PART 1
FUZE SETTING PROJ, HE, M795
FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 $\label{eq:formula} \text{FOR FUZE, MTSQ, M564}$

	ETTING M582	CORRECTIONS
FROM	TO	
2.0	11.9	-0.1
12.0	25.1	-0.2
25.2	39.2	-0.3
39.3	46.5	-0.4

Part 1

Charge 4G

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-286\ M/S$ 

Propelling Charge M3A1 - Base and Increments 2, 3, and 4  $\,$ 

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A

CHARGE 4 G

795 LINE NUMBER

LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	L I NE NUMBER
0.0- 160.8	0
160.9- 308.1 308.2- 465.1 465.2- 623.2 623.3- 767.0	1 2 3 4
767.1- 984.5	5
984.6- 1295.0	6

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	NE RANGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	0					0					
	100 200 300 400					0 0 0 0	0 1 2 2	1 3 4 5	2 4 6 8		
	500					0	3	6	10		
	600 700 800 900					0 0 0 0	3 4 5 5	7 8 10 11	12 13 15 17		
	1000					0	6	12	19		
	1100 1200 1300 1400				- 7 - 7	0 0 0 0	6 7 7 8	13 14 15 17	20 22 24 26		
	1500				-8	0	9	18	27		
0	1600 1700 1800 1900			-19 -20	-8 -9 -10 -10	0 0 0	9 10 10 11	19 20 21 23	29 31 33 35		
	2000			-21	-11	0	12	24	37		
	2100 2200 2300 2400		-34 -36 -38	-22 -23 -25 -26	-11 -12 -13 -13	0 0 0 0	12 13 13 14	25 26 28 29	39 41 42 44		
	2500	-52	-40	-27	-14	0	15	30	46		
	2600 2700 2800 2900	-54 -56 -59 -61	-41 -43 -45 -47	-28 -30 -31 -32	-14 -15 -16 -16	0 0 0 0	15 16 17 17	32 33 34 36	49 51 53 55		
	3000	-64	-49	-33	-17	0	18	37	57		
	3100 3200 3300 3400	-66 -69 -72 -74	-51 -53 -55 -57	-35 -36 -37 -39	-18 -18 -19 -20	0 0 0 0	19 20 20 21	39 40 42 43	59 62 64 66		
	3500	-77	-59	-40	-21	0	22	45	69		
	0					1			2		

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4 G

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
3							100	
3 6 9 12	8 12 15	10 15 19	12 18 23	14 21 27	17 24 31	27 36	200 300 400	
14	18	23	28	33	38	43	500	
16 19 21 23	21 24 28 31	27 31 34 38	32 37 42 46	38 44 49 54	45 51 57 63	51 58 65 72	600 700 800 900	
26	34	42	50	60	69	79	1000	
28 31 33 35	37 40 43 46	45 49 53 57	55 59 64 68	65 70 75 81	75 81 87 93	86 93 100 107	1100 1200 1300 1400	
38	49	60	73	86	100	114	1500	
40 43 45 48	52 55 58 61	64 68 72 76	77 82 87 91	91 96 102 107	106 112 118 124	121 128 135 142	1600 1700 1800 1900	3
50	65	80	96	113	131	149	2000	
53 56 58 61	68 71 75 78	84 88 92 96	101 106 111 116	119 124 130 136	137 144 150 157	157 164 172 179	2100 2200 2300 2400	
64	82	101	121	142	164	187	2500	
66 69 72 75	85 89 92 96	105 109 114 119	126 131 137 142	148 154 160 167	171 178 185 193	195 203 211 220	2600 2700 2800 2900	
78	100	123	148	173	200	228	3000	
81 84 87 91	104 108 112 116	128 133 138 143	153 159 165 171	180 187 193 200	208 216 223 232	237 246 255 264	3100 3200 3300 3400	
94	120	148	177	208	240	274	3500	
		2				3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEIO	HT OF 1	TARGET A	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	3500	-77	-59	-40	-21	0	22	45	69
0	3600 3700 3800 3900	-80 -83 -86 -89	-61 -63 -66 -68	-42 -43 -45 -46	-21 -22 -23 -24	0 0 0	23 24 24 25	46 48 50 51	71 74 76 79
	4000	-92	-70	-48	-24	0	26	53	81
	4100 4200 4300 4400	-95 -98 -101 -105	-73 -75 -78 -80	-50 -51 -53 -55	-25 -26 -27 -28	0 0 0	27 28 29 30	55 57 59 60	84 87 90 93
1	4500	-108	-83	-56	-29	0	31	62	96
	4600 4700 4800 4900	-112 -115 -119 -123	-86 -88 -91 -94	-58 -60 -62 -64	-30 -31 -32 -33	0 0 0 0	32 33 34 35	64 67 69 71	99 102 106 109
	5000	-127	-97	-66	-34	0	36	73	113
	5100 5200 5300 5400	-130 -135 -139 -143	-100 -103 -107 -110	-68 -70 -73 -75	-35 -36 -37 -38	0 0 0 0	37 38 39 41	76 78 81 84	117 121 125 129
	5500	-148	-114	-77	-40	0	42	87	134
2	5600 5700 5800 5900	-153 -158 -163 -168	-117 -121 -125 -129	-80 -83 -86 -89	-41 -42 -44 -45	0 0 0	44 45 47 49	90 93 97 100	139 144 150 156
	6000	-174	-134	-92	-47	0	51	105	163
	6100 6200 6300 6400	-180 -186 -193 -201	-139 -144 -149 -155	-95 -99 -103 -107	-49 -51 -53 -55	0 0 0	53 55 58 61	109 114 120 127	170 179 190 203
	6500	-209	-162	-112	-58	0	64	136	221
3	6600 6700 6800	-218 -228 -239	-169 -177 -187	-117 -124 -131	-61 -65 -70	0 0 0	69 76	149	
5	6800 6700 6600	-514 -540 -566	-369 -390 -410	-234 -249 -263	-110 -118 -126	****** 0 0 0	102 112	207	
	6500	-591	-429	-276	-133	0	121	227	313
	6	)			5	5			

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FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4 G

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT	OF TARG	ET ABOVE	GUN - M	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
94	120	148	177	208	240	274	3500	
97 101 104 108	124 129 133 138	153 159 164 170	183 190 196 203	215 223 230 238	249 257 266 276	284 294 304 315	3600 3700 3800 3900	
111	143	175	210	247	285	326	4000	
115 119 123 127	147 152 157 163	181 188 194 200	217 225 232 240	255 264 273 282	295 305 316 327	337 349 361 374	4100 4200 4300 4400	3
131	168	207	248	292	338	388	4500	
135 140 145 149	174 180 186 192	214 221 229 237	257 266 275 285	302 313 324 336	350 363 376 390	402 416 432 448	4600 4700 4800 4900	
154	198	245	295	348	405	466	5000	
160 165 171 177	205 213 220 229	254 263 273 284	306 317 329 343	361 375 390 407	421 438 456 477	485 506 529 555	5100 5200 5300 5400	4
184	237	295	357	425	500	584	5500	
191 198	247 257	307 321	373 391	445 468	526 557	618 662	5600 5700	
207 216	268 281	336 353	411 434	495 529	595 649	723	5800 5900	
226	295	374	464	576			6000	
238 251 268 293	313 334 364	399 434	505				6100 6200 6300 6400	
							6500	5
	****	*****		*****			6600 6700 6800 ****	3
							6800 6700 6600	
							6500	
						5		

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# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEIC		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	6500	-591	-429	-276	-133	0	121	227	313
	6400 6300 6200 6100	-615 -640 -664 -689	-447 -466 -484 -503	-288 -301 -313 -326	-139 -145 -152 -158	0 0 0	128 135 141 148	243 257 271 284	342 366 388 409
	6000	-715	-522	-338	-164	0	154	297	428
	5900 5800 5700 5600	-741 -768 -796 -825	-541 -561 -582 -603	-351 -364 -378 -391	-171 -177 -184 -190	0 0 0 0	160 167 173 180	310 322 335 348	448 467 486 505
	5500	-856	-625	-406	-197	0	186	361	525
	5400 5300 5200 5100	-888 -922 -959 -998	-648 -672 -698 -725	-420 -436 -452 -469	-204 -212 -220 -228	0 0 0 0	193 200 207 215	375 389 403 417	545 565 586 607
	5000	-1041	-754	-487	-236	0	223	432	629
6	4900 4800 4700 4600	-1090 -1144	-786 -820 -859 -903	-506 -527 -550 -574	-245 -255 -265 -276	0 0 0 0	231 239 248 258	448 464 482 500	652 676 700 726
	4500		-953	-602	-288	0	268	518	753
	4400 4300 4200 4100			-632 -668	-301 -316 -332 -350	0 0 0 0	279 290 302 316	538 560 582 606	781 811 843 876
	4000				-371	0	330	632	912
	3900 3800 3700 3600					0 0 0 0	346 363 382 404	660 690 723 759	950 991 1035 1082
	3500							799	1133
	3400 3300								
					6				

CHARGE 4 G

# FT 155-AR-1 TABLE B PART 1 PROJ, HE, M795 FUZE, PD, M739 A1 COMPLEMENTARY RANGE LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	METERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
							6500	
420 459 491 520	528 576 616	636 693	742				6400 6300 6200 6100	5
547	652	740	808	847			6000	
573 599 625 651	686 719 751 784	783 824 864 903	864 914 962 1009	923 986 1044 1099	948 1034 1106 1171	1143 1223	5900 5800 5700	
							5600	
677	816	942	1054	1152	1233	1296	5500	<u> </u>
703 729 757 784	848 881 915 949	981 1020 1059 1100	1100 1145 1191 1237	1204 1256 1308 1360	1293 1352 1410 1468	1365 1431 1496 1561	5400 5300 5200 5100	
813	983	1141	1284	1413	1527	1625	5000	
842 873 904 937	1019 1056 1094 1134	1182 1226 1270 1316	1332 1380 1431 1482	1466 1521 1576 1634	1586 1646 1707 1769	1690 1756 1822 1889	4900 4800 4700 4600	
972	1175	1363	1536	1692	1833	1958	4500	6
1008 1045 1085 1126	1218 1263 1309 1359	1412 1464 1517 1573	1591 1648 1707 1769	1753 1816 1881 1948	1899 1967 2037 2109	2029 2101 2175 2252	4400 4300 4200 4100	
1171	1410	1631	1834	2018	2184	2331	4000	
1218 1268 1321 1378	1465 1523 1584 1650	1693 1758 1826 1899	1902 1973 2047 2126	2091 2167 2247 2331	2261 2342 2427 2515	2413 2498 2586 2677	3900 3800 3700 3600	
1439	1719	1976	2209	2419	2607	2772	3500	
		2057	2296	2511	2703	2872	3400	
				6				

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

		0.1.2.1.1.0 0.	ĺ	A ONE KNOT WIT		
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 4 G

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-			-0.2+ -1.1+								
+200-			-0.5+ -2.1+								-0.7+ -2.9+
+300-			-0.7+ -3.1+								

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-4.4	-40.0
-30	-3.9	-34.4
-20	-3.5	-28.9
-10	-3.1	-23.3
0	-2.7	-17.8
10	-2.3	-12.2
20	-1.9	-6.7
30	-1.5	-1.1
40	-1.1	4.4
50	-0.7	10.0
60	- <b>0.4</b>	15.6
70	0.0	21.1
80	0.4	26.7
90	0.7	32.2
100	1.0	37.8
110	1.4	43.3
120	1.7	48.9
130	2.0	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
N	1	2	3	4	5	6	7	8	9
G E         V         FUZE M582         DEC HOB         D ELEV         K         DRITTO LY         CW OF TO LY         CW OF KNOT           M         MIL         M         MIL         SEC         MIL	Α	E L E	GRAZE	PER	PER	0	OF		
0         0.0         16         1         0.0         0.0         0.00           100         6.2         166         1         0.7         0.2         0.01           300         18.4         166         1         0.7         0.2         0.01           400         24.6         166         1         1.1         0.3         0.01           500         30.9         1.8         1.16         16         1         1.4         0.5         0.02           500         37.2         2.1         0.97         16         1         2.1         0.7         0.02           600         37.2         2.1         0.97         16         1         2.1         0.7         0.02           700         43.5         2.5         0.83         16         1         2.5         0.8         0.03           800         49.8         2.8         0.72         16         1         2.8         0.9         0.03           900         56.2         3.2         0.64         16         1         3.2         1.0         0.04           1100         69.2         3.9         0.52         15         1	G	V	FUZE	DEC				( CORR	OF
100         6.2         16         1         0.4         0.1         0.00           200         12.3         300         18.4         166         1         0.7         0.2         0.01           300         18.4         166         1         1.1         0.3         0.01           400         24.6         166         1         1.4         0.5         0.02           500         30.9         1.8         1.16         16         1         1.4         0.5         0.02           600         37.2         2.1         0.97         16         1         2.1         0.7         0.02           700         43.5         2.5         0.83         16         1         2.5         0.8         0.03           800         49.8         2.8         0.72         16         1         2.8         0.9         0.03           900         56.2         3.2         0.64         16         1         3.9         0.03           1000         62.7         3.6         0.58         15         1         3.6         1.2         0.04           1100         69.2         3.9         0.52         15<	М	MIL			M	MIL	SEC	MIL	MIL
200         12.3 / 400         18.4 / 400         166 / 11 / 1.1 / 1.4 / 0.5 / 0.02         0.01 / 0.02           500         30.9 / 1.8 / 1.16 / 16 / 11 / 1.4 / 0.5 / 0.02         0.02         0.02         0.02           600         37.2 / 2.1 / 0.97 / 16 / 12.5 / 0.8 / 0.03         1.8 / 0.6 / 0.02         0.02         0.02           700         43.5 / 2.5 / 0.83 / 16 / 12.5 / 0.8 / 0.03         0.03         0.03         0.03           800         49.8 / 2.8 / 0.72 / 16 / 13.2 / 1.0 / 0.04         1.2.8 / 0.9 / 0.03           1000         62.7 / 3.6 / 0.58 / 15 / 1 / 3.9 / 1.3 / 0.04         1.00         0.04           1000         62.7 / 3.6 / 0.58 / 15 / 1 / 3.9 / 1.3 / 0.04         1.00         0.04           1100         69.2 / 3.9 / 0.58 / 15 / 1 / 3.9 / 1.3 / 0.04         1.00         0.04           1200         75.7 / 4.3 / 0.48 / 15 / 1 / 4.3 / 1.4 / 0.05         1.30         1.3 / 4.7 / 0.04           1200         75.7 / 4.3 / 0.44 / 15 / 2 / 4.7 / 1.5 / 0.05         1.40         88.9 / 5.1 / 0.41 / 15 / 2 / 5.1 / 1.7 / 0.05           1500         95.6 / 5.4 / 0.38 / 15 / 2 / 5.4 / 1.8 / 0.06         1.60         1.60         1.60         1.62         0.33 / 15 / 2 / 5.4 / 1.8 / 0.06           1600         102.4 / 5.8 / 0.36 / 15 / 2 / 5.8 / 0.36 / 15 / 2 / 5.4 / 1.8 / 0.06         1.60         1.60         1.60	0	0.0			16	1	0.0	0.0	0.00
600         37.2         2.1         0.97         16         1         2.1         0.7         0.02           700         43.5         2.5         0.83         16         1         2.5         0.8         0.03           800         49.8         2.8         0.72         16         1         2.8         0.9         0.03           900         56.2         3.2         0.64         16         1         2.8         0.9         0.03           900         56.2         3.2         0.64         16         1         3.2         1.0         0.04           1000         62.7         3.6         0.58         15         1         3.6         1.2         0.04           1100         69.2         3.9         0.52         15         1         3.9         1.3         0.04           1200         75.7         4.3         0.48         15         1         4.3         1.4         0.05           1300         82.3         4.7         0.44         15         2         5.8         1.9         0.05           1500         95.6         5.4         0.38         15         2         5.8	200 300	12.3 18.4			16 16	1	0.7 1.1	0.2 0.3	0.01 0.01
700         43.5         2.5         0.83         16         1         2.5         0.8         0.03           800         49.8         2.8         0.72         16         1         2.8         0.9         0.03           900         56.2         3.2         0.64         16         1         3.2         1.0         0.04           1000         62.7         3.6         0.58         15         1         3.6         1.2         0.04           1100         69.2         3.9         0.52         15         1         3.9         1.3         0.04           1200         75.7         4.3         0.48         15         1         3.9         1.3         0.04           1200         75.7         4.3         0.44         15         2         4.7         1.5         0.05           1300         82.3         4.7         0.44         15         2         4.7         1.5         0.05           1400         88.9         5.1         0.41         15         2         5.8         1.9         0.05           1500         95.6         5.4         0.38         15         2         5.8 <t< td=""><td>500</td><td>30.9</td><td>1.8</td><td>1.16</td><td>16</td><td>1</td><td>1.8</td><td>0.6</td><td>0.02</td></t<>	500	30.9	1.8	1.16	16	1	1.8	0.6	0.02
1100         69.2         3.9         0.52         15         1         3.9         1.3         0.04           1200         75.7         4.3         0.48         15         1         4.3         1.4         0.05           1300         82.3         4.7         0.44         15         2         4.7         1.5         0.05           1400         88.9         5.1         0.41         15         2         5.1         1.7         0.05           1500         95.6         5.4         0.38         15         2         5.8         1.9         0.06           1600         102.4         5.8         0.36         15         2         5.8         1.9         0.06           1700         109.1         6.2         0.33         15         2         6.2         2.1         0.07           1800         116.0         6.6         0.32         15         2         6.6         2.2         0.07           1900         122.9         7.0         0.30         14         2         7.7         2.6         0.08           2100         136.9         7.7         0.27         14         2         7.7	700 800	43.5 49.8	2.5	0.83 0.72	16 16	1 1	2.5 2.8	0.8 0.9	0.03 0.03
1200       75.7       4.3       0.48       15       1       4.3       1.4       0.05         1300       82.3       4.7       0.44       15       2       4.7       1.5       0.05         1400       88.9       5.1       0.41       15       2       5.1       1.7       0.05         1500       95.6       5.4       0.38       15       2       5.4       1.8       0.06         1600       102.4       5.8       0.36       15       2       5.8       1.9       0.06         1700       109.1       6.2       0.33       15       2       6.6       2.2       0.07         1800       116.0       6.6       0.32       15       2       6.6       2.2       0.07         1900       122.9       7.0       0.30       14       2       7.0       2.3       0.07         2000       129.9       7.3       0.28       14       2       7.7       2.6       0.08         2100       136.9       7.7       0.27       14       2       7.7       2.6       0.08         2200       144.0       8.1       0.26       14       3	1000	62.7	3.6	0.58	15	1	3.6	1.2	0.04
1600         102.4         5.8         0.36         15         2         5.8         1.9         0.06           1700         109.1         6.2         0.33         15         2         6.2         2.1         0.07           1800         116.0         6.6         0.32         15         2         6.6         2.2         0.07           1900         122.9         7.0         0.30         14         2         7.0         2.3         0.07           2000         129.9         7.3         0.28         14         2         7.7         2.5         0.08           2100         136.9         7.7         0.27         14         2         7.7         2.6         0.08           2200         144.0         8.1         0.26         14         3         8.1         2.8         0.09           2300         151.1         8.5         0.24         14         3         8.5         2.9         0.09           2400         158.3         8.9         0.23         14         3         8.9         3.1         0.09           2500         165.6         9.3         0.22         14         3         9.7 <td>1200 1300</td> <td>75.7 82.3</td> <td>4.3 4.7</td> <td>0.48 0.44</td> <td>15 15</td> <td>1 2</td> <td>4.3 4.7</td> <td>1.4 1.5</td> <td>0.05 0.05</td>	1200 1300	75.7 82.3	4.3 4.7	0.48 0.44	15 15	1 2	4.3 4.7	1.4 1.5	0.05 0.05
1700         109.1         6.2         0.33         15         2         6.2         2.1         0.07           1900         122.9         7.0         0.30         14         2         7.0         2.3         0.07           2000         129.9         7.3         0.28         14         2         7.3         2.5         0.08           2100         136.9         7.7         0.27         14         2         7.7         2.6         0.08           2200         144.0         8.1         0.26         14         3         8.1         2.8         0.09           2300         151.1         8.5         0.24         14         3         8.5         2.9         0.09           2400         158.3         8.9         0.23         14         3         8.5         2.9         0.09           2500         165.6         9.3         0.22         14         3         9.3         3.2         0.10           2600         173.0         9.7         0.21         14         3         9.7         3.4         0.10           2700         180.4         10.1         0.21         13         3         10.5<	1500	95.6	5.4	0.38	15	2	5.4	1.8	0.06
2100         136.9         7.7         0.27         14         2         7.7         2.6         0.08           2200         144.0         8.1         0.26         14         3         8.1         2.8         0.09           2300         151.1         8.5         0.24         14         3         8.5         2.9         0.09           2400         158.3         8.9         0.23         14         3         8.9         3.1         0.09           2500         165.6         9.3         0.22         14         3         9.3         3.2         0.10           2600         173.0         9.7         0.21         14         3         9.7         3.4         0.10           2700         180.4         10.1         0.21         13         3         10.1         3.5         0.11           2800         187.9         10.5         0.20         13         3         10.5         3.7         0.11           2900         195.5         11.0         0.19         13         3         11.0         3.8         0.11           3000         203.2         11.4         0.18         13         4 <td< td=""><td>1700 1800</td><td>109.1 116.0</td><td>6.2 6.6</td><td>0.33 0.32</td><td>15 15</td><td>2 2 2 2</td><td>6.2 6.6</td><td>2.1 2.2</td><td>0.07 0.07</td></td<>	1700 1800	109.1 116.0	6.2 6.6	0.33 0.32	15 15	2 2 2 2	6.2 6.6	2.1 2.2	0.07 0.07
2200         144.0         8.1         0.26         14         3         8.1         2.8         0.09           2300         151.1         8.5         0.24         14         3         8.5         2.9         0.09           2400         158.3         8.9         0.23         14         3         8.9         3.1         0.09           2500         165.6         9.3         0.22         14         3         9.3         3.2         0.10           2600         173.0         9.7         0.21         14         3         9.7         3.4         0.10           2700         180.4         10.1         0.21         13         3         10.1         3.5         0.11           2800         187.9         10.5         0.20         13         3         10.5         3.7         0.11           2900         195.5         11.0         0.19         13         3         11.0         3.8         0.11           3000         203.2         11.4         0.18         13         4         11.4         4.0         0.12           3100         218.8         12.2         0.17         13         4         <	2000	129.9	7.3	0.28	14	2	7.3	2.5	0.08
2600     173.0     9.7     0.21     14     3     9.7     3.4     0.10       2700     180.4     10.1     0.21     13     3     10.1     3.5     0.11       2800     187.9     10.5     0.20     13     3     10.5     3.7     0.11       2900     195.5     11.0     0.19     13     3     11.0     3.8     0.11       3000     203.2     11.4     0.18     13     4     11.4     4.0     0.12       3100     211.0     11.8     0.18     13     4     11.8     4.1     0.12       3200     218.8     12.2     0.17     13     4     12.2     4.3     0.13       3300     226.8     12.7     0.17     12     4     12.7     4.5     0.13       3400     234.8     13.1     0.16     12     4     13.1     4.7     0.14	2200 2300	144.0 151.1	8.1 8.5	0.26 0.24	14 14	3	8.1 8.5	2.8	0.09 0.09
2700         180.4         10.1         0.21         13         3         10.1         3.5         0.11           2800         187.9         10.5         0.20         13         3         10.5         3.7         0.11           2900         195.5         11.0         0.19         13         3         11.0         3.8         0.11           3000         203.2         11.4         0.18         13         4         11.4         4.0         0.12           3100         211.0         11.8         0.18         13         4         11.8         4.1         0.12           3200         218.8         12.2         0.17         13         4         12.2         4.3         0.13           3300         226.8         12.7         0.17         12         4         12.7         4.5         0.13           3400         234.8         13.1         0.16         12         4         13.1         4.7         0.14	2500	165.6	9.3	0.22	14	3	9.3	3.2	0.10
3100     211.0     11.8     0.18     13     4     11.8     4.1     0.12       3200     218.8     12.2     0.17     13     4     12.2     4.3     0.13       3300     226.8     12.7     0.17     12     4     12.7     4.5     0.13       3400     234.8     13.1     0.16     12     4     13.1     4.7     0.14	2700 2800	180.4 187.9	10.1 10.5	0.21 0.20	13 13	3	10.1 10.5	3.5 3.7	0.11 0.11
3200     218.8     12.2     0.17     13     4     12.2     4.3     0.13       3300     226.8     12.7     0.17     12     4     12.7     4.5     0.13       3400     234.8     13.1     0.16     12     4     13.1     4.7     0.14	3000	203.2	11.4	0.18	13	4	11.4	4.0	0.12
3500 243.0 13.5 0.16 12 4 13.5 4.8 0.14	3200 3300	218.8 226.8	12.2 12.7	0.17 0.17	13 12	4	12.2 12.7	4.3 4.5	0.13 0.13
	3500	243.0	13.5	0.16	12	4	13.5	4.8	0.14

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 4G TABLE F

CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RA WI 1 K		T	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	М	M	М	M	M	M	М	M	М	М
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.7 1.4 2.2 2.9	-0.6 -1.3 -1.9 -2.6	0.0 0.0 0.0 0.1	0.0 0.0 0.0 -0.1	0.0 0.1 0.1 0.1	0.0 0.0 -0.1 -0.1	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-1 -2 -3 -4	1 2 3 4
500	3.6	-3.2	0.1	-0.1	0.2	-0.1	-0.1	0.1	-5	5
600 700 800 900	4.3 5.0 5.6 6.3	-3.8 -4.5 -5.1 -5.7	0.1 0.2 0.2 0.2	-0.1 -0.1 -0.1 -0.2	0.2 0.2 0.3 0.3	-0.1 -0.1 -0.2 -0.2	$ \begin{array}{c} -0.1 \\ -0.1 \\ -0.2 \\ -0.2 \end{array} $	0.1 0.1 0.2 0.2	-6 -7 -8 -9	6 7 8 9
1000	7.0	-6.3	0.3	-0.2	0.4	-0.2	-0.3	0.3	-10	10
1100 1200 1300 1400	7.7 8.4 9.0 9.7	-6.9 -7.5 -8.1 -8.7	0.3 0.4 0.4 0.5	-0.2 -0.2 -0.3 -0.3	0.4 0.5 0.5 0.5	-0.2 -0.2 -0.3 -0.3	-0.3 -0.4 -0.4 -0.5	0.3 0.4 0.5 0.5	-10 -11 -12 -13	11 12 13 13
1500	10.4	-9.3	0.5	-0.3	0.6	-0.3	-0.6	0.6	-14	14
1600 1700 1800 1900	11.0 11.7 12.3 13.0	-9.9 -10.5 -11.1 -11.7	0.6 0.6 0.7 0.8	-0.3 -0.4 -0.4 -0.5	0.6 0.7 0.7 0.8	-0.3 -0.3 -0.4 -0.4	-0.7 -0.8 -0.8 -0.9	0.7 0.8 0.9 0.9	-15 -16 -16 -17	15 16 17 18
2000	13.6	-12.2	0.8	-0.5	0.8	-0.4	-1.0	1.0	-18	19
2100 2200 2300 2400	14.3 14.9 15.6 16.2	-12.8 -13.4 -14.0 -14.5	0.9 0.9 1.0 1.1	-0.5 -0.6 -0.6 -0.7	0.9 0.9 1.0 1.0	-0.4 -0.4 -0.4 -0.4	-1.1 -1.2 -1.4 -1.5	1.1 1.3 1.4 1.5	-19 -20 -20 -21	19 20 21 22
2500	16.8	-15.1	1.2	-0.7	1.1	-0.5	-1.6	1.6	-22	23
2600 2700 2800 2900	17.5 18.1 18.7 19.3	-15.7 -16.2 -16.8 -17.4	1.2 1.3 1.4 1.4	-0.7 -0.8 -0.8 -0.9	1.1 1.1 1.2 1.2	-0.5 -0.5 -0.5 -0.5	-1.7 -1.9 -2.0 -2.1	1.7 1.9 2.0 2.2	-23 -23 -24 -25	23 24 25 26
3000	20.0	-17.9	1.5	-0.9	1.2	-0.5	-2.3	2.3	-25	26
3100 3200 3300 3400	20.6 21.2 21.8 22.4	-18.5 -19.0 -19.6 -20.1	1.6 1.7 1.7 1.8	-1.0 -1.0 -1.1 -1.1	1.3 1.3 1.3 1.4	-0.5 -0.5 -0.5 -0.5	-2.4 -2.6 -2.7 -2.9	2.5 2.6 2.8 2.9	-26 -27 -28 -28	27 28 29 29
3500	23.1	-20.7	1.9	-1.2	1.4	-0.5	-3.1	3.1	-29	30

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

Table   Tabl									
A	1	2	3	4	5	6	7	8	9
E         FUZE M582         HOB MS82         M         MIL SEC MIL	Α	L	GRAZE	PER	PER	0	OF		
3500         243.0         13.5         0.16         12         4         13.5         4.8         0.14           3600         251.3         14.0         0.15         12         5         14.0         5.0         0.14           3700         259.7         14.4         0.15         12         5         14.9         5.4         0.15           3800         268.2         14.9         0.14         12         5         14.9         5.4         0.15           3900         276.8         15.8         0.13         11         5         15.8         5.6         0.16           4000         285.6         15.8         0.13         11         5         15.8         5.8         0.16           4100         294.5         16.3         0.13         11         6         16.3         6.0         0.17           4200         303.6         16.7         0.13         11         6         16.7         6.2         0.17           4300         312.9         17.2         0.12         10         7         18.2         6.8         0.18           4500         331.9         18.2         0.12         10         7	G	V	FUZE	DEC			FEIGHT	( CORR	OF
3600	М	MIL			М	MIL	SEC	MIL	MIL
3700         259.7         14.4         0.15         12         5         14.4         5.2         0.15           3800         268.2         14.9         0.14         11         5         14.9         5.4         0.15           3900         276.8         15.3         0.14         11         5         15.3         5.6         0.16           4000         285.6         15.8         0.13         11         5         15.8         5.8         0.16           4100         294.5         16.3         0.13         11         6         16.7         6.2         0.17           4200         303.6         16.7         0.13         11         6         16.7         6.2         0.17           4300         312.9         17.2         0.12         11         6         17.7         6.6         0.18           4500         331.9         18.2         0.12         10         7         18.2         6.8         0.19           4600         341.6         18.7         0.11         10         7         18.7         7.1         0.19           4700         351.6         19.7         0.11         10         7	3500	243.0	13.5	0.16	12	4	13.5	4.8	0.14
4100         294.5         16.3         0.13         11         6         16.7         6.2         0.17           4200         303.6         16.7         0.13         11         6         16.7         6.2         0.17           4300         312.9         17.2         0.12         11         6         17.2         6.4         0.18           4400         322.3         17.7         0.12         11         6         17.7         6.6         0.18           4500         331.9         18.2         0.12         10         7         18.2         6.8         0.19           4600         341.6         18.7         0.11         10         7         18.7         7.1         0.19           4800         361.8         19.7         0.11         10         7         18.7         7.6         0.20           4900         372.3         20.3         0.10         9         8         20.3         7.8         0.21           5000         383.0         20.8         0.10         9         9         21.3         8.4         0.22           5200         405.3         21.9         0.10         9         9	3700 3800	259.7 268.2	14.4 14.9	0.15 0.14	12 12	5 5	14.4 14.9	5.2 5.4	0.15 0.15
4200         303.6         16.7         0.13         11         6         16.7         6.2         0.17           4300         312.9         17.2         0.12         11         6         17.2         6.4         0.18           4400         322.3         17.7         0.12         10         7         18.2         6.8         0.19           4500         331.9         18.2         0.12         10         7         18.2         6.8         0.19           4600         341.6         18.7         0.11         10         7         18.7         7.1         0.19           4800         361.8         19.7         0.11         10         7         18.7         7.6         0.20           4900         372.3         20.3         0.10         9         8         20.3         7.8         0.21           5000         383.0         20.8         0.10         9         8         20.8         8.1         0.21           5100         394.0         21.3         0.10         9         9         21.3         8.4         0.22         5200         405.3         21.9         0.10         9         9         21.3	4000	285.6	15.8	0.13	11	5	15.8	5.8	0.16
4600         341.6         18.7         0.11         10         7         18.7         7.1         0.19           4700         351.6         19.2         0.11         10         7         19.2         7.3         0.19           4800         361.8         19.7         0.11         10         8         19.7         7.6         0.20           4900         372.3         20.3         0.10         9         8         20.3         7.8         0.21           5000         383.0         20.8         0.10         9         8         20.8         8.1         0.21           5100         394.0         21.3         0.10         9         9         21.3         8.4         0.22           5200         405.3         21.9         0.10         9         9         21.9         8.7         0.22           5300         416.9         22.5         0.09         8         9         22.5         9.0         0.23           5500         441.3         23.7         0.09         8         11         23.7         9.6         0.24           5600         454.1         24.3         0.09         7         12	4200 4300	303.6 312.9	16.7 17.2	0.13 0.12	11 11	6 6	16.7 17.2	6.2 6.4	0.17 0.18
4700         351.6         19.2         0.11         10         7         19.2         7.3         0.19           4800         361.8         19.7         0.11         10         8         19.7         7.6         0.20           4900         372.3         20.3         0.10         9         8         20.8         8.1         0.21           5000         383.0         20.8         0.10         9         8         20.8         8.1         0.21           5100         394.0         21.3         0.10         9         9         21.3         8.4         0.22           5200         405.3         21.9         0.10         9         9         21.3         8.7         0.22           5300         416.9         22.5         0.09         8         9         22.5         9.0         0.23           5400         428.9         23.1         0.09         8         11         23.7         9.6         0.24           5600         454.1         24.3         0.09         8         11         24.3         10.0         0.24           5700         467.5         25.0         0.09         7         12	4500	331.9	18.2	0.12	10	7	18.2	6.8	0.19
5100         394.0         21.3         0.10         9         9         21.3         8.4         0.22           5200         405.3         21.9         0.10         9         9         21.9         8.7         0.22           5300         416.9         22.5         0.09         8         9         22.5         9.0         0.23           5400         428.9         23.1         0.09         8         10         23.1         9.3         0.23           5500         441.3         23.7         0.09         8         11         23.7         9.6         0.24           5600         454.1         24.3         0.09         7         12         25.0         10.3         0.25           5800         481.4         25.6         0.08         7         13         25.6         10.7         0.26           5900         496.0         26.3         0.08         7         13         26.3         11.2         0.26           6000         511.3         27.0         0.08         6         14         27.0         11.6         0.27           6100         527.6         27.8         0.08         6         16 <td>4700 4800</td> <td>351.6 361.8</td> <td>19.2 19.7</td> <td>0.11 0.11</td> <td>10 10</td> <td>8</td> <td>19.2 19.7</td> <td>7.3 7.6</td> <td>0.19 0.20</td>	4700 4800	351.6 361.8	19.2 19.7	0.11 0.11	10 10	8	19.2 19.7	7.3 7.6	0.19 0.20
5500         441.3         23.7         0.09         8         11         23.7         9.6         0.24           5600         454.1         24.3         0.09         8         11         24.3         10.0         0.24           5700         467.5         25.0         0.09         7         12         25.0         10.3         0.25           5800         481.4         25.6         0.08         7         13         25.6         10.7         0.26           5900         496.0         26.3         0.08         7         13         25.6         10.7         0.26           6000         511.3         27.0         0.08         6         14         27.0         11.6         0.27           6100         527.6         27.8         0.08         6         16         27.8         12.1         0.28           6200         545.0         28.6         0.07         5         19         29.4         13.3         0.29           6300         563.7         29.4         0.07         5         19         29.4         13.3         0.29           6400         584.2         30.4         0.07         4 <td< td=""><td>5000</td><td>383.0</td><td>20.8</td><td>0.10</td><td>9</td><td>8</td><td>20.8</td><td>8.1</td><td>0.21</td></td<>	5000	383.0	20.8	0.10	9	8	20.8	8.1	0.21
5600         454.1         24.3         0.09         8         11         24.3         10.0         0.24           5700         467.5         25.0         0.09         7         12         25.0         10.3         0.25           5800         481.4         25.6         0.08         7         13         25.6         10.7         0.26           5900         496.0         26.3         0.08         7         13         26.3         11.2         0.26           6000         511.3         27.0         0.08         6         14         27.0         11.6         0.27           6100         527.6         27.8         0.08         6         16         27.8         12.1         0.28           6200         545.0         28.6         0.07         6         17         28.6         12.6         0.29           6300         563.7         29.4         0.07         5         19         29.4         13.3         0.29           6400         584.2         30.4         0.07         5         21         30.4         13.9         0.30           6500         607.1         31.4         0.07         4 <t< td=""><td>5200 5300</td><td>405.3 416.9</td><td>21.9 22.5</td><td>0.10 0.09</td><td>9 9 8 8</td><td>9</td><td>21.9 22.5</td><td>8.7 9.0</td><td>0.22 0.23</td></t<>	5200 5300	405.3 416.9	21.9 22.5	0.10 0.09	9 9 8 8	9	21.9 22.5	8.7 9.0	0.22 0.23
5700         467.5         25.0         0.09         7         12         25.0         10.3         0.25           5800         481.4         25.6         0.08         7         13         25.6         10.7         0.26           5900         496.0         26.3         0.08         7         13         25.6         10.7         0.26           6000         511.3         27.0         0.08         6         14         27.0         11.6         0.27           6100         527.6         27.8         0.08         6         16         27.8         12.1         0.28           6200         545.0         28.6         0.07         6         17         28.6         12.6         0.29           6300         563.7         29.4         0.07         5         19         29.4         13.3         0.29           6400         584.2         30.4         0.07         5         21         30.4         13.9         0.30           6500         607.1         31.4         0.07         4         25         31.4         14.7         0.31           6600         633.6         32.5         0.07         3 <t< td=""><td>5500</td><td>441.3</td><td>23.7</td><td>0.09</td><td>8</td><td>11</td><td>23.7</td><td>9.6</td><td>0.24</td></t<>	5500	441.3	23.7	0.09	8	11	23.7	9.6	0.24
6100         527.6         27.8         0.08         6         16         27.8         12.1         0.28           6200         545.0         28.6         0.07         6         17         28.6         12.6         0.29           6300         563.7         29.4         0.07         5         19         29.4         13.3         0.29           6400         584.2         30.4         0.07         5         21         30.4         13.9         0.30           6500         607.1         31.4         0.07         4         25         31.4         14.7         0.31           6600         633.6         32.5         0.07         3         30         32.5         15.7         0.33           6700         666.2         33.9         0.06         2         41         33.9         16.9         0.34           6800         713.6         35.9         0.06         2         41         33.9         0.36    ***********************************	5700 5800	467.5 481.4	25.0 25.6	0.09 0.08	7	12 13	25.0 25.6	10.3 10.7	0.25 0.26
6200         545.0         28.6         0.07         6         17         28.6         12.6         0.29           6300         563.7         29.4         0.07         5         19         29.4         13.3         0.29           6400         584.2         30.4         0.07         5         21         30.4         13.9         0.30           6500         607.1         31.4         0.07         4         25         31.4         14.7         0.31           6600         633.6         32.5         0.07         3         30         32.5         15.7         0.33           6700         666.2         33.9         0.06         2         41         33.9         16.9         0.34           6800         713.6         35.9         0.06         2         41         33.9         18.9         0.36           ***********************************	6000	511.3	27.0	0.08	6	14	27.0	11.6	0.27
6600         633.6         32.5         0.07         3         30         32.5         15.7         0.33           6700         666.2         33.9         0.06         2         41         33.9         16.9         0.34           6800         713.6         35.9         0.06         2         41         35.9         18.9         0.36           ***********************************	6200 6300	545.0 563.7	28.6 29.4	0.07 0.07	6 5	17 19	28.6 29.4	12.6 13.3	0.29 0.29
6700 666.2 33.9 0.06 2 41 33.9 16.9 0.34 6800 713.6 35.9 0.06 2 41 33.9 16.9 0.34 ************************************	6500	607.1	31.4	0.07	4	25	31.4	14.7	0.31
6800         839.7         40.7         0.05         3         40.7         25.4         0.46           6700         887.1         42.4         0.05         3         42         42.4         28.4         0.48           6600         919.6         43.5         0.05         3         30         43.5         30.7         0.50	6700 6800	666.2 713.6	33.9 35.9	0.06 0.06		41	33.9 35.9	16.9 18.9	0.34 0.36
6500   946.0   44.3   0.05   4   25   44.3   32.8   0.52	6800 6700	839.7 887.1	40.7 42.4	0.05 0.05		42	40.7 42.4	25.4 28.4	0.46 0.48
	6500	946.0	44.3	0.05	4	25	44.3	32.8	0.52

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 4G TABLE F CORRECTION FACTORS

FUZE, P	U, M/3	9 A1								
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	T	IR EMP PCT	A I DENS 1 F	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	M	М	M	M	M	М	М	М	М
3500	23.1	-20.7	1.9	-1.2	1.4	-0.5	-3.1	3.1	-29	30
3600 3700 3800 3900	23.7 24.3 24.9 25.5	-21.2 -21.8 -22.3 -22.8	2.0 2.1 2.2 2.2	-1.2 -1.3 -1.4 -1.4	1.4 1.4 1.5 1.5	-0.5 -0.5 -0.5 -0.5	-3.2 -3.4 -3.6 -3.8	3.3 3.5 3.7 3.9	-30 -30 -31 -32	31 31 32 33
4000	26.1	-23.4	2.3	-1.5	1.5	-0.5	-4.0	4.0	-32	33
4100 4200 4300 4400	26.7 27.3 27.9 28.4	-23.9 -24.5 -25.0 -25.6	2.4 2.5 2.6 2.7	-1.6 -1.6 -1.7 -1.8	1.5 1.5 1.5	-0.4 -0.4 -0.4 -0.4	-4.2 -4.4 -4.6 -4.8	4.2 4.5 4.7 4.9	-33 -34 -34 -35	34 35 35 36
4500	29.0	-26.1	2.8	-1.8	1.5	-0.4	-5.0	5.1	-35	37
4600 4700 4800 4900	29.6 30.2 30.8 31.3	-26.6 -27.2 -27.7 -28.2	2.8 2.9 3.0 3.1	-1.9 -2.0 -2.1 -2.1	1.5 1.5 1.5	-0.4 -0.4 -0.4 -0.4	-5.2 -5.4 -5.7 -5.9	5.3 5.5 5.8 6.0	-36 -37 -37 -38	37 38 39 39
5000	31.9	-28.8	3.2	-2.2	1.5	-0.4	-6.1	6.3	-38	40
5100 5200 5300 5400	32.5 33.1 33.6 34.2	-29.3 -29.8 -30.3 -30.8	3.3 3.4 3.5 3.6	-2.3 -2.4 -2.5 -2.6	1.5 1.4 1.4 1.4	-0.4 -0.4 -0.4 -0.3	-6.4 -6.6 -6.9 -7.1	6.5 6.7 7.0 7.3	-39 -39 -40 -40	40 41 41 42
5500	34.7	-31.4	3.7	-2.6	1.4	-0.3	-7.4	7.5	-41	42
5600 5700 5800 5900	35.3 35.9 36.4 37.0	-31.9 -32.4 -32.9 -33.4	3.8 4.0 4.1 4.2	-2.7 -2.8 -2.9 -3.0	1.4 1.4 1.4 1.3	-0.3 -0.3 -0.3 -0.3	-7.6 -7.9 -8.2 -8.5	7.8 8.1 8.4 8.7	-41 -42 -42 -43	43 44 44 45
6000	37.5	-33.9	4.3	-3.1	1.3	-0.3	-8.8	9.0	-43	45
6100 6200 6300 6400	38.0 38.6 39.1 39.6	-34.5 -35.0 -35.5 -36.0	4.5 4.6 4.8 4.9	-3.2 -3.3 -3.5 -3.6	1.3 1.3 1.3	-0.3 -0.3 -0.3 -0.3	-9.0 -9.3 -9.7 -10.0	9.3 9.6 9.9 10.3	-44 -44 -45 -45	45 46 46 47
6500		-36.5	5.1	-3.7	1.2	-0.2	-10.3	10.6	-46	47
6600 6700 6800	***	-37.0 -37.5 -38.0	****	-3.8 -4.0 -4.1	1.2 1.1 1.1	-0.2 -0.2 -0.2	-10.6 -11.0 -11.4	11.0 11.6	-46 -46 -47	48 48
6800 6700 6600		-37.6 -37.1 -36.6		-5.0 -5.0 -5.0	1.0 0.9 0.9	-0.1 -0.1 -0.1	-12.5 -12.3 -12.2	12.0 12.0	-45 -44 -44	47 46
6500		-36.0	5.7	-4.9	0.8	-0.1	-12.0	11.9	-43	45

CHARGE 4G

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER	DR PER 1 MIL	F O	TIME OF		MUTH
N G E	V	FUZE M582	10 M DEC HOB	D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
6500	946.0	44.3	0.05	4	25	44.3	32.8	0.52
6400 6300 6200 6100	968.9 989.3 1007.9 1025.2	45.0 45.7 46.2 46.7	0.05 0.05 0.05 0.05	5 5 6 6	22 19 17 16	45.0 45.7 46.2 46.7	34.7 36.6 38.5 40.3	0.54 0.56 0.58 0.60
6000	1041.4	47.2	0.05	6	15	47.2	42.1	0.62
5900 5800 5700 5600	1056.7 1071.2 1085.0 1098.2	47.6 48.0 48.4 48.7	0.05 0.05 0.05 0.05	7 7 7 8	14 13 12 11	47.6 48.0 48.4 48.7	43.9 45.8 47.6 49.5	0.64 0.66 0.68 0.70
5500	1110.9	49.0	0.04	8	11	49.0	51.5	0.72
5400 5300 5200 5100	1123.2 1135.0 1146.4 1157.5	49.4 49.6 49.9 50.2	0.04 0.04 0.04 0.04	8999	10 10 9 9	49.4 49.6 49.9 50.2	53.5 55.6 57.8 60.1	0.74 0.77 0.79 0.82
5000	1168.3	50.4	0.04	9	8	50.4	62.4	0.85
4900 4800 4700 4600	1178.7 1188.9 1198.8 1208.4	50.7 50.9 51.1 51.3	0.04 0.04 0.04 0.04	10 10 10 11	8 8 7 7	50.7 50.9 51.1 51.3	65.0 67.6 70.5 73.5	0.88 0.91 0.95 0.99
4500	1217.7	51.6	0.04	11	6	51.6	76.8	1.03
4400 4300 4200 4100	1226.8 1235.7 1244.3 1252.6	51.8 51.9 52.1 52.3	0.04 0.04 0.04 0.04	11 11 12 12	6665	51.8 51.9 52.1 52.3	80.4 84.4 88.7 93.6	1.08 1.13 1.19 1.25
4000	1260.7	52.5	0.04	13	5	52.5	99.1	1.33
3900 3800 3700 3600	1268.5 1276.0 1283.3 1290.2	52.7 52.8 53.0 53.2	0.04 0.04 0.04 0.04	13 14 14	5	52.7 52.8 53.0 53.2	105.3 112.4 120.7 130.2	1.41 1.51
3529	1295.0							
	•							

FT 155-AR-1 TABLE F CHARGE 4 G

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE RANGE AIR TEMP AIR DENSITY PROJ WT G **VELOCITY** WIND OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC INC HEAD TAIL DEC INC DEC INC DEC INC M M M M M M M M M М M 6500 5.7 -4.9 0.8 -0.1 -12.0 11.9 45 -36.0 -43 5.7 5.7 5.7 5.7 -11.8 -11.7 -11.5 6400 0.8 11.8 39.5 -35.5 -4.8 -0.1-42 44 38.8 38.2 -35.0 -34.4 -33.9 -4.8 -4.7 11.6 11.5 11.3 44 43 0.8 0.8 0.7 6300 6200  $-0.1 \\ -0.1$ -41 -41 37.6 -4.6 42 6100 -0.1 -11.340 6000 37.0 -33.4 5.7 -4.5 0.7 0.0 -11.1 11.1 -39 41 5.7 5.6 5.6 5.5 0.7 0.7 0.7 0.6 10.9 10.7 10.5 10.3 -32.8 -32.3 -31.8 -31.2 0.0 0.0 0.0 0.0 -4.4 -4.3 -4.1 -10.9 -10.7 5900 36.4 -39 41 35.8 35.2 40 -38 5800 -10.4-37 39 5700 -10.2-36 39 5600 5500 34.0 -30.75.5 -3.80.6 0.0 -10.0 10.1 -36 38 5400 5300 5.4 5.3 5.2 5.2 -9.8 -9.5 33.4 32.8 -30.2 -29.6 -29.1 0.6 0.6 0.0 -3.6 -3.4 9.9 9.7 -35 -34 37 36 9.5 9.2 5200 32.2 0.6 0.0 -9.3 -34 36 -3.1 -9.1 5100 0.6 0.0 -33 35 5000 31.0 5.1 -8.8 9.0 -32 -28.0-2.50.6 0.0 34 30.5 29.9 29.3 28.7 -8.6 -8.3 -8.0 -7.8 -27.5 -27.0 -26.5 5.0 4.9 4.7 0.5 0.5 0.5 0.0 0.0 0.0 4900 8.8 -31 -2.233 32 32 31 4800 4700 8.5 8.3 8.0 -31 -30 4600 **-26.0** 4.6 0.5 0.0 -29 4500 28.1 4.5 0.5 -7.5 -25.40.0 7.8 -2830 27.5 26.9 26.4 25.8 7.5 7.2 6.9 6.6 4.3 4.2 0.5 0.5 -27 -27 4400 -24.90.0 -7.229 -24.4 -23.9 -23.4 4300 0.0 -6.9 28 4.0 4200 4100 0.5 0.0 -6.5 -6.2-26 -25 28 27 4000 25.2 -23.03.5 0.5 0.0 -5.8 6.3 -24 26 24.7 24.1 23.6 23.1 3.3 3.0 2.6 2.2 -23 -22 -21 -20 0.0 25 24 3900 -22.5 0.4 -5.4 6.0 5.6 5.2 4.8 0.4

3800

3700

3600

-22.0

23 21

0.0

0.0

0.4

0.4

CHARGE 4G

TABLE G
SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R	E L		PROB	ABLE	ERROR	S	ANGLE OF	COT	TML VEL	MO		SITE
A N	Ē			FI	UZE M5			ANGLE OF	VEL		ANGLE	OR OF SITE
G E	V	R	D	НВ	ТВ	RB		FALL			+1 MIL   SITE	-1 MIL   SITE
М	MIL	М	M	М	SEC	М	MIL		M/S	М	MIL	MIL
0	0.0	3	0				0		286	0	0.000	0.00
500 1000 1500 2000	30.9 62.7 95.6 129.9	4 5 7 8	0 0 1 1	1 1 2	0.04 0.04 0.04	11 11 11	31 65 100 137	32.5 15.8 10.2 7.4	280 274 269 264	4 16 36 66	0.001 0.004 0.008 0.016	-0.008
2500	165.6	10	1	2	0.04	12	177	5.7	259	106	0.027	-0.025
3000 3500 4000 4500	203.2 243.0 285.6 331.9	12 13 15 17	1 2 2 2	3 3 4 5	0.04 0.04 0.04 0.04	12 12 13 14	220 266 316 370	4.6 3.7 3.1 2.6	254 250 246 242	158 223 303 403	0.042 0.063 0.092 0.135	-0.057 -0.084
5000	383.0	19	3	6	0.04	14	431	2.2	239	526	0.199	-0.173
5500 6000 6500	441.3 511.3 607.1	21 23 25	3 3 4	7 9 12	0.04 0.05 0.05	15 16 17	499 580 688	1.9 1.6 1.2	237 235 234	682 888 1196	0.307 0.528 1.509	$-0.402 \\ -0.755$
6500 6000 5500	946.0 1041.4 1110.9	25 23 22	5 5 5	22 24 26	0.06 0.06	17 16 15	1031 1119 1183	0.6 0.5 0.4	239 242 243	2373 2681 2887		
5000	1168.3	20	5	28	0.07	13	1237	0.4	244	3042	-1.207	1.18
4500 4000	1217.7 1260.7	18 16	5 4	29 30	0.07 0.07	12 11	1285 1330	0.3 0.3	244 244	3162 3257		1.12 1.08

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE H ROTATION - RANGE CHARGE 4 G

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

	AZIMUTH OF TARGET - MILS															
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600							
500 1000 1500 2000	0 0 0 0	0 -1+ -1+ -2+	-1+ -2+ -2+ -3+	-1+ -2+ -3+ -4+	-1+ -3+ -4+ -5+	-2+ -3+ -5+ -6+	-2+ -4+ -6+ -7+	- 2+ - 4+ - 6+ - 8+	-2+ -4+ -6+ -8+							
2500	0	-2+	-4+	-5+	-7+	-8+	-9+	-9+	-9+							
3000 3500 4000 4500	0 0 0 0	0 -2+ -5+ -7+ -9+ -10+ -11+ -12+ -12+ 0 -3+ -5+ -8+ -10+ -11+ -13+ -13+ -14+ 0 -3+ -6+ -8+ -10+ -12+ -14+ -14+ -15+														
5000	0	-3+	-6+	-9+	-11+	-13+	-14+	-15+	-15+							
5500 6000 6500	0 0 0	0 -3+ -6+ -9+ -11+ -13+ -15+ -16+ -16+														
6500 6000 5500	0 0 0 0	****** -1+ 0 +1-	****** -2+ 0 +1-	****** -2+ 0 +2-	****** -3+ 0 +2-	****** -4+ 0 +3-	****** - 4+ 0 +3-	****** - 4+ 0 +3-	******* -4+ 0 +3-							
5000	0	+1-	+3-	+4-	+5-	+5-	+6-	+6-	+7-							
4500 4000	0 0	+2- +3-	+4- +5-	+5- +7-	+7- +9-	+8- +11-	+9- +12-	+9- +13-	+10 <sup>-</sup> +13 <sup>-</sup>							
	3200 6400															
	AZIMUTH OF TARGET - MILS															

- NOTES 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
  2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
  3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
  4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	.94	. 87	.77	. 64	.50	. 34

TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

	AZIMUTH OF TARGET - MILS												
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200				
500 1000 1500 2000	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0				
2500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
3000 3500 4000 4500	R0.1L R0.1L R0.1L R0.1L	R0.1L R0.1L R0.1L R0.1L	0.0 R0.1L R0.1L R0.1L	0.0 0.0 0.0 R0.1L	0.0 0.0 0.0 0.0	0.0 0.0 0.0 L0.1R	0.0 L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R				
5000	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R				
5500 6000 6500	R0.3L R0.3L R0.5L	R0.2L R0.3L R0.5L	R0.2L R0.2L R0.4L	R0.1L R0.1L R0.2L	0.0 0.0 0.0	L0.1R L0.1R L0.2R	L0.2R L0.2R L0.4R	L0.2R L0.3R L0.5R	L0.3R L0.3R L0.5R				
6500 6000 5500	******* R1.4L R1.8L R2.2L	R1.3L R1.7L R2.0L	******* R1.0L R1.3L R1.5L	R0.5L R0.7L R0.8L	0.0 0.0 0.0 0.0	L0.5R L0.7R L0.8R	L1.0R L1.3R L1.5R	L1.3R L1.7R L2.0R	L1.4R L1.8R L2.2R				
5000	R2.6L	R2.4L	R1.8L	R1.0L	0.0	L1.0R	L1.8R	L2.4R	L2.6R				
4500 4000	R3.0L R3.4L												
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400				
	AZIMUTH OF TARGET - MILS												

### 0 DEGREES LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

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FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4 G ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS												
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200				
500 1000 1500 2000	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R				
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R				
3000 3500 4000 4500	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.2R L0.3R	L0.2R L0.2R L0.3R L0.3R	L0.2R L0.2R L0.3R L0.4R	L0.2R L0.2R L0.3R L0.4R				
5000	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R	L0.5R				
5500 6000 6500	0.0 0.0 R0.1L	L0.1R 0.0 R0.1L	L0.1R L0.1R 0.0	L0.2R L0.2R L0.2R	L0.3R L0.3R L0.4R	L0.4R L0.5R L0.6R	L0.5R L0.6R L0.7R	L0.5R L0.7R L0.8R	L0.5R L0.7R L0.9R				
6500 6000 5500	******* R0.8L R1.2L R1.6L	****** R0.7L R1.1L R1.4L	****** R0.4L R0.7L R0.9L	0.0 R0.1L R0.2L	L0.5R L0.6R L0.6R	L1.1R L1.2R L1.4R	****** L1.5R L1.8R L2.1R	L1.8R L2.2R L2.6R	L1.9R L2.3R L2.7R				
5000	R1.9L	R1.7L	R1.2L	R0.4L	L0.6R	L1.6R	L2.4R	L2.9R	L3.1R				
4500 4000	R2.3L R2.8L												
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400				
			AZ I	MUTH OF	TARGE T	· - MILS							

### 10 DEGREES SOUTH LATITUDE

TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 20 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS													
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200					
500 1000 1500 2000	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R	0.0 L0.1R L0.1R L0.2R					
2500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R					
3000 3500 4000 4500	L0.2R L0.3R L0.3R L0.3R	LO.3R LO.3R LO.3R LO.3R LO.4R LO.4R LO.4R LO.5R												
5000	L0.3R	L0.3R	L0.4R	L0.4R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R					
5500 6000 6500	L0.3R L0.3R L0.3R	L0.4R L0.4R L0.3R	L0.4R L0.4R L0.4R	L0.5R L0.5R L0.6R	L0.6R L0.7R L0.8R	L0.7R L0.8R L0.9R	L0.7R L0.9R L1.1R	L0.8R L1.0R L1.2R	L0.8R L1.0R L1.2R					
6500 6000 5500	******* R0.2L R0.6L R0.9L	****** R0.1L R0.4L R0.7L	****** L0.1R R0.1L R0.3L	****** L0.6R L0.5R L0.4R	L1.1R L1.1R L1.2R	L1.6R L1.8R L2.0R	L2.0R L2.3R L2.6R	L2.3R L2.7R L3.1R	L2.4R L2.8R L3.2R					
5000	R1.2L	R1.0L	R0.5L	L0.3R	L1.2R	L2.1R	L2.9R	L3.4R	L3.6R					
4500 4000	R1.6L R2.0L													
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400					
	AZIMUTH OF TARGET - MILS													

### 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS													
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200					
500 1000 1500 2000	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.3R											
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R					
3000 3500 4000 4500	L0.4R L0.4R L0.5R L0.5R	LO.4R LO.4R LO.4R LO.5R LO.5R LO.5R LO.5R LO.6R LO.6 LO.5R LO.5R LO.5R LO.5R LO.6R LO.6R LO.6R LO.7R LO.7												
5000	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.9R	L0.9R	L0.9R					
5500 6000 6500	L0.6R L0.7R L0.7R	L0.6R L0.7R L0.7R	L0.7R L0.7R L0.8R	L0.8R L0.8R L0.9R	L0.8R L1.0R L1.1R	L0.9R L1.1R L1.3R	L1.0R L1.2R L1.4R	L1.1R L1.2R L1.5R	L1.1R L1.3R L1.5R					
*****	*****	*****	*****	*****	*****	******	*****	*****	*****					
6500 6000 5500	L0.4R L0.1R R0.2L	L0.4R L0.2R 0.0	L0.7R L0.5R L0.4R	L1.1R L1.1R L1.0R	L1.6R L1.6R L1.7R	L2.0R L2.2R L2.4R	L2.4R L2.7R L3.0R	L2.7R L3.1R L3.4R	L2.7R L3.2R L3.6R					
5000	R0.5L	R0.3L	L0.2R	L0.9R	L1.7R	L2.6R	L3.3R	L3.8R	L4.0R					
4500 4000	R0.8L R1.2L													
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400					
	AZIMUTH OF TARGET - MILS													

### 30 DEGREES SOUTH LATITUDE

### TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 40 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS													
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200					
500 1000 1500 2000	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R	L0.1R L0.2R L0.3R L0.3R	L0.1R L0.2R L0.3R L0.3R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R					
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R					
3000 3500 4000 4500	L0.5R L0.6R L0.6R L0.7R	L0.6R L0.6R L0.6R L0.6R L0.6R L0.7R L0.7R L0.7R L0.7R L0.7R L0.7R L0.8R												
5000	L0.8R	L0.8R	L0.8R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R					
5500 6000 6500	L0.9R L1.0R L1.0R	L0.9R L1.0R L1.1R	L0.9R L1.0R L1.2R	L1.0R L1.1R L1.3R	L1.1R L1.2R L1.4R	L1.2R L1.3R L1.6R	L1.2R L1.4R L1.7R	L1.3R L1.5R L1.8R	L1.3R L1.5R L1.8R					
*****	*****	*****	*****	*****	*****	******	*****	*****	*****					
6500 6000 5500	L0.9R L0.7R L0.5R	L1.0R L0.8R L0.6R	L1.2R L1.1R L1.0R	L1.6R L1.6R L1.6R	L2.0R L2.1R L2.2R	L2.4R L2.6R L2.8R	L2.7R L3.1R L3.4R	L3.0R L3.4R L3.7R	L3.1R L3.5R L3.9R					
5000	L0.3R	L0.4R	L0.8R	L1.5R	L2.2R	L3.0R	L3.6R	L4.1R	L4.2R					
4500 4000	0.0 R0.3L													
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400					
		AZIMUTH OF TARGET - MILS												

### 40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 50 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200			
500 1000 1500 2000	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R			
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R			
3000 3500 4000 4500	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L1.0R	L0.6R L0.7R L0.9R L1.0R	L0.6R L0.8R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R			
5000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.3R			
5500 6000 6500	L1.1R L1.2R L1.4R	L1.1R L1.3R L1.4R	L1.2R L1.3R L1.5R	L1.2R L1.4R L1.6R	L1.3R L1.5R L1.7R	L1.4R L1.6R L1.8R	L1.4R L1.6R L1.9R	L1.4R L1.7R L2.0R	L1.5R L1.7R L2.0R			
6500 6000 5500	******* L1.5R L1.4R L1.2R	******* L1.6R L1.5R L1.3R	****** L1.7R L1.7R L1.6R	******* L2.0R L2.1R L2.1R	******* L2.4R L2.5R L2.6R	L2.7R L3.0R L3.1R	****** L3.0R L3.3R L3.6R	L3.2R L3.6R L3.9R	L3.3R L3.7R L4.0R			
5000	L1.0R	L1.1R	L1.5R	L2.0R	L2.7R	L3.3R	L3.8R	L4.2R	L4.3R			
4500 4000	L0.8R L0.5R	L0.9R L0.7R	L1.3R L1.2R	L2.0R L1.9R	L2.7R L2.7R	L3.4R L3.5R	L4.1R L4.3R	L4.5R L4.7R	L4.6R L4.9R			
	3200 2800 2400 2000 1600 1200 800 400 0 3200 3600 4000 4400 4800 5200 5600 6000 6400											
	AZIMUTH OF TARGET - MILS											

### 50 DEGREES SOUTH LATITUDE

### TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 60 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R		
2000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R		
2500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
3000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R		
3500	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R		
4000	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R		
4500	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R		
5000	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R		
5500	L1.3R	L1.3R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R		
6000	L1.5R	L1.5R	L1.5R	L1.6R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R		
6500	L1.7R	L1.7R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.2R	L2.2R		
*****	*****	*****	*****	*****	*****	******	*****	******	*****		
6500	L2.0R	L2.0R	L2.2R	L2.4R	L2.7R	L3.0R	L3.2R	L3.3R	L3.4R		
6000	L2.0R	L2.0R	L2.2R	L2.5R	L2.9R	L3.2R	L3.5R	L3.7R	L3.7R		
5500	L1.9R	L1.9R	L2.2R	L2.5R	L3.0R	L3.4R	L3.7R	L4.0R	L4.0R		
5000	L1.7R	L1.8R	L2.1R	L2.5R	L3.0R	L3.5R	L3.9R	L4.2R	L4.3R		
4500	L1.6R	L1.7R	L2.0R	L2.5R	L3.1R	L3.6R	L4.1R	L4.4R	L4.5R		
4000	L1.4R	L1.5R	L1.9R	L2.4R	L3.1R	L3.7R	L4.3R	L4.6R	L4.8R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
	AZIMUTH OF TARGET - MILS										

### 60 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200			
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200			
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R			
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R			
1500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R			
2000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R			
2500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R			
3000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R			
3500	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R			
4000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R			
4500	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R			
5000	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R			
5500	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R			
6000	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R			
6500	L1.9R	L1.9R	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R			
6500 6000 5500	******* L2.4R L2.5R L2.5R	****** L2.5R L2.5R L2.5R	****** L2.6R L2.7R L2.7R	****** L2.7R L2.9R L2.9R	L2.9R L3.1R L3.2R	L3.1R L3.3R L3.5R	****** L3.2R L3.5R L3.7R	L3.4R L3.7R L3.9R	L3.4R L3.7R L3.9R			
5000	L2.4R	L2.5R	L2.6R	L2.9R	L3.3R	L3.6R	L3.9R	L4.1R	L4.2R			
4500	L2.3R	L2.4R	L2.6R	L2.9R	L3.3R	L3.7R	L4.0R	L4.3R	L4.3R			
4000	L2.2R	L2.2R	L2.5R	L2.9R	L3.3R	L3.8R	L4.1R	L4.4R	L4.5R			
	3200	2800	2400	2000	1600	1200	800	400	0			
	3200	3600	4000	4400	4800	5200	5600	6000	6400			
	AZIMUTH OF TARGET - MILS											

### 70 DEGREES SOUTH LATITUDE

**CHARGE** TABLE J FT 155-AR-1 4 G **FUZE CORRECTION FACTORS** PROJ, HE, M795 FUZE, MTSQ, M582

PART 1

1 3 4 5 7 8 9 10 11 FS **FUZE CORRECTIONS FOR RANGE** MUZZLE AIR AIR PROJ WT **VELOCITY** WIND **TEMP DENSITY** OF 1 SQ (4 SQ STD) 1 M/S 1 KNOT 1 PCT PCT TAIL DEC DEC INC HEAD INC DEC INC DEC INC 0 0.000 0.000 0.000 0.000 0.000 0.000 0.000 | 0.000 -.001 | 0.001 -.001 | 0.001 0.007 010 0.010 0.010 0.013 0.000 0.000 0.010 .010 2 3 4 0.000 0.000 0.015 .015 0.020 020 017 0.016 -.*001* 0.001 001 0.001 0.000 0.000 0.024 024 
 020
 0.020

 023
 0.023

 026
 0.026
 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.029 0.033 0.038 .002 029 6 7 -.001 001 -.001 001 8 .002 0.001 -.*001* . 038 . 026 .001 0.002 0.029 0.001 9 -.*001* 0.001 .003 .001 0.042 029 04310 033 0.032 -. 002 0.001 003 0.002 0.002 .002 0.047 047 0.035 0.038 0.041 0.001 0.001 0.001 0.002 0.002 0.002 0.002 0.002 0.003 11 036 -.002 -.002 .003 002 0.051 052 -.002 -.003 12 13 .004 0.055 039 056 -.002. 060 042 0.044 0.001 0.002 0.003 14 045 -. **002** .004 .003 0.064 . 065 15 049 0.048 -.*003* 0.002 004 0.002 0.004 . 004 0.068 069 0.051 0.054 0.057 0.060 0.004 16 052 -.003 0.002 . 004 0.002 004 0.073 073 0.077 0.002 0.002 0.002 0.002 0.002 0.002 0.005 0.005 055 -.003 . 078 .004 17 -.005 .004 . 082 18 058 -.003 -.005 -.003 19 .004 0.006 .006 0.085 . 086 20 064 0.063 -.*004* 0.002 004 0.002 0.007 .007 0.089 . 090 0.066 0.069 0.072 21 068 -.004 0.002 . 004 0.002 0.007 -.*007* 0.093 . 094 0.002 0.001 0.001 0.001 *071* -.004 0.002 .004 0.008 -.008 0.097 . 098 -.004 0.003 .004 0.009 -.*008* 0.101 . 103 0.075 24 077 **-.004** 0.003 .004 0.009 . 009 0.105 .107 25 0.078 080 -.004 0.003 . 004 0.001 0.010 -.010 0.109 .111 0.081 0.084 0.089 0.087 0.091 26 27 0.113 0.117 -.004 0.003 . 004 0.001 0.011 -.*011* .114 0.003 0.003 0.001 -.004 .004 0.011 -.011 -.012 -.013 . 122 28 -.005 .004 0.012 0.121 0.001 29 -.0050.003 004 0.013 0.125 .126 30 . 095 0.094 -.005 0.004 .004 0.001 0.014 0.128 -.013. 130 0.001 0.001 0.001 0.001 0.097 0.101 0.100 0.103 -.005 0.004 0.014 0.132 -.014 .134 -. 015 -. 016 -. 017 0.136 0.140 32 -.005 0.004 004 0.015 0.004 33 -.005 004 0.016 . 142 0.106 34 -. *005* 0.017 . 108 .004 0.144 . 146 35 . *111* 0.109 -.005 0.004 .004 0.001 0.018 -.017 0.147 .149 FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582 TABLE J CHARGE 4G

### FUZE CORRECTION FACTORS

1	2	3	4	5	6	7	8	9	10	11
FS	FUZE CORRECTIONS FOR									
	MUZZLE VELOCITY 1 M/S		WI	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		AIR DENSITY 1 PCT		WT SQ STD)
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	111	0.109	005	0.004	004	0.001	0.018	017	0.147	149
36 37 38 39	117 120	0.112 0.115 0.118 0.121	006 006	0.005 0.005 0.005 0.005	004 004 004 004	0.001 0.001	0.019 0.019 0.020 0.021	019 020	0.151 0.155 0.159 0.162	153 157 161 165
40	126	0.124	006	0.005	004	0.001	0.022	021	0.166	169
41 42 43 44	132 135	0.127 0.130 0.133 0.136	006 006	0.005 0.006 0.006 0.006	004 004 004 004	0.001 0.001	0.024	022 023 024 025	0.170 0.174 0.178 0.182	173 177 181 185
45	141	0.139	006	0.006	004	0.001	0.026	026	0.186	189
47 48	147 150	0.142 0.145 0.148 0.151	007 007	0.006 0.007 0.007 0.008	004 004 004 004	0.001 0.001	0.028 0.029	027 027 028 029	0.190 0.194 0.198 0.202	197 201
50	156	0.154	007	0.009	004	0.001	0.031	030	0.207	210
51 52 53		0.157 0.160 0.162	008 009 012	0.012	004 004 003			031 032 035	0.212 0.218 0.229	215 221 230

CHARGE TABLE K FT 155-AR-1
4G PART 1
FUZE SETTING PROJ, HE, M795
FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

	ETTING M582	CORRECTIONS
FROM	TO	
1.8	15.3	-0.1
15.4	31.4	-0.2
31.5	49.0	-0.3
49.1	53.2	-0.4

Part 1

Charge 5G

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-346\ M/S$ 

Propelling Charge M3A1 - Base and Increments 2, 3, 4, and 5  $\,$ 

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A

CHARGE 5 G

, HE, M795 LINE NUMBER PD. M739 A1

LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	L I NE NUMBER
0.0- 135.7	0
135.8- 261.5 261.6- 394.3 394.4- 524.6 524.7- 638.6	1 2 3 4
638.7- 798.4	5
798.5- 1016.2 1016.3- 1300.0	6 7

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS								
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	0					0			
	100 200 300 400					0 0 0 0	0 1 1 1	0 2 3 3	1 4 5 6
	500					0	2	4	8
	600 700 800 900					0 0 0 0	2 2 3 3	5 6 7	8 10 10 11
	1000					0	3	8	12
	1100 1200 1300 1400					0 0 0 0	4 4 4 5	8 9 10 10	13 14 15 16
	1500					0	5	11	17
0	1600 1700 1800 1900				-5 -5 -5 -6	0 0 0	5 6 6	11 12 13 13	18 19 20 21
	2000				-6	0	7	14	22
	2100 2200 2300 2400			-12 -13 -13 -14	-6 -7 -7 -7	0 0 0 0	7 7 8 8	14 15 16 16	23 24 25 25
	2500			-15	-8	0	8	17	26
	2600 2700 2800 2900		-22 -23 -24 -25	-15 -16 -17 -17	-8 -8 -9 -9	0 0 0	8 9 9 9	18 18 19 20	27 28 29 30
	3000	-33	-26	-18	-9	0	10	20	31
	3100 3200 3300 3400	-35 -36 -37 -39	-27 -28 -29 -30	-19 -19 -20 -21	-10 -10 -10 -11	0 0 0 0	10 10 11 11	21 22 22 23	33 34 35 36
	3500	-40	-31	-21	-11	0	12	24	37
		0			1				2

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5 G

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
							0	
2 5 7 9	7 10 12	9 13 16	11 15 19	13 18 23	15 21 27	24 31	100 200 300 400	
11	15	19	23	27	32	36	500	
12 14 15 16	17 19 20 22	21 24 26 28	26 29 32 34	31 35 38 41	36 40 44 48	42 46 51 55	600 700 800 900	
18	24	30	37	44	51	59	1000	
19 20 22 23	25 27 28 30	32 34 36 38	39 41 44 46	47 49 52 55	54 58 61 64	63 66 70 73	1100 1200 1300 1400	
24	32	40	48	57	67	77	1500	
25 27 28 29	33 35 36 38	41 43 45 47	50 53 55 57	60 62 65 67	70 73 76 79	80 83 87 90	1600 1700 1800 1900	3
30	39	49	59	70	81	93	2000	
31 33 34 35	41 42 44 46	51 53 55 57	61 64 66 68	73 75 78 81	84 87 90 94	97 100 104 107	2100 2200 2300 2400	
37	47	59	71	83	97	111	2500	
38 39 40 42	49 51 52 54	61 63 65 67	73 75 78 80	86 89 92 95	100 103 106 110	114 118 122 125	2600 2700 2800 2900	
43	56	69	83	98	113	129	3000	
45 46 48 49	58 60 61 63	71 74 76 78	86 88 91 94	101 104 107 110	117 120 124 128	133 137 142 146	3100 3200 3300 3400	
51	65	81	97	114	132	150	3500	
		2				3		

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE		GHT OF			UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	3500	-40	-31	-21	-11	0	12	24	37
0	3600 3700 3800 3900	-41 -43 -44 -46	-32 -33 -34 -36	-22 -23 -24 -24	-11 -12 -12 -13	0 0 0 0	12 12 13 13	25 26 26 27	38 40 41 42
	4000	-48	-37	-25	-13	0	14	28	43
	4100 4200 4300 4400	-49 -51 -53 -54	-38 -39 -41 -42	-26 -27 -28 -29	-13 -14 -14 -15	0 0 0	14 15 15 16	29 30 31 32	45 46 48 49
	4500	-56	-43	-30	-15	0	16	33	51
	4600 4700 4800 4900	-58 -60 -62 -64	-45 -46 -48 -49	-31 -32 -33 -34	-16 -16 -17 -17	0 0 0 0	17 17 18 18	34 35 36 37	52 54 55 57
	5000	-66	-51	-35	-18	0	19	38	58
1	5100 5200 5300 5400	-68 -70 -72 -74	-52 -54 -56 -57	-36 -37 -38 -39	-18 -19 -19 -20	0 0 0	19 20 20 21	39 40 42 43	60 62 64 66
	5500	-77	-59	-40	-21	0	22	44	68
	5600 5700 5800 5900	-79 -81 -84 -86	-61 -62 -64 -66	-41 -43 -44 -45	-21 -22 -22 -23	0 0 0 0	22 23 23 24	45 47 48 49	69 71 74 76
	6000	-89	-68	-46	-24	0	25	51	78
	6100 6200 6300 6400	-91 -94 -97 -99	-70 -72 -74 -76	-48 -49 -50 -52	-24 -25 -26 -26	0 0 0	26 26 27 28	52 <u>54</u> 55 57	80 83 85 88
2	6500	-102	-78	-53	-27	0	29	59	90
	6600 6700 6800 6900	-105 -108 -112 -115	-81 -83 -86 -88	-55 -57 -58 -60	-28 -29 -30 -31	0 0 0	30 31 31 32	61 62 64 66	93 96 99 102
	7000	-119	-91	-62	-32	0	33	68	105
		2					3		

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5 G

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
51	65	81	97	114	132	150	3500	
52 54 56 58	67 70 72 74	83 86 88 91	100 103 106 109	117 121 124 128	136 140 144 148	155 159 164 169	3600 3700 3800 3900	
59	76	94	112	132	152	174	4000	
61 63 65 67	79 81 83 86	97 100 103 106	116 119 123 126	136 140 144 148	157 162 166 171	179 184 190 195	4100 4200 4300 4400	
69	88	109	130	153	176	201	4500	
71 73 75 78	91 94 96 99	112 115 119 122	134 138 142 146	157 162 166 171	181 187 192 197	207 212 219 225	4600 4700 4800 4900	3
80	102	126	150	176	203	231	5000	
82 85 87 90	105 108 111 115	129 133 137 141	155 159 164 169	181 186 192 197	209 215 221 228	238 245 252 259	5100 5200 5300 5400	
92	118	145	173	203	234	267	5500	
95 98 100 103	121 125 129 132	149 154 158 163	178 184 189 195	209 215 221 228	241 248 255 263	274 283 291 300	5600 5700 5800 5900	
106	136	168	200	235	271	309	6000	
110 113 116 120	140 145 149 153	173 178 183 188	206 212 219 225	242 249 257 264	279 287 296 305	318 328 338 349	6100 6200 6300 6400	
123	158	194	232	273	315	360	6500	4
127 131 135 139	163 168 173 178	200 206 213 220	240 247 255 263	281 290 299 309	325 335 346 358	371 383 396 410	6600 6700 6800 6900	
143	184	227	272	320	370	424	7000	
	3				4			

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	NGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	7000	-119	- <b>91</b>	-62	-32	0	33	68	105			
2	7100 7200 7300 7400	-122 -126 -129 -133	-94 -96 -99 -102	-64 -66 -68 -70	-33 -34 -35 -36	0 0 0 0	34 35 37 38	70 73 75 77	108 112 115 119			
	7500	-137	-105	-72	-37	0	39	80	123			
3	7600 7700 7800 7900	-142 -146 -151 -156	-109 -112 -116 -120	-74 -77 -79 -82	-38 -39 -41 -42	0 0 0 0	40 42 43 45	83 86 89 92	127 132 137 142			
	8000	-161	-124	-85	-43	0	46	95	148			
	8100 8200 8300 8400	-167 -172 -179 -185	-128 -133 -138 -143	-88 -91 -94 -98	-45 -47 -49 -51	0 0 0	48 50 52 54	99 103 108 113	154 161 168 177			
	8500	-192	-148	-102	-53	0	57	119	188			
4	8600 8700 8800 8900	-200 -208 -218 -228	-155 -161 -169 -178	-107 -112 -117 -124	-55 -58 -61 -66	0 0 0	60 64 70	127 137 161	203 230			
	*****	******	******	*****	******	******	******	******	******			
6	8900 8800 8700 8600	-476 -499 -520 -540	-344 -361 -378 -393	-219 -232 -243 -254	-104 -111 -117 -123	0 0 0 0	98 106 113	170 199 215	267 303			
	8500	-560	- <b>409</b>	-264	-128	0	119	228	325			
	8400 8300 8200 8100	-580 -599 -619 -638	-423 -438 -453 -468	-275 -285 -294 -304	-133 -138 -143 -148	0 0 0	125 130 135 140	240 251 262 272	345 363 379 395			
	8000	-658	-483	-314	-153	0	145	282	411			
7	7900 7800 7700 7600	-678 -698 -719 -739	-497 -512 -528 -543	-324 -334 -344 -354	-158 -163 -168 -173	0 0 0 0	150 155 160 165	292 302 312 322	426 441 456 471			
	7500	-761	-559	-365	-178	0	170	332	486			
	7											

CHARGE 5 G

# FT 155-AR-1 TABLE B PART 1 PROJ, HE, M795 FUZE, PD, M739 A1 COMPLEMENTARY RANGE LINE NUMBER

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	METERS		RANGE	LINE		
400	500	600	700	800	900	1000	METERS	NO.		
143	184	227	272	320	370	424	7000	1		
148 153 158	190 196 203	234 242 251	281 291 301	331 342 355	383 397 412	440 456 474	7100 7200 7300	4		
163	210	259	312	368	428	493	7400			
169	217	269	324	382	446	514	7500			
175 181 188 196	225 234 243 253	279 290 302 315	336 350 365 382	398 415 434 456	465 486 510 539	537 564 596 636	7600 7700 7800 7900			
204	264	329	401	482	575	692	8000	5		
213 223 234 248	276 291 308 330	346 366 392 432	424 454 498	515 563	627		8100 8200 8300 8400			
267	366						8500			
298							8600 8700 8800 8900			
*****	*****	*****	*****	******	*****	******	*****			
366							8900 8800 8700 8600			
408	465						8500			
437 463 486 508	514 551 582 611	566 622 665 702	667 730 779	769 839	870		8400 8300 8200 8100	6		
530	639	737	822	894	947	970	8000			
550	665	769	863	943	1008	1054	7900			
570 590 610	691 716 741	801 832 862	901 938 974	989 1032 1074	1063 1114 1163	1122 1183 1240	7800 7700 7600			
630	766	892	1009	1115	1210	1294	7500			
	7									

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	LINE RANGE HEIGHT OF TARGET ABOVE GUN - METERS										
LINE	RANGE		HEIC	GHT OF	TARGET	ABOVE G	UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	7500	-761	-559	-365	-178	0	170	332	486		
	7400 7300 7200 7100	-783 -805 -828 -852	-575 -591 -608 -626	-375 -386 -397 -408	-184 -189 -194 -200	0 0 0	175 180 186 191	342 353 363 373	501 516 531 547		
	7000	-877	-644	-420	-206	0	197	384	563		
	6900 6800 6700 6600	-903 -930 -958 -988	-662 -682 -702 -723	-432 -445 -458 -471	-211 -218 -224 -230	0 0 0	202 208 214 220	395 406 418 430	579 596 613 630		
	6500	-1020	-746	-485	-237	0	226	442	648		
	6400 6300 6200 6100	-1054 -1090 -1130 -1173	-769 -794 -821 -849	-500 -516 -532 -549	-244 -251 -259 -267	0 0 0	233 239 246 254	455 468 481 495	666 685 705 725		
7	6000	-1220	-880	-568	-276	0	261	510	746		
-	5900 5800 5700 5600	-1274	-914 -951 -993	-588 -610 -633 -659	-285 -295 -305 -316	0 0 0	269 278 286 296	525 541 557 575	768 790 814 839		
	5500			-687	-329	0	306	593	865		
	5400 5300 5200 5100			-719	-342 -356 -373 -391	0 0 0	316 327 339 352	612 633 655 678	892 921 951 983		
	5000					0	366	703	1017		
	4900 4800 4700 4600					0 0 0	381 397 415 435	729 758 788 821	1053 1091 1132 1175		
	4500										
	4400										
					7						

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5 G

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT OF TARGET ABOVE GUN - METERS RANGE LIN											
400	500	600	700	800	900	1000	METERS	NO.				
630	766	892	1009	1115	1210	1294	7500					
650 671 691 712	791 816 841 867	922 952 983 1013	1044 1079 1114 1149	1156 1196 1236 1276	1256 1302 1347 1392	1346 1397 1447 1498	7400 7300 7200 7100					
733	893	1044	1185	1316	1437	1548	7000					
754 776 798 820	919 946 973 1001	1075 1106 1138 1171	1221 1257 1294 1331	1357 1398 1439 1481	1482 1528 1574 1621	1598 1648 1698 1749	6900 6800 6700 6600					
843	1029	1204	1369	1524	1668	1801	6500					
867 892 917 943	1058 1088 1119 1150	1239 1273 1309 1346	1408 1448 1489 1531	1568 1612 1658 1704	1716 1765 1815 1866	1854 1907 1961 2016	6400 6300 6200 6100					
970	1183	1384	1574	1752	1918	2073	6000	7				
998 1027 1057 1089	1216 1251 1288 1325	1423 1463 1505 1548	1618 1663 1710 1759	1801 1851 1903 1956	1972 2027 2083 2141	2131 2190 2251 2313	5900 5800 5700 5600	-				
1121	1364	1593	1809	2012	2201	2377	5500					
1156 1192 1229 1269	1405 1447 1492 1538	1640 1688 1739 1792	1861 1915 1971 2030	2069 2128 2189 2253	2263 2327 2393 2461	2444 2512 2582 2655	5400 5300 5200 5100					
1311	1587	1847	2091	2319	2532	2730	5000					
1355 1402 1451 1504	1639 1693 1750 1810	1905 1966 2029 2097	2155 2221 2291 2364	2388 2460 2535 2614	2606 2682 2762 2845	2808 2888 2972 3059	4900 4800 4700 4600					
		2167	2441	2695	2932	3150	4500					
						3244	4400					
				7								

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FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

		INII ONLINIO OI	,	A ONE KNOT WIT	10	
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L.10 L.20 L.29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 5 G

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-			-0.2+ -1.1+								
+200-			-0.5+ -2.1+								-0.7+ -2.9+
+300-			-0.7+ -3.1+								

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-4.7	-40.0
-30	-4.2	-34.4
-20	-3.8	-28.9
-10	-3.4	-23.3
0	-3.0	-17.8
10	-2.5	-12.2
20	-2.1	-6.7
30	-1.7	-1.1
40	-1.3	4.4
50	-0.8	10.0
60	-0.4	15.6
70	0.0	21.1
80	0.4	26.7
90	0.8	32.2
100	1.3	37.8
110	1.7	43.3
120	2.1	48.9
130	2.5	54.4

CHARGE 5 G

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	
R A N	E L E V	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT	AZ IMUTH CORRECTIONS		
G E	V	FUZE M582	DEC HOB	D ELEV	K		DRIFT (CORR TO L)	CW OF 1 KNOT	
М	MIL			M	MIL	SEC	MIL	MIL	
0	0.0			23	1	0.0	0.0	0.00	
100 200 300 400	4.3 8.5 12.8 17.1			23 23 23 23	1 1 1 1	0.3 0.6 0.9 1.2	0.1 0.2 0.2 0.3	0.01 0.01 0.02 0.02	
500	21.5			23	1	1.5	0.4	0.03	
600 700 800 900	25.9 30.4 34.9 39.5	1.8 2.1 2.4 2.7	1.15 0.98 0.86 0.76	22 22 22 22 22	1 1 1 1	1.8 2.1 2.4 2.7	0.5 0.6 0.7 0.8	0.04 0.04 0.05 0.05	
1000	44.1	3.0	0.68	22	1	3.0	0.8	0.06	
1100 1200 1300 1400	48.7 53.4 58.1 62.9	3.3 3.6 3.9 4.3	0.62 0.57 0.52 0.48	21 21 21 21	1 1 1 1	3.3 3.6 3.9 4.3	0.9 1.0 1.1 1.2	0.06 0.07 0.07 0.08	
1500	67.7	4.6	0.45	21	1	4.6	1.3	0.08	
1600 1700 1800 1900	72.6 77.5 82.4 87.4	4.9 5.5 5.9	0.42 0.39 0.37 0.35	20 20 20 20	1 1 1 1	4.9 5.2 5.5 5.9	1.4 1.5 1.6 1.6	0.09 0.09 0.10 0.10	
2000	92.5	6.2	0.33	20	1	6.2	1.7	0.11	
2100 2200 2300 2400	97.5 102.7 107.8 113.0	6.5 6.9 7.2 7.5	0.32 0.30 0.29 0.27	20 19 19 19	1 1 1	6.5 6.9 7.2 7.5	1.8 1.9 2.0 2.1	0.11 0.12 0.12 0.13	
2500	118.3	7.9	0.26	19	1	7.9	2.2	0.13	
2600 2700 2800 2900	123.6 128.9 134.3 139.7	8.2 8.6 8.9 9.2	0.25 0.24 0.23 0.22	19 19 19 18	1 1 1 2	8.2 8.6 8.9 9.2	2.4 2.5 2.6 2.7	0.14 0.14 0.14 0.15	
3000	145.2	9.6	0.22	18	2	9.6	2.8	0.15	
3100 3200 3300 3400	150.7 156.3 161.9 167.5	9.9 10.3 10.7 11.0	0.21 0.20 0.19 0.19	18 18 18 18	2 2 2 2	9.9 10.3 10.7 11.0	2.9 3.0 3.1 3.2	0.16 0.16 0.16 0.17	
3500	173.2	11.4	0.18	17	2	11.4	3.4	0.17	

CHARGE 5 G TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

			1				1			
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RA WI 1 K		T	IR EMP PCT	A I DENS 1 P		PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	М	М	М	M	M	M	М	M	М	M
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.6 1.2 1.7 2.2	-0.6 -1.1 -1.6 -2.1	0.0 0.0 0.0 0.1	0.0 0.0 -0.1 -0.1	0.0 0.0 0.1 0.1	0.0 -0.1 -0.1 -0.2	0.0 0.0 0.0 -0.1	0.0 0.0 0.0 0.1	-1 -2 -3 -4	1 2 3 4
500	2.7	-2.6	0.1	-0.1	0.2	-0.3	-0.1	0.1	-5	5
600 700 800 900	3.3 3.8 4.2 4.7	-3.1 -3.5 -3.9 -4.4	0.1 0.2 0.2 0.3	-0.2 -0.2 -0.3 -0.3	0.3 0.5 0.6 0.8	-0.4 -0.5 -0.6 -0.8	-0.2 -0.2 -0.3 -0.4	0.2 0.2 0.3 0.4	-5 -6 -7 -8	6 6 7 8
1000	5.1	-4.8	0.4	-0.4	0.9	-0.9	-0.5	0.5	-8	9
1100 1200 1300 1400	5.6 6.0 6.4 6.8	-5.2 -5.6 -6.0 -6.4	0.5 0.6 0.7 0.8	-0.5 -0.5 -0.6 -0.7	1.1 1.3 1.6 1.8	-1.1 -1.3 -1.5 -1.7	-0.5 -0.6 -0.7 -0.8	0.5 0.6 0.7 0.8	-9 -10 -10 -11	9 10 11 11
1500	7.2	-6.7	0.9	-0.8	2.0	-1.9	-1.0	0.9	-11	12
1600 1700 1800 1900	7.6 8.0 8.4 8.7	-7.1 -7.5 -7.8 -8.1	1.0 1.1 1.2 1.4	-0.9 -1.0 -1.1 -1.2	2.3 2.6 2.9 3.1	-2.1 -2.3 -2.6 -2.8	-1.1 -1.2 -1.3 -1.4	1.1 1.2 1.3 1.4	-12 -12 -13 -13	12 13 13 14
2000	9.1	-8.5	1.5	-1.3	3.5	-3.1	-1.6	1.5	-14	14
2100 2200 2300 2400	9.4 9.8 10.1 10.4	-8.8 -9.1 -9.4 -9.7	1.6 1.8 1.9 2.1	-1.4 -1.5 -1.6 -1.8	3.8 4.1 4.4 4.8	-3.4 -3.6 -3.9 -4.2	-1.7 -1.8 -2.0 -2.1	1.7 1.8 1.9 2.1	-14 -15 -15 -16	15 15 16 16
2500	10.8	-10.0	2.2	-1.9	5.1	-4.5	-2.3	2.2	-16	17
2600 2700 2800 2900	11.1 11.4 11.7 12.0	-10.3 -10.6 -10.9 -11.1	2.4 2.6 2.7 2.9	-2.0 -2.1 -2.2 -2.4	5.5 5.9 6.2 6.6	-4.8 -5.0 -5.3 -5.6	-2.4 -2.6 -2.7 -2.9	2.4 2.5 2.7 2.9	-16 -17 -17 -17	17 17 18 18
3000	12.3	-11.4	3.1	-2.5	7.0	-5.9	-3.1	3.0	-18	18
3100 3200 3300 3400	12.6 12.9 13.2 13.5	-11.7 -11.9 -12.2 -12.5	3.2 3.4 3.6 3.8	-2.6 -2.8 -2.9 -3.0	7.4 7.8 8.2 8.6	-6.2 -6.5 -6.8 -7.1	-3.2 -3.4 -3.6 -3.8	3.2 3.4 3.5 3.7	-18 -18 -19 -19	19 19 20 20
3500	13.8	-12.7	4.0	-3.2	9.0	-7.4	-3.9	3.9	-19	20

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	E V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	173.2	11.4	0.18	17	2	11.4	3.4	0.17
3600 3700 3800 3900	179.0 184.8 190.7 196.6	11.7 12.1 12.5 12.8	0.18 0.17 0.17 0.16	17 17 17 17	2 2 2 2	11.7 12.1 12.5 12.8	3.5 3.6 3.7 3.9	0.18 0.18 0.18 0.19
4000	202.6	13.2	0.16	17	2	13.2	4.0	0.19
4100 4200 4300 4400	208.6 214.7 220.9 227.1	13.6 14.0 14.3 14.7	0.15 0.15 0.15 0.14	16 16 16 16	2 2 2 2	13.6 14.0 14.3 14.7	4.1 4.3 4.4 4.5	0.20 0.20 0.20 0.21
4500	233.4	15.1	0.14	16	2	15.1	4.7	0.21
4600 4700 4800 4900	239.7 246.1 252.6 259.2	15.5 15.9 16.3 16.7	0.14 0.13 0.13 0.13	16 16 15 15	2 3 3 3	15.5 15.9 16.3 16.7	4.8 5.0 5.1 5.3	0.21 0.22 0.22 0.23
5000	265.8	17.1	0.12	15	3	17.1	5.4	0.23
5100 5200 5300 5400	272.5 279.3 286.2 293.1	17.5 17.9 18.3 18.7	0.12 0.12 0.11 0.11	15 15 14 14	3 3 3	17.5 17.9 18.3 18.7	5.6 5.7 5.9 6.1	0.23 0.24 0.24 0.25
5500	300.2	19.2	0.11	14	3	19.2	6.2	0.25
5600 5700 5800 5900	307.4 314.6 322.0 329.4	19.6 20.0 20.5 20.9	0.11 0.11 0.10 0.10	14 14 13 13	3 3 4 4	19.6 20.0 20.5 20.9	6.4 6.6 6.8 7.0	0.25 0.26 0.26 0.27
6000	337.0	21.4	0.10	13	4	21.4	7.1	0.27
6100 6200 6300 6400	344.7 352.5 360.5 368.6	21.8 22.3 22.7 23.2	0.10 0.10 0.09 0.09	13 13 12 12	4 4 4 4	21.8 22.3 22.7 23.2	7.3 7.5 7.8 8.0	0.27 0.28 0.28 0.29
6500	376.8	23.7	0.09	12	5	23.7	8.2	0.29
6600 6700 6800 6900	385.2 393.8 402.6 411.5	24.2 24.7 25.2 25.7	0.09 0.09 0.08 0.08	12 12 11 11	5 5 5 5	24.2 24.7 25.2 25.7	8.4 8.6 8.9 9.1	0.30 0.30 0.31 0.31
7000	420.7	26.2	0.08	11	6	26.2	9.4	0.31

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 5 G TABLE F

CORRECTION FACTORS

FUZE, P	PD, M739A1									
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	T	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	М	M	M	М	M	M	М	М
3500	13.8	-12.7	4.0	-3.2	9.0	-7.4	-3.9	3.9	-19	20
3600 3700 3800 3900	14.1 14.4 14.7 15.0	-13.0 -13.2 -13.5 -13.7	4.2 4.4 4.6 4.7	-3.3 -3.4 -3.6 -3.7	9.4 9.8 10.2 10.6	-7.7 -8.0 -8.3 -8.6	-4.1 -4.3 -4.5 -4.7	4.1 4.3 4.5 4.7	-19 -20 -20 -20	20 21 21 21
4000	15.3	-14.0	4.9	-3.9	11.0	-8.9	-4.9	4.9	-20	22
4100 4200 4300 4400	15.6 15.9 16.1 16.4	-14.2 -14.5 -14.7 -15.0	5.1 5.3 5.5 5.7	-4.0 -4.1 -4.3 -4.4	11.4 11.8 12.2 12.6	-9.2 -9.5 -9.7 -10.0	-5.1 -5.3 -5.5 -5.7	5.1 5.3 5.5 5.7	-21 -21 -21 -21	22 22 23 23
4500	16.7	-15.2	5.9	-4.5	12.9	-10.3	-6.0	6.0	-22	23
4600 4700 4800 4900	17.0 17.3 17.6 17.9	-15.4 -15.7 -15.9 -16.2	6.1 6.3 6.5 6.7	-4.7 -4.8 -5.0 -5.1	13.3 13.7 14.1 14.4	-10.5 -10.8 -11.1 -11.3	-6.2 -6.4 -6.7 -6.9	6.2 6.4 6.7 6.9	-22 -22 -22 -23	23 24 24 24
5000	18.2	-16.4	6.9	-5.2	14.8	-11.6	-7.2	7.1	-23	24
5100 5200 5300 5400	18.5 18.7 19.1 19.4	-16.7 -16.9 -17.2 -17.4	7.1 7.3 7.5 7.7	-5.4 -5.5 -5.6 -5.8	15.1 15.4 15.8 16.1	-11.8 -12.1 -12.3 -12.5	-7.4 -7.7 -7.9 -8.2	7.4 7.6 7.9 8.2	-23 -23 -23 -24	24 25 25 25 25
5500	19.7	-17.7	7.9	-5.9	16.4	-12.7	-8.4	8.4	-24	25
5600 5700 5800 5900	20.0 20.3 20.6 20.9	-17.9 -18.2 -18.4 -18.7	8.1 8.3 8.4 8.6	-6.1 -6.2 -6.3 -6.5	16.8 17.1 17.4 17.7	-13.0 -13.2 -13.4 -13.6	-8.7 -9.0 -9.2 -9.5	8.7 9.0 9.3 9.6	-24 -24 -24 -25	26 26 26 26
6000	21.2	-18.9	8.8	-6.6	17.9	-13.8	-9.8	9.9	-25	27
6100 6200 6300 6400	21.5 21.9 22.2 22.5	-19.2 -19.4 -19.7 -19.9	9.0 9.2 9.4 9.6	-6.7 -6.9 -7.0 -7.2	18.2 18.5 18.8 19.0	-14.0 -14.1 -14.3 -14.5	-10.1 -10.4 -10.7 -11.0	10.2 10.5 10.8 11.1	-25 -25 -25 -25	27 27 27 28
6500	22.8	-20.2	9.8	-7.3	19.3	-14.7	-11.3	11.5	-25	28
6600 6700 6800 6900	23.1 23.4 23.8 24.1	-20.5 -20.7 -21.0 -21.3	9.9 10.1 10.3 10.5	-7.4 -7.6 -7.7 -7.8	19.5 19.7 20.0 20.2	-14.8 -15.0 -15.1 -15.3	-11.6 -11.9 -12.2 -12.6	11.8 12.1 12.5 12.8	-26 -26 -26 -26	28 28 29 29
7000	24.4	-21.6	10.7	-8.0	20.4	-15.4	-12.9	13.2	-26	29

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	420.7	26.2	0.08	11	6	26.2	9.4	0.31
7100 7200 7300 7400	430.1 439.7 449.6 459.8	26.7 27.3 27.8 28.4	0.08 0.08 0.08 0.08	11 10 10 10	6 6 7	26.7 27.3 27.8 28.4	9.6 9.9 10.2 10.5	0.32 0.32 0.33 0.33
7500	470.3	29.0	0.07	9	7	29.0	10.8	0.34
7600 7700 7800 7900	481.2 492.4 504.1 516.3	29.6 30.2 30.8 31.5	0.07 0.07 0.07 0.07	9 9 8 8	7 8 8 9	29.6 30.2 30.8 31.5	11.1 11.5 11.9 12.2	0.35 0.35 0.36 0.36
8000	529.1	32.2	0.07	8	9	32.2	12.7	0.37
8100 8200 8300 8400	542.5 556.7 571.8 588.1	32.9 33.6 34.4 35.3	0.07 0.06 0.06 0.06	7 7 6 6	10 11 12 13	32.9 33.6 34.4 35.3	13.1 13.6 14.1 14.7	0.38 0.38 0.39 0.40
8500	605.9	36.2	0.06	5	15	36.2	15.4	0.41
8600 8700 8800 8900	625.7 648.4 675.7 713.2	37.2 38.3 39.6 41.4	0.06 0.06 0.05 0.05	5 4 3	17 21 27	37.2 38.3 39.6 41.4	16.1 17.0 18.1 19.8	0.42 0.43 0.44 0.46
******	******	******	*****	******	***	******	******	******
8900 8800 8700 8600	847.8 885.1 912.2 934.5	47.4 48.9 50.0 50.8	0.05 0.05 0.04 0.04	3 4 5	29 22 19	47.4 48.9 50.0 50.8	27.1 29.6 31.7 33.4	0.56 0.59 0.61 0.62
8500	954.1	51.6	0.04	5	16	51.6	35.1	0.64
8400 8300 8200 8100	971.6 987.6 1002.5 1016.5	52.2 52.8 53.3 53.8	0.04 0.04 0.04 0.04	6 6 7 7	15 13 12 12	52.2 52.8 53.3 53.8	36.7 38.3 39.8 41.3	0.66 0.67 0.69 0.71
8000	1029.7	54.2	0.04	8	11	54.2	42.8	0.72
7900 7800 7700 7600	1042.2 1054.1 1065.6 1076.6	54.6 55.0 55.4 55.7	0.04 0.04 0.04 0.04	8 9 9	10 10 9	54.6 55.0 55.4 55.7	44.3 45.8 47.3 48.8	0.74 0.75 0.77 0.79
7500	1087.2	56.1	0.04	10	8	56.1	50.3	0.80

FT 155-AR-1 TABLE F CHARGE PART 1 PROJ, HE, M795 FUZE, PD, M739A1 5 G CORRECTION FACTORS

12 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 PCT 1 M/S 1 KNOT 1 PCT (4 SQ STD) DEC INC HEAD DEC INC DEC INC DEC INC TAIL М M M M М M M M M М M 7000 24.4 10.7 20.4 13.2 29 -21.6 -8.0 -15.4 -12.9**-26** 24.8 25.1 25.5 13.5 13.9 14.3 14.7 20.6 -15.5 -15.7 -15.8 -27 -27 -27 7100 10.8 -21.8 -8.1 -13.329 -22.1 -22.4 -22.7 20.7 20.9 -8.2 -8.3 -8.5 -13.6 -14.0 7200 7300 29 29 11.0 11.2 -15.9 11.3 21.0  $-\frac{1}{27}$ 30 7400 25.8 7500 26.2 -**23.0** 11.5 21.1 -15.9 -14.7 15.1 -27 30 -8.7 -8.8 -9.0 -9.1 15.5 15.9 16.3 16.7 -23.3 -23.6 -23.9 11.7 11.8 21.2 21.3 21.4 -28 -28 30 30 7600 26.6 -16.0-15.126.9 27.3 27.7 -15.5-16.1 -16.2 7700 12.0 12.1 -15.9 -28 31 7800 -16.2-16.3-28 7900 8000 28.1 -24.5 12.3 -9.2 21.5 -16.3 -16.6 17.1 -28 31 8100 28.4 28.8 -24.8 -25.1 12.5 12.6 -9.3 -9.5 21.6 21.6 -16.3 -16.4 17.6 18.0 -28 -29 31 32 -17.1 -17.5 8200 29.2 -25.5 12.8 -9.6 21.6 -16.4 -17.918.5 -29 32 8300 8400 -9.7 21.6 18.9 32 -16.48500 30.0 -18.7 -29 **-9.8** 21.6 -16.5 19.4 32 -26.1-16.5 -16.5 -16.4 -29 -29 -30 8600 30.6 -10.0 21.5 21.3 -19.2 20.0 -26.532 -26.8 -27.2-19.7 -20.1 33 33 -10.1 -10.2 20.6 8700 8800 8900 -10.3-16.4-20.6-30 33 33 33 8900 -28.6 -10.3-14.6 -22.58800 -28.3-10.2-14.3 -22.3-29 -28.1 -27.8 20.2 19.7 -22.1 -21.9 21.5 21.4 33 32 8700 -10.1 -29 31.0 -13.8-28 8600 -10.08500 30.8 -27.6**-9.8** 19.3 -13.6 -21.721.3 -28 32 -9.7 -9.6 -9.4 -9.3 -13.4 -13.2 -28 -27 -27 8400 30.6 -27.318.9 -21.4 21.1 32 8300 30.3 **-27.0** 12.7 18.6 -21.120.9 31 12.6 -20.920.7 8200 30.1 -26.718.3 *-13.0* 31 -26.4 12.4 -20.620.5 -27 31 8100 29.8 18.0 -12.88000 29.4 12.3 17.7 -20.4 -27 -26.1-9.1 -12.620.2 30 29.1 28.8 28.5 12.1 12.0 11.8 -9.0 -8.8 -8.7 17.4 17.1 16.9 -26 -26 -26 -25.8 -12.5 30 7900 -20.120.0 -25.6-25.319.7 19.5 19.2 30 29 29 7800 7700 -12.3 -12.1 -19.8 -19.5 28.2 -25.0 $-\frac{25}{5}$ -8.5 -11.9 -19.37600 11.7 16.6 7500 27.8 -24.711.5 -8.3 16.4 -11.8 -19.0 18.9 -25 28

CHARGE 5 G

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E	FS FOR GRAZE	DFS PER	DR PER	FO	TIME OF		MUTH CTIONS
G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			M	MIL	SEC	MIL	MIL
7500	1087.2	56.1	0.04	10	8	56.1	50.3	0.80
7400 7300 7200 7100	1097.4 1107.4 1117.0 1126.3	56.4 56.7 57.0 57.3	0.04 0.04 0.04 0.04	10 10 11 11	8 7 7 7	56.4 56.7 57.0 57.3	51.9 53.5 55.1 56.8	0.82 0.84 0.86 0.87
7000	1135.5	57.5	0.04	11	7	57.5	58.5	0.89
6900 6800 6700 6600	1144.3 1153.0 1161.4 1169.7	57.8 58.0 58.2 58.5	0.04 0.04 0.04 0.04	11 12 12 12	6 6 6	57.8 58.0 58.2 58.5	60.2 62.0 63.8 65.7	0.91 0.94 0.96 0.98
6500	1177.7	58.7	0.04	13	5	58.7	67.7	1.00
6400 6300 6200 6100	1185.6 1193.3 1200.9 1208.2	58.9 59.1 59.3 59.5	0.04 0.04 0.04 0.04	13 13 13 14	5 5 5 5	58.9 59.1 59.3 59.5	69.8 71.9 74.2 76.5	1.03 1.06 1.08 1.11
6000	1215.5	59.7	0.04	14	4	59.7	79.0	1.15
5900 5800 5700 5600	1222.6 1229.5 1236.3 1242.9	59.9 60.1 60.2 60.4	0.04 0.04 0.04 0.04	14 15 15 15	4 4 4 4	59.9 60.1 60.2 60.4	81.7 84.5 87.4 90.6	1.18 1.22 1.26 1.30
5500	1249.4	60.6	0.04	16	4	60.6	94.1	1.34
5400 5300 5200 5100	1255.7 1261.9 1268.0 1273.8	60.7 60.9 61.0 61.2	0.04 0.04 0.04 0.04	16 16 17 17	3333	60.7 60.9 61.0 61.2	97.8 101.9 106.3 111.2	1.39 1.45 1.51 1.58
5000	1279.6	61.4	0.04	18		61.4	116.7	1.65
4900 4800 4700	1285.1 1290.5 1295.7	61.5 61.7 61.8	0.04 0.04 0.04	18 19		61.5 61.7 61.8	122.7 129.4 137.0	1.74
4615	1300.0							

CHARGE 5 G TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R						TIONS F				
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	A	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	M	М	М	М	М	М	М
7500	27.8	-24.7	11.5	-8.3	16.4	-11.8	-19.0	18.9	-25	28
7400 7300 7200 7100	27.5 27.2 26.8 26.5	-24.3 -24.0 -23.7 -23.4	11.4 11.2 11.1 10.9	-8.1 -8.0 -7.8 -7.5	16.2 15.9 15.7 15.5	-11.6 -11.5 -11.3 -11.1	-18.7 -18.4 -18.1 -17.8	18.7 18.4 18.1 17.8	-25 -24 -24 -24	28 27 27 27 27
7000	26.1	-23.1	10.8	-7.3	15.2	-11.0	-17.5	17.6	-23	26
6900 6800 6700 6600	25.8 25.4 25.1 24.7	-22.8 -22.5 -22.1 -21.8	10.6 10.5 10.3 10.2	-7.1 -6.8 -6.6 -6.3	15.0 14.8 14.6 14.4	-10.8 -10.7 -10.5 -10.4	-17.2 -16.9 -16.6 -16.3	17.3 17.0 16.7 16.4	-23 -22 -22 -22	26 25 25 24
6500	24.4	-21.5	10.0	-6.0	14.2	-10.2	-15.9	16.1	-21	24
6400 6300 6200 6100	24.0 23.6 23.3 22.9	-21.2 -20.8 -20.5 -20.2	9.9 9.7 9.5 9.4	-5.6 -5.3 -4.9	14.0 13.8 13.6 13.4	-10.1 -10.0 -9.8 -9.7	-15.6 -15.3 -15.0 -14.6	15.8 15.5 15.2 14.9	-21 -20 -20 -19	23 23 22 22
6000	22.6	-19.8	9.2		13.2	-9.6	-14.3	14.6	-19	21
5900 5800 5700 5600	22.2 21.8 21.5 21.1	-19.5 -19.2 -18.8 -18.5	9.0 8.8 8.6 8.4		13.0 12.8 12.7 12.5	-9.4 -9.3 -9.2 -9.1	-13.9 -13.6 -13.2 -12.8	14.3 13.9 13.6 13.3	-18 -18 -17 -16	21 20 19 19
5500	20.7	-18.2	8.2		12.3	-9.0	-12.4	12.9	-16	18
5400 5300 5200 5100	20.3 20.0 19.6 19.2	-17.8 -17.5 -17.1 -16.8	8.0 7.7 7.5 7.2		12.2 12.0 11.9 11.8	-8.8 -8.7 -8.6 -8.6	-12.0 -11.6 -11.2 -10.7	12.6 12.2 11.8 11.5	-15 -14 -13 -13	17 17 16 15
5000	18.8	-16.4	6.9		11.6	-8.5		11.1	-12	14
4900 4800 4700	18.5 18.1 17.7	-16.1 -15.7	6.6 6.2 5.9		11.5 11.4 11.3	-8.4 -8.4 -8.3		10.6 10.2 9.7	-11 -10 -9	13 12 11

CHARGE 5 G

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R	Ë		PROB	ABLE	ERROF	RS	ANGLE	СОТ	TML	МО		SITE
A N G	L E V			FI	JZE M5	82	OF FALL	ANGLE OF FALL	VEL		ANGLE	OR OF SITE I-1 MIL
E	, v	R	D	НВ	ТВ	RB		FALL			SITE	SITE
М	MIL	M	M	M	SEC	M	MIL		M/S	M	MIL	MIL
0	0.0	5	0				0		346	0	0.000	0.00
500 1000 1500 2000	21.5 44.1 67.7 92.5	5 5 5 6	0 0 1 1	1 1 1	0.04 0.04 0.04	13 13 12	22 46 72 100	46.2 22.0 14.0 10.1	333 322 313 306	3 11 26 47	0.000 0.002 0.004 0.007	0.00 -0.001 -0.003 -0.006
2500	118.3	6	1	2	0.04	12	130	7.8	299	77	0.011	-0.010
3000 3500 4000 4500	145.2 173.2 202.6 233.4	7 8 8 9	1 2 2 2	2 2 3 3	0.04 0.04 0.04 0.04	12 12 12 12	161 195 230 267	6.3 5.2 4.4 3.7	294 288 284 279	114 160 216 282		-0.030
5000	265.8	10	2	4	0.04	12	306	3.2	275	361	0.063	-0.056
5500 6000 6500 7000	300.2 337.0 376.8 420.7	11 12 14 15	3 3 4	4 5 6 6	0.04 0.04 0.04 0.04	13 13 14 14	348 393 442 496	2.8 2.5 2.2 1.9	271 268 265 262	453 562 690 844	0.086 0.117 0.162 0.229	-0.076 -0.102 -0.137 -0.189
7500	470.3	16	4	7	0.05	15	555	1.6	260	1031	0.338	-0.267
8000 8500	529.1 605.9	18 20	5 5	9 11	0.05 0.05	16 17	625 713	1.4 1.2	259 259	1269 1602	0.551 1.288	-0.400 -0.681
****	*****	****	****	****	*****	****	*****	*****	****	*****	*****	******
8500 8000	954.1 1029.7	22 21	7 7	21 23	0.07 0.07	18 17	1060 1127	0.6 0.5	270 272	3226 3558		1.73 1.44
7500	1087.2	20	7	25	0.07	16	1177	0.4	274	3794	-1.375	1.30
7000 6500 6000 5500	1135.5 1177.7 1215.5 1249.4	18 17 15 14	7 6 6 6	26 27 28 29	0.08 0.08 0.08 0.08	15 14 12 11	1220 1258 1293 1326	0.4 0.3 0.3 0.3	275 276 277 278	3979 4130 4255 4359	-1.262 -1.189 -1.138 -1.100	1.22 1.16 1.12 1.09
5000	1279.6		6	30	0.08	10	1359	0.2	278	4444	-1.069	1.06

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H CHARGE 5 G ROTATION - RANGE

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

	AZIMUTH OF TARGET - MILS											
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600			
500 1000 1500 2000	0 0 0 0	0 -1+ -1+ -2+	-1+ -2+ -3+ -3+	-1+ -3+ -4+ -5+	-2+ -3+ -5+ -6+	-2+ -4+ -6+ -7+	-2+ -4+ -6+ -8+	-2+ -5+ -7+ -9+	-2+ -5+ -7+ -9+			
2500	0	-2+	-4+	-6+	-8+	-9+	-10+	-11+	-11+			
3000 3500 4000 4500	0 0 0	-2+ -3+ -3+ -3+	-5+ -6+ -6+ -7+	-7+ -8+ -9+ -10+	-9+ -10+ -11+ -13+	-11+ -12+ -13+ -15+	-12+ -13+ -15+ -16+	-13+ -14+ -16+ -17+	-13+ -15+ -16+ -18+			
5000	0	-4+	-7+	-11+	-13+	-16+	-18+	-19+	-19+			
5500 6000 6500 7000	0 0 0 0	-4+ -4+ -4+ -4+	-8+ -8+ -8+ -9+	-11+ -12+ -12+ -13+	-14+ -15+ -16+ -16+	-17+ -18+ -18+ -19+	-19+ -20+ -21+ -21+	-20+ -21+ -22+ -22+	-20+ -21+ -22+ -23+			
7500	0	-4+	-9+	-13+	-16+	-19+	-21+	-23+	-23+			
8000 8500	0	-4+ -4+	-9+ -8+	-13+ -12+	-16+ -15+	-19+ -18+	-21+ -20+	-22+ -21+	-23+ -21+			
8500 8000	0	****** -1+ 0	-2+ 0	-3+ 0	-4+ 0	-5+ 0	-5+ 0	-5+ -1+	-6+ -1+			
7500	0	+1-	+1-	+2-	+3-	+3-	+3-	+4-	+4-			
7000 6500 6000 5500	0 0 0 0	+1- +2- +3- +4-	+3- +4- +5- +7-	+4- +6- +8- +10-	+5- +8- +10- +13-	+6- +9- +12- +15-	+7- +10- +13- +17-	+7- +11- +14- +18-	+7- +11- +14- +18-			
5000	0	+5-	+9-	+13-	+16-	+19-	+21-	+23-	+23-			
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800			
			A	ZIMUTH (	OF TARG	ET - MI	LS					

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	. 9 4	. 87	.77	. 64	. 50	. 34

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0		
2500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3000 3500 4000 4500	0.0 0.0 R0.1L R0.1L	0.0 0.0 R0.1L R0.1L	0.0 0.0 0.0 R0.1L	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 L0.1R	0.0 0.0 L0.1R L0.1R	0.0 0.0 L0.1R L0.1R		
5000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R		
5500 6000 6500 7000	R0.1L R0.2L R0.2L R0.3L	R0.1L R0.2L R0.2L R0.2L	R0.1L R0.1L R0.2L R0.2L	R0.1L R0.1L R0.1L R0.1L	0.0 0.0 0.0 0.0	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.3R		
7500	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R		
8000 8500	R0.4L R0.6L	R0.4L R0.5L	R0.3L R0.4L	R0.2L R0.2L	0.0 0.0	L0.2R L0.2R	L0.3R L0.4R	L0.4R L0.5R	L0.4R L0.6R		
8500 8000	******* R1.6L R2.0L	R1.5L R1.8L	R1 . 1L R1 . 4L	R0.6L R0.8L	0.0 0.0	L0.6R L0.8R	L1.1R L1.4R	L1.5R L1.8R	L1.6R L2.0R		
7500	R2.3L	R2.2L	R1.7L	R0.9L	0.0	L0.9R	L1.7R	L2.2R	L2.3R		
7000 6500 6000 5500	R2.7L R3.0L R3.4L R3.8L	R2.5L R2.8L R3.2L R3.5L	R1.9L R2.2L R2.4L R2.7L	R1.0L R1.2L R1.3L R1.5L	0.0 0.0 0.0 0.0	L1.0R L1.2R L1.3R L1.5R	L1.9R L2.2R L2.4R L2.7R	L2.5R L2.8R L3.2R L3.5R	L2.7R L3.0R L3.4R L3.8R		
5000	R4.2L	R3.9L	R3.0L	R1.6L	0.0	L1.6R	L3.0R	L3.9R	L4.2R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
		AZIMUTH OF TARGET - MILS									

### 0 DEGREES LATITUDE

TABLE I CHARGE 5 G

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R		
3500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R		
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
4500	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R		
5000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R		
5500	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R		
6000	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R		
6500	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.4R	L0.5R	L0.5R		
7000	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.5R	L0.6R	L0.6R		
7500	0.0	0.0	L0.1R	L0.2R	L0.4R	L0.5R	L0.6R	L0.7R	L0.7R		
8000	0.0	0.0	L0.1R	L0.2R	L0.4R	L0.6R	L0.7R	L0.8R	L0.8R		
8500	R0.1L	R0.1L	0.0	L0.2R	L0.4R	L0.7R	L0.8R	L1.0R	L1.0R		
*****	*****	*****	*****	*****	******	******	******	******	*****		
8500	R1.0L	R0.9L	R0.5L	0.0	L0.6R	L1.2R	L1.7R	L2.1R	L2.2R		
8000	R1.3L	R1.2L	R0.7L	R0.1L	L0.7R	L1.4R	L2.0R	L2.5R	L2.6R		
7500	R1.6L	R1.5L	R1.0L	R0.2L	L0.7R	L1.6R	L2.3R	L2.8R	L3.0R		
7000	R2.0L	R1.8L	R1.2L	R0.3L	L0.7R	L1.7R	L2.6R	L3.1R	L3.3R		
6500	R2.3L	R2.1L	R1.4L	R0.5L	L0.7R	L1.8R	L2.8R	L3.5R	L3.7R		
6000	R2.7L	R2.4L	R1.7L	R0.6L	L0.7R	L2.0R	L3.1R	L3.8R	L4.1R		
5500	R3.0L	R2.7L	R1.9L	R0.7L	L0.7R	L2.1R	L3.4R	L4.2R	L4.4R		
5000	R3.4L	R3.1L	R2.2L	R0.9L	L0.7R	L2.3R	L3.6R	L4.5R	L4.8R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGET	- MILS	1				

#### 10 DEGREES SOUTH LATITUDE

TABLE I FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 20 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS									
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
2000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
2500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	
3500	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	
4500	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	
5000	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	
5500	L0.3R	L0.3R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	
6000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R	
6500	L0.4R	L0.4R	L0.4R	L0.5R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	
7000	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L0.9R	
7500	L0.4R	L0.4R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L1.0R	L1.0R	
8000	L0.4R	L0.4R	L0.5R	L0.6R	L0.8R	L0.9R	L1.1R	L1.1R	L1.2R	
8500	L0.3R	L0.4R	L0.5R	L0.7R	L0.9R	L1.1R	L1.2R	L1.4R	L1.4R	
	******		*****	*****						
8500	R0.3L	R0.2L	L0.1R	L0.6R	L1.2R	L1.8R	L2.3R	L2.6R	L2.7R	
8000	R0.6L	R0.4L	0.0	L0.6R	L1.3R	L2.0R	L2.6R	L3.0R	L3.2R	
7500	R0.9L	R0.7L	R0.2L	L0.5R	L1.3R	L2.2R	L2.9R	L3.4R	L3.5R	
7000	R1.2L	R1.0L	R0.4L	L0.4R	L1.4R	L2.3R	L3.1R	L3.7R	L3.9R	
6500	R1.5L	R1.3L	R0.7L	L0.3R	L1.4R	L2.5R	L3.4R	L4.0R	L4.2R	
6000	R1.8L	R1.6L	R0.9L	L0.2R	L1.4R	L2.6R	L3.7R	L4.4R	L4.6R	
5500	R2.2L	R1.9L	R1.1L	0.0	L1.4R	L2.8R	L3.9R	L4.7R	L5.0R	
5000	R2.5L	R2.2L	R1 . 4L	R0.1L	L1.4R	L2.9R	L4.2R	L5.0R	L5.3R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZ I	MUTH OF	TARGET	- MILS				

#### 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS									
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	
3500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	
4000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	
4500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	
5000	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	
5500	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	
6000	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	
6500	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L1.0R	L1.0R	L1.0R	
7000	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.1R	L1.2R	
7500	L0.7R	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R	
8000	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.3R	L1.4R	L1.5R	L1.5R	
8500	L0.8R	L0.8R	L0.9R	L1.1R	L1.3R	L1.5R	L1.6R	L1.7R	L1.8R	
*****	*****	*****	*****	*****	*****	******	******	******	*****	
8500	L0.4R	L0.5R	L0.8R	L1.3R	L1.8R	L2.3R	L2.8R	L3.1R	L3.2R	
8000	L0.1R	L0.3R	L0.7R	L1.2R	L1.9R	L2.5R	L3.1R	L3.5R	L3.6R	
7500	R0.1L	L0.1R	L0.5R	L1.2R	L1.9R	L2.7R	L3.4R	L3.8R	L4.0R	
7000	R0.4L	R0.2L	L0.3R	L1.1R	L2.0R	L2.9R	L3.6R	L4.1R	L4.3R	
6500	R0.6L	R0.4L	L0.1R	L1.0R	L2.0R	L3.0R	L3.9R	L4.4R	L4.6R	
6000	R0.9L	R0.7L	R0.1L	L0.9R	L2.0R	L3.2R	L4.1R	L4.8R	L5.0R	
5500	R1.3L	R1.0L	R0.3L	L0.8R	L2.0R	L3.3R	L4.4R	L5.1R	L5.3R	
5000	R1.6L	R1.3L	R0.5L	L0.6R	L2.0R	L3.4R	L4.6R	L5.4R	L5.6R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZ I	MUTH OF	TARGET	- MILS	1			

#### 30 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 40 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS									
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	
3000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	
3500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	
4000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	
4500	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	
5000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	
5500	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	
6000	L0.8R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	
6500	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	
7000	L1.0R	L1.0R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	
7500	L1.1R	L1.1R	L1.1R	L1.2R	L1.3R	L1.4R	L1.5R	L1.6R	L1.6R	
8000	L1.1R	L1.1R	L1.2R	L1.3R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R	
8500	L1.2R	L1.2R	L1.3R	L1.5R	L1.6R	L1.8R	L1.9R	L2.0R	L2.1R	
*****	*****	*****	*****	*****	******	******	******	******	*****	
8500	L1.1R	L1.2R	L1.4R	L1.8R	L2.3R	L2.8R	L3.2R	L3.4R	L3.5R	
8000	L0.9R	L1.0R	L1.3R	L1.8R	L2.4R	L3.0R	L3.5R	L3.8R	L3.9R	
7500	L0.7R	L0.8R	L1.2R	L1.8R	L2.5R	L3.2R	L3.8R	L4.1R	L4.3R	
7000	L0.5R	L0.6R	L1.1R	L1.8R	L2.5R	L3.3R	L4.0R	L4.4R	L4.6R	
6500	L0.2R	L0.4R	L0.9R	L1.7R	L2.6R	L3.5R	L4.2R	L4.7R	L4.9R	
6000	0.0	L0.2R	L0.8R	L1.6R	L2.6R	L3.6R	L4.5R	L5.0R	L5.2R	
5500	R0.3L	R0.1L	L0.6R	L1.5R	L2.6R	L3.7R	L4.7R	L5.3R	L5.5R	
5000	R0.6L	R0.3L	L0.3R	L1.4R	L2.6R	L3.8R	L4.9R	L5.6R	L5.8R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZ I	MUTH OF	TARGE T	- MILS	;			

#### 40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 50 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS	i				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R		
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R		
3000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R		
3500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R		
4000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R		
4500	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R		
5000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R		
5500	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R		
6000	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R		
6500	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R		
7000	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.6R		
7500	L1.3R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.7R	L1.8R	L1.8R		
8000	L1.5R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R	L2.0R		
8500	L1.6R	L1.6R	L1.7R	L1.8R	L1.9R	L2.1R	L2.2R	L2.3R	L2.3R		
*****	*****	*****	*****	*****	*****	*****	******	******	*****		
8500	L1.7R	L1.8R	L2.0R	L2.3R	L2.7R	L3.1R	L3.5R	L3.7R	L3.8R		
8000	L1.6R	L1.7R	L2.0R	L2.4R	L2.9R	L3.4R	L3.8R	L4.1R	L4.2R		
7500	L1.5R	L1.6R	L1.9R	L2.4R	L3.0R	L3.5R	L4.0R	L4.4R	L4.5R		
7000	L1.3R	L1.4R	L1.8R	L2.4R	L3.0R	L3.7R	L4.3R	L4.6R	L4.8R		
6500	L1.1R	L1.3R	L1.7R	L2.3R	L3.1R	L3.8R	L4.5R	L4.9R	L5.0R		
6000	L0.9R	L1.1R	L1.6R	L2.3R	L3.1R	L3.9R	L4.7R	L5.1R	L5.3R		
5500	L0.7R	L0.9R	L1.4R	L2.2R	L3.1R	L4.1R	L4.8R	L5.4R	L5.6R		
5000	L0.4R	L0.6R	L1.2R	L2.1R	L3.1R	L4.1R	L5.0R	L5.6R	L5.8R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
		AZIMUTH OF TARGET - MILS									

### 50 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 60 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGE T	- MILS	1				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
2000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R		
3000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
3500	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R		
4000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R		
4500	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R		
5000	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R		
5500	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R		
6000	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R		
6500	L1.3R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R		
7000	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R		
7500	L1.6R	L1.6R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R		
8000	L1.7R	L1.8R	L1.8R	L1.9R	L2.0R	L2.0R	L2.1R	L2.2R	L2.2R		
8500	L1.9R	L1.9R	L2.0R	L2.1R	L2.2R	L2.3R	L2.4R	L2.5R	L2.5R		
*****	*****	*****	*****	*****	*****	******	******	******	*****		
8500	L2.3R	L2.3R	L2.5R	L2.8R	L3.1R	L3.4R	L3.7R	L3.8R	L3.9R		
8000	L2.3R	L2.3R	L2.5R	L2.9R	L3.2R	L3.6R	L4.0R	L4.2R	L4.2R		
7500	L2.2R	L2.3R	L2.5R	L2.9R	L3.4R	L3.8R	L4.2R	L4.4R	L4.5R		
7000	L2.1R	L2.2R	L2.5R	L2.9R	L3.4R	L3.9R	L4.4R	L4.7R	L4.8R		
6500	L2.0R	L2.1R	L2.4R	L2.9R	L3.5R	L4.1R	L4.6R	L4.9R	L5.0R		
6000	L1.8R	L1.9R	L2.3R	L2.9R	L3.5R	L4.2R	L4.7R	L5.1R	L5.2R		
5500	L1.6R	L1.8R	L2.2R	L2.8R	L3.5R	L4.3R	L4.9R	L5.3R	L5.4R		
5000	L1.4R	L1.6R	L2.0R	L2.7R	L3.5R	L4.3R	L5.0R	L5.4R	L5.6R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
		AZIMUTH OF TARGET - MILS									

#### **60 DEGREES SOUTH LATITUDE**

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5 G

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS	;		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
2000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
3000	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
3500	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
4000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
4500	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R
5000	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
5500	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R
6000	L1.4R	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R
6500	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R
7000	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R	L1.8R
7500	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.0R	L2.0R	L2.0R
8000	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R	L2.3R
8500	L2.2R	L2.2R	L2.2R	L2.3R	L2.4R	L2.5R	L2.5R	L2.6R	L2.6R
*****	******		*****	*****		******	******	******	*****
8500	L2.8R	L2.8R	L3.0R	L3.1R	L3.4R	L3.6R	L3.8R	L3.9R	L3.9R
8000	L2.8R	L2.9R	L3.0R	L3.3R	L3.5R	L3.8R	L4.0R	L4.2R	L4.2R
7500	L2.8R	L2.9R	L3.1R	L3.3R	L3.6R	L3.9R	L4.2R	L4.4R	L4.4R
7000	L2.8R	L2.9R	L3.1R	L3.4R	L3.7R	L4.1R	L4.4R	L4.6R	L4.6R
6500	L2.7R	L2.8R	L3.0R	L3.4R	L3.8R	L4.2R	L4.5R	L4.7R	L4.8R
6000	L2.6R	L2.7R	L3.0R	L3.4R	L3.8R	L4.3R	L4.6R	L4.9R	L5.0R
5500	L2.5R	L2.6R	L2.9R	L3.3R	L3.8R	L4.3R	L4.7R	L5.0R	L5.1R
5000	L2.4R	L2.5R	L2.8R	L3.3R	L3.8R	L4.4R	L4.8R	L5.1R	L5.2R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	;		

#### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J FT 155-AR-1
5G PART 1
FUZE CORRECTION FACTORS PROJ, HE, M795
FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	CITY		IGE ND (NOT	TEM	AIR TEMP 1 PCT		IR SITY PCT		VT SQ STD)
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	005 008 010	0.005 0.008 0.010	0.000 0.000 0.000	0.000 0.000 0.001	0.000 001 002	0.001 0.001 0.002	0.000 0.000 0.001	0.000 0.000 001	0.009 0.014 0.017	009 014 018
5	012	0.012	001	0.001	002	0.003	0.001	001	0.021	021
6 7 8 9	015 017 019 020	0.014 0.016 0.018 0.020	001 001 002 002	0.001 0.002 0.002 0.003		0.003 0.005 0.006 0.007	0.001 0.002 0.002 0.003	001 002 002 003	0.024 0.027 0.030 0.033	025 028 031 034
10	022	0.022	003	0.003	009	0.008	0.003	003	0.036	036
11 12 13 14	024 026 027 029	0.023 0.025 0.027 0.028	003 004 004 005	0.004 0.004 0.005 0.005	010 012 014 016	0.010 0.011 0.013 0.014	0.004 0.005 0.005 0.006	004 004 005 005	0.038 0.040 0.042 0.045	039 041 044 046
15	031	0.030	006	0.006	018	0.016	0.006	006	0.047	048
16 17 18 19	032 034 035 037	0.031 0.032 0.034 0.035	006 007 008 008	0.006 0.007 0.008 0.008	019 021 023 025	0.018 0.019 0.020 0.022	0.007 0.008 0.008 0.009	007 007 008 009	0.049 0.051 0.053 0.055	051 053 055 057
20	039	0.037	009	0.009	027	0.023	0.010	009	0.057	059
21 22 23 24	040 042 044 045	0.038 0.040 0.041 0.043	010 010 011 011	0.009 0.010 0.010 0.011	029 031 033 034	0.025 0.026 0.027 0.028	0.011 0.011 0.012 0.013	010 011 012 013	0.059 0.061 0.063 0.065	061 064 066 068
25	<i>047</i>	0.044	012	0.011	036	0.029	0.014	013	0.067	<i>071</i>
26 27 28 29	049 051 052 054	0.046 0.047 0.049 0.051	013 013 014 014	0.011 0.012 0.012 0.012	038 039 041 042	0.030 0.031 0.032 0.033	0.015 0.016 0.017 0.018	014 015 016 017	0.069 0.071 0.074 0.076	073 075 077 079
30	056	0.053	015	0.013	043	0.033	0.019	018	0.078	082
31 32 33 34	058 060 062 064	0.054 0.056 0.058 0.060	015 015 016 016	0.013 0.013 0.014 0.014	044 045 046 047	0.034 0.035 0.035 0.036	0.020 0.021 0.022 0.024	019 020 022 023	0.080 0.082 0.084 0.087	084 087 089 092
35	066	0.061	016	0.014	047	0.037	0.025	024	0.089	094

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

### TABLE J CORRECTION FACTORS

CHARGE 5 G

١,	HE, M795	FUZE	CORRECTION	FACTOR
•	MITOO MICOO			

1	2	3	4	5	6	7	8	9	10	11
FS			FUZE CORRECTIONS FOR							
	MUZZ VELOC 1 M/	TY	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	066	0.061	016	0.014	047	0.037	0.025	024	0.089	094
36 37 38 39	070 072	0.063 0.065 0.067 0.069	017 017 017 017	0.014 0.014 0.015 0.015		0.037 0.038 0.038 0.039	0.026 0.027 0.028 0.029	026	0.091 0.094 0.096 0.098	096 099 101 104
40	076	0.071	018	0.015	052	0.039	0.031	029	0.101	106
41 42 43 44	080 082	0.072 0.074 0.076 0.078	018 018 018 018	0.015 0.015 0.015 0.016	053 054	0.040 0.040 0.041 0.041	0.032 0.033 0.034 0.035	033	0.103 0.105 0.108 0.110	109 112 114 117
45	086	0.080	018	0.016	055	0.042	0.037	035	0.113	120
46 47 48 49		0.082 0.084 0.086 0.088	019 019 019 019	0.016 0.016 0.016 0.016	057 057	0.042 0.043 0.043 0.044	0.038 0.039 0.040 0.041	037	0.115 0.118 0.120 0.123	123 126 129 132
50	097	0.090	019	0.016	058	0.044	0.042	041	0.125	135
51 52 53 54		0.092 0.094 0.096 0.098	018 018 018 018	0.016 0.016 0.016 0.016	060 060	0.044 0.045 0.045 0.046	0.044 0.045 0.046 0.047	044	0.128 0.131 0.135 0.138	138 141 144 148
55	107	0.100	018	0.016	061	0.046	0.048	046	0.141	151
56 57 58 59	112 114	0.102 0.105 0.107 0.109	018 017 017 017	0.016 0.016 0.016 0.017	<i>063</i>	0.047 0.047 0.047 0.047	0.049 0.051 0.052 0.053	049 050	0.145 0.149 0.154 0.159	154 158 161 166
60	119	0.111	017		063	0.048	0.054	052	0.165	171
61	121	0.114	018		063	0.047	0.057	054	0.173	179

CHARGE TABLE K FT 155-AR-1
5G PART 1
FUZE SETTING PROJ, HE, M795
FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

	ETTING	
FUZE	M582	CORRECTIONS
FROM	TO	
1.8	27.3	-0.1
27.4	58.0	-0.2
58.1	61.8	-0.3

Part 1

Charge 4W

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-320\ M/S$ 

Propelling Charge M4A2 - Base and Increment 4

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A LINE NUMBER CHARGE 4W

LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	L I NE NUMBER
0.0- 145.0	0
145.1- 278.0 278.1- 418.5 418.6- 557.5 557.6- 680.9	1 2 3 4
681.0- 857.6	5
857.7- 1114.9 1115.0- 1300.0	6 7

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

## TABLE B

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPLEMENTARY RANGE LINE NUMBER

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	ANGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	0					0						
	100 200 300 400					0 0 0 0	0 1 1 2	0 2 3 4	1 4 5 7			
	500					0	2	5	8			
	600 700 800 900					0 0 0 0	2 3 3 4	6 6 7 8	9 10 12 13			
	1000					0	4	9	14			
	1100 1200 1300 1400					0 0 0	4 5 5 6	9 10 11 12	15 16 17 19			
	1500				-5	0	6	13	20			
0	1600 1700 1800 1900				-6 -6 -7 -7	0000	6 7 7 8	13 14 15 16	21 22 23 25			
	2000			-14	-7	0	8	17	26			
	2100 2200 2300 2400		-25	-15 -16 -17 -17	-8 -8 -9 -9	0000	8 9 9 10	18 18 19 20	27 29 30 31			
	2500		-26	-18	-9	0	10	21	33			
	2600 2700 2800 2900	-39 -41	-28 -29 -30 -32	-19 -20 -21 -22	-10 -10 -11 -11	0 0 0 0	11 11 12 12	22 23 24 25	34 35 37 38			
	3000	-43	-33	-23	-12	0	13	26	40			
	3100 3200 3300 3400	-45 -47 -48 -50	-35 -36 -37 -39	-24 -25 -26 -27	-12 -13 -13 -14	0 0 0 0	13 14 14 15	27 28 29 30	41 43 44 46			
	3500	-52	-40	-28	-14	0	15	31	48			
		0					1		2			

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT		ET ABOVE		ETERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
							0	
2 5 7 10	7 10 13	9 12 16	11 15 19	13 18 23	14 21 27	24 30	100 200 300 400	
11	15	19	23	28	32	37	500	
13 15 16 18	17 20 22 24	22 25 27 30	27 30 33 36	32 36 40 43	37 42 46 50	42 48 53 58	600 700 800 900	
20	26	32	39	47	55	63	1000	
21 23 24 26	28 30 32 34	35 37 40 42	42 45 48 51	50 54 57 61	59 63 67 71	67 72 77 81	1100 1200 1300 1400	
28	36	45	54	64	75	86	1500	
29 31 32 34	38 40 42 44	47 50 52 55	57 60 63 66	68 71 75 78	79 83 87 91	90 95 100 104	1600 1700 1800 1900	3
36	46	58	70	82	95	109	2000	
38 39 41 43	49 51 53 55	60 63 66 69	73 76 79 83	86 90 93 97	100 104 108 113	114 119 124 129	2100 2200 2300 2400	
45	58	71	86	101	117	134	2500	
47 49 51 53	60 63 65 68	74 77 80 83	89 93 96 100	105 109 113 118	122 126 131 136	139 144 150 155	2600 2700 2800 2900	
55	70	86	104	122	141	161	3000	
57 59 61 63	73 75 78 81	90 93 96 99	107 111 115 119	126 131 135 140	146 151 156 161	166 172 178 184	3100 3200 3300 3400	
65	84	103	123	144	167	190	3500	
		2				3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEIGHT OF TARGET ABOVE GUN - METERS									
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	3500	-52	-40	-28	-14	0	15	31	48			
0	3600 3700 3800 3900	-54 -56 -59 -61	-42 -44 -45 -47	-29 -30 -31 -32	-15 -15 -16 -16	0 0 0 0	16 16 17 17	32 33 34 35	49 51 53 54			
	4000	-63	-48	-33	-17	0	18	37	56			
	4100 4200 4300	-65 -67 -70	-50 -52 -53	-34 -35 -36	-17 -18 -19	0 0 0	18 19 20	38 39 40	58 60 62			
	4400	-72	-55	-38	-19	0	20	41	64			
	4500	-74	-57	-39	-20	0	21	43	66			
	4600 4700 4800 4900	-77 -79 -82 -84	-59 -61 -63 -64	-40 -41 -43 -44	-20 -21 -22 -22	0 0 0 0	22 22 23 24	44 45 47 48	68 70 72 74			
1	5000	-87	-66	-45	-23	0	24	50	76			
	5100 5200 5300 5400	-89 -92 -95 -98	-68 -70 -73 -75	-47 -48 -49 -51	-24 -24 -25 -26	0 0 0	25 26 27 27	51 53 54 56	78 81 83 86			
	5500	-100	-77	-52	-27	0	28	58	88			
	5600 5700 5800 5900	-103 -106 -109 -112	-79 -81 -84 -86	-54 -55 -57 -59	-27 -28 -29 -30	0 0 0	29 30 31 32	59 61 63 65	91 94 97 100			
	6000	-116	-89	-60	-31	0	33	67	103			
	6100 6200 6300 6400	-119 -123 -127 -131	-91 -94 -97 -100	-62 -64 -66 -69	-32 -33 -34 -35	0 0 0	34 35 36 37	69 71 73 76	106 109 113 116			
2	6500	-135	-103	-71	-36	0	38	78	120			
	6600 6700 6800 6900	-139 -143 -148 -152	-107 -110 -113 -117	-73 -75 -77 -80	-37 -38 -40 -41	0 0 0 0	39 41 42 43	81 83 86 89	124 128 132 137			
	7000	-157	-121	-82	-42	0	45	92	142			
	2					3	'					

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4W

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - M	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
65	84	103	123	144	167	190	3500	
67 70 72 74	86 89 92 95	106 110 113 117	127 131 136 140	149 154 159 164	172 178 184 189	196 203 209 216	3600 3700 3800 3900	
77	98	121	145	169	195	223	4000	
79 82 84 87	101 105 108 111	125 129 133 137	149 154 159 163	175 180 186 192	202 208 214 221	230 237 244 252	4100 4200 4300 4400	
89	115	141	168	197	228	260	4500	3
92 95 98 101	118 122 125 129	145 150 154 159	174 179 184 190	203 210 216 223	235 242 249 257	268 276 284 293	4600 4700 4800 4900	
104	133	164	196	230	265	302	5000	
107 110 114 117	137 141 146 150	169 174 179 185	202 208 215 221	237 244 251 259	273 282 290 299	311 321 331 342	5100 5200 5300 5400	
121	155	191	228	267	309	353	5500	
125 129 133 137	160 165 170 175	197 203 209 215	235 242 250 258	276 284 293 303	319 329 339 350	364 375 388 400	5600 5700 5800 5900	
141	180	222	266	313	362	414	6000	
145 150 154 159	186 192 198 204	229 236 244 252	275 284 293 303	323 333 345 357	374 387 400 415	428 443 459 477	6100 6200 6300 6400	4
164	211	261	314	370	430	495	6500	
170 176 182	218 226 234	270 280 290	325 337 350	384 399 415	447 465 486	516 538 564	6600 6700 6800	
188	243	301	365	433	509	593	6900	5
195	252	314	381	454	535	628	7000	
		4				Į.	5	

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI				UN - ME	TERS		
NO.	METERS	-400	-300	-200	-100	0	100	200	300	
2	7000	-157	-121	-82	-42	0	45	92	142	
3	7100 7200 7300 7400	-162 -167 -173 -178	-124 -128 -133 -137	-85 -88 -91 -94	-44 -45 -47 -48	0 0 0 0	46 48 50 52	95 99 103 107	147 153 160 167	
	7500	-184	-142	- <b>97</b>	-50	0	54	112	175	
	7600 7700 7800 7900	-191 -198 -206 -214	-147 -153 -159 -166	-101 -105 -110 -115	-52 -54 -57 -60	0 0 0 0	56 59 62 66	117 124 132 143	184 196 211 245	
4	8000	-224	-174	-121	-63	0	72			
<b>  4</b>	8100	-235	-183	-128	-68	0			*****	
	8100	-493	-356	-226	-107	0				
	8000	-516	-374	-239	-114	0	101			
	7900 7800 7700 7600	-538 -560 -581 -602	-391 -408 -424 -440	-252 -263 -274 -285	-121 -127 -133 -138	0 0 0 0	110 117 123 129	204 221 235 248	310 334 355	
6	7500	-623	-456	-296	-144	0	135	259	374	
	7400 7300 7200 7100	-644 -665 -687 -708	-471 -487 -503 -519	-306 -317 -327 -338	-149 -154 -160 -165	0 0 0 0	140 145 151 156	271 282 293 303	391 408 425 441	
	7000	- <b>730</b>	-536	-349	-170	0	162	314	457	
	6900 6800 6700 6600	-753 -776 -800 -825	-552 -569 -587 -605	-360 -371 -383 -394	-176 -181 -187 -193	0 0 0	167 172 178 183	325 336 347 358	474 490 506 523	
	6500	-850	-624	-406	-199	0	189	369	539	
7	6400 6300 6200 6100	-877 -905 -934 -965	-643 -663 -684 -706	-419 -432 -445 -459	-205 -211 -217 -224	0 0 0 0	195 201 207 213	381 392 404 417	556 574 591 610	
	6000	-998	-729	-474	-231	0	220	429	628	
7										

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4W

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
195	252	314	381	454	535	628	7000	
203 211 221 231	263 274 288 303	328 343 361 383	399 420 445 477	477 506 543 602	567 608 673	674 746	7100 7200 7300 7400	
244	321	412	531				7500	
259 279 317	346 388	460					7600 7700 7800 7900	5
							8000	
							8100	
*****	*****	*****	*****	******	******	******	******	
							8100	
							8000	
367 416	467						7900 7800 7700	
449	524	567					7700 7600	
476	564	633					7500	
501 524 547 569	598 629 658 686	680 720 757 792	741 795 842 885	849 911 964	956 1025	1062	7400 7300 7200 7100	
591	714	826	926	1013	1085	1138	7000	
613 634 656 678	741 769 796 823	859 892 925 958	966 1005 1043 1081	1060 1106 1150 1194	1141 1193 1244 1294	1205 1267 1325 1382	6900 6800 6700 6600	6
700	850	990	1119	1237	1343	1437	6500	
722 745 768 792	878 906 935 964	1023 1057 1090 1125	1158 1196 1235 1275	1281 1325 1369 1413	1392 1441 1491 1540	1492 1546 1601 1655	6400 6300 6200 6100	
816	994	1160	1315	1458	1590	1710	6000	
				7				•

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIC	HT OF	TARGET	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	6000	-998	-729	-474	-231	0	220	429	628
	5900 5800 5700 5600	-1033 -1071 -1112 -1157	-753 -779 -807 -837	-489 -505 -522 -541	-239 -246 -254 -263	0 0 0	227 234 241 249	443 456 470 485	647 667 688 709
	5500	-1208	-869	-560	-272	0	257	500	731
7	5400 5300 5200 5100		-905 -945 -991	-581 -604 -629 -657	-281 -292 -303 -315	0 0 0	265 274 283 293	516 533 550 569	754 777 802 828
'	5000			-688	-328	0	303	588	856
	4900 4800 4700 4600			-724	-342 -358 -376 -396	0 0 0	315 327 340 354	609 631 654 679	885 915 948 982
	4500					0	369	706	1018
	4400 4300 4200 4100					0 0 0	385 404 424	735 766 800	1057 1099 1144 1192
	4000								
					7				

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 4W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	LINE NUMBERS OF METEOROLOGICAL MESSAGE										
	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE			
400	500	600	700	800	900	1000	METERS	NO.			
816	994	1160	1315	1458	1590	1710	6000				
841 867 893 921	1024 1055 1087 1120	1196 1232 1270 1308	1356 1398 1440 1484	1504 1551 1599 1648	1641 1693 1745 1799	1766 1822 1879 1937	5900 5800 5700 5600				
949	1155	1348	1529	1698	1854	1997	5500				
978 1009 1040 1074	1190 1227 1265 1304	1389 1431 1475 1521	1575 1623 1673 1724	1749 1802 1856 1913	1910 1967 2027 2088	2057 2119 2183 2248	5400 5300 5200 5100	7			
1108	1345	1568	1777	1971	2150	2316	5000				
1145 1183 1223 1265	1389 1434 1481 1531	1618 1669 1723 1779	1832 1889 1948 2011	2031 2093 2158 2226	2215 2283 2352 2424	2385 2457 2531 2607	4900 4800 4700 4600				
1310	1583	1838	2076	2296	2500	2686	4500				
1358 1409 1462 1520	1638 1697 1759 1824	1900 1965 2034 2107	2144 2215 2290 2369	2369 2446 2526 2611	2578 2659 2744 2833	2768 2854 2943 3035	4400 4300 4200 4100				
			2452	2699	2925	3132	4000				
				7				-			

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

COMPONENTS OF A ONE KNOT WIND											
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND					
MIL	KNOT	KNOT		MIL	KNOT	KNOT					
0	0	H1.00		3200	0	T1.00					
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96					
400	R. 38	H. 92		3600	L.38	T.92					
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77					
800	R. 71	H. 71		4000	L.71	T. 71					
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47					
1200	R.92	H. 38		4400	L.92	T. 38					
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10					
1600	R1.00	0		4800	L1.00	0					
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29					
2000	R. 92	T. 38		5200	L.92	H. 38					
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63					
2400	R. 71	T. 71		5600	L.71	H. 71					
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88					
2800	R. 38	T.92		6000	L.38	H. 92					
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99					
3200	0	T1.00		6400	0	H1.00					

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 4W

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-											-0.4+ -1.9+
+200-	DT DD	-0.5+ -2.0+	-0.5+ -2.1+	-0.5+ -2.2+	-0.6+ -2.3+	-0.6+ -2.4+	-0.6+ -2.5+	-0.6+ -2.6+	-0.7+ -2.7+	-0.7+ -2.8+	-0.7+ -2.9+
+300-											-0.9+ -3.9+

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-4.8	-40.0
-30	-4.4	-34.4
-20	-4.0	-28.9
-10	-3.6	-23.3
0	-3.1	-17.8
10	-2.7	-12.2
20	-2.3	-6.7
30	-1.8	-1.1
40	-1.4	4.4
50	-0.9	10.0
60	-0.5	15.6
70	0.0	21.1
80	0.5	26.7
90	1.0	32.2
100	1.5	37.8
110	2.0	43.3
120	2.5	48.9
130	3.0	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
Ğ E	٧	FUZE M582	DEC HOB	D ELEV	K	FEIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
0	0.0			20	1	0.0	0.0	0.00
100 200 300 400	5.0 9.9 14.9 19.9			20 20 20 20	1 1 1	0.3 0.6 0.9 1.3	0.1 0.2 0.2 0.3	0.01 0.01 0.02 0.02
500	24.9			20	1	1.6	0.4	0.02
600 700 800 900	30.0 35.1 40.3 45.5	1.9 2.2 2.6 2.9	1.07 0.92 0.80 0.71	20 19 19 19	1 1 1 1	1.9 2.2 2.6 2.9	0.5 0.6 0.7 0.8	0.03 0.03 0.04 0.04
1000	50.7	3.2	0.64	19	1	3.2	0.9	0.05
1100 1200 1300 1400	56.0 61.3 66.7 72.1	3.5 3.9 4.2 4.6	0.58 0.53 0.49 0.45	19 19 19 18	1 1 1 2	3.5 3.9 4.2 4.6	1.0 1.1 1.2 1.3	0.05 0.06 0.06 0.06
1500	77.5	4.9	0.42	18	2	4.9	1.4	0.07
1600 1700 1800 1900	83.0 88.5 94.0 99.6	5.2 5.6 5.9 6.3	0.39 0.37 0.35 0.33	18 18 18 18	2 2 2 2	5.2 5.6 5.9 6.3	1.5 1.6 1.7 1.8	0.07 0.08 0.08 0.08
2000	105.3	6.6	0.31	18	2	6.6	1.9	0.09
2100 2200 2300 2400	111.0 116.7 122.5 128.3	7.0 7.3 7.7 8.0	0.30 0.28 0.27 0.26	18 17 17 17	2 2 2 2	7.0 7.3 7.7 8.0	2.0 2.1 2.2 2.3	0.09 0.09 0.10 0.10
2500	134.2	8.4	0.25	17	2	8.4	2.4	0.11
2600 2700 2800 2900	140.1 146.0 152.1 158.1	8.7 9.1 9.5 9.8	0.24 0.23 0.22 0.21	17 17 17 16	3 3 3 3	8.7 9.1 9.5 9.8	2.5 2.7 2.8 2.9	0.11 0.11 0.12 0.12
3000	164.2	10.2	0.20	16	3	10.2	3.0	0.12
3100 3200 3300 3400	170.4 176.6 182.9 189.3	10.6 10.9 11.3 11.7	0.20 0.19 0.18 0.18	16 16 16 16	3 3 3	10.6 10.9 11.3 11.7	3.2 3.3 3.4 3.5	0.13 0.13 0.14 0.14
3500	195.7	12.1	0.17	16	4	12.1	3.7	0.14

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 4W TABLE F

CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E		ZLE CITY M/S	WI	NGE ND NO T	T	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	M	M	M	M	M	M	М	M
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.6 1.3 1.9 2.4	-0.6 -1.1 -1.7 -2.2	0.0 0.0 0.1 0.1	0.0 0.0 -0.1 -0.1	0.0 0.1 0.1 0.2	0.0 -0.1 -0.1 -0.2	0.0 0.0 0.0 -0.1	0.0 0.0 0.0 0.1	-1 -2 -2 -3	1 2 3 3
500	3.0	-2.7	0.1	-0.1	0.3	-0.3	-0.1	0.1	-4	4
600 700 800 900	3.6 4.1 4.7 5.2	-3.3 -3.8 -4.3 -4.8	0.2 0.2 0.3 0.4	-0.1 -0.2 -0.2 -0.3	0.4 0.6 0.7 0.9	-0.4 -0.5 -0.6 -0.7	-0.1 -0.2 -0.2 -0.3	0.1 0.2 0.2 0.3	-5 -5 -6 -7	5 6 6 7
1000	5.7	-5.2	0.4	-0.3	1.0	-0.8	-0.3	0.3	-7	8
1100 1200 1300 1400	6.2 6.7 7.2 7.7	-5.7 -6.1 -6.6 -7.0	0.5 0.6 0.7 0.8	-0.4 -0.4 -0.5 -0.5	1.2 1.4 1.6 1.8	-0.9 -1.1 -1.2 -1.4	-0.4 -0.5 -0.6 -0.6	0.4 0.5 0.6 0.6	-8 -8 -9 -10	8 9 9 10
1500	8.2	-7.4	0.9	-0.6	2.1	-1.5	-0.7	0.7	-10	11
1600 1700 1800 1900	8.7 9.2 9.6 10.1	-7.9 -8.3 -8.7 -9.1	1.0 1.1 1.3 1.4	-0.7 -0.7 -0.8 -0.9	2.3 2.6 2.8 3.1	-1.7 -1.8 -2.0 -2.1	-0.8 -0.9 -1.0 -1.1	0.8 0.9 1.0 1.1	-11 -11 -12 -12	11 12 12 13
2000	10.5	-9.5	1.5	-0.9	3.3	-2.3	-1.2	1.2	-13	13
2100 2200 2300 2400	11.0 11.5 11.9 12.4	-9.9 -10.2 -10.6 -11.0	1.6 1.8 1.9 2.0	-1.0 -1.1 -1.2 -1.2	3.6 3.9 4.2 4.5	-2.5 -2.6 -2.8 -2.9	-1.3 -1.4 -1.6 -1.7	1.3 1.4 1.5 1.7	-13 -14 -14 -14	14 14 15 15
2500	12.8	-11.4	2.2	-1.3	4.7	-3.1	-1.8	1.8	-15	16
2600 2700 2800 2900	13.3 13.7 14.1 14.6	-11.8 -12.1 -12.5 -12.9	2.3 2.5 2.6 2.8	-1.4 -1.5 -1.6 -1.6	5.0 5.3 5.6 5.9	-3.2 -3.4 -3.5 -3.7	-1.9 -2.1 -2.2 -2.4	1.9 2.1 2.2 2.4	-15 -16 -16 -17	16 17 17 17
3000	15.0	-13.2	2.9	-1.7	6.2	-3.8	-2.5	2.5	-17	18
3100 3200 3300 3400	15.5 15.9 16.4 16.8	-13.6 -14.0 -14.3 -14.7	3.1 3.2 3.4 3.5	-1.8 -1.9 -2.0 -2.0	6.4 6.7 7.0 7.3	-4.0 -4.1 -4.3 -4.4	-2.7 -2.8 -3.0 -3.1	2.7 2.8 3.0 3.2	-17 -18 -18 -19	18 19 19 19
3500	17.2	-15.0	3.7	-2.1	7.5	-4.5	-3.3	3.3	-19	20

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	FEIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	195.7	12.1	0.17	16	4	12.1	3.7	0.14
3600 3700 3800 3900	202.1 208.7 215.3 222.0	12.5 12.9 13.3 13.7	0.17 0.16 0.16 0.15	15 15 15 15	4 4 4 4	12.5 12.9 13.3 13.7	3.8 3.9 4.1 4.2	0.15 0.15 0.15 0.16
4000	228.7	14.0	0.15	15	4	14.0	4.4	0.16
4100 4200 4300 4400	235.5 242.4 249.4 256.5	14.4 14.9 15.3 15.7	0.15 0.14 0.14 0.13	15 14 14 14	4 4 5 5	14.4 14.9 15.3 15.7	4.5 4.7 4.8 5.0	0.17 0.17 0.17 0.18
4500	263.6	16.1	0.13	14	5	16.1	5.1	0.18
4600 4700 4800 4900	270.8 278.2 285.6 293.1	16.5 16.9 17.4 17.8	0.13 0.12 0.12 0.12	14 14 13 13	5556	16.5 16.9 17.4 17.8	5.3 5.5 5.6 5.8	0.19 0.19 0.19 0.20
5000	300.8	18.2	0.12	13	6	18.2	6.0	0.20
5100 5200 5300 5400	308.5 316.4 324.4 332.5	18.7 19.1 19.6 20.0	0.11 0.11 0.11 0.11	13 13 12 12	6 6 7	18.7 19.1 19.6 20.0	6.2 6.3 6.5 6.7	0.21 0.21 0.21 0.22
5500	340.8	20.5	0.10	12	7	20.5	6.9	0.22
5600 5700 5800 5900	349.2 357.8 366.5 375.4	21.0 21.5 22.0 22.4	0.10 0.10 0.10 0.09	12 12 11 11	7 7 8 8	21.0 21.5 22.0 22.4	7.1 7.3 7.6 7.8	0.23 0.23 0.24 0.24
6000	384.5	23.0	0.09	11	8	23.0	8.0	0.24
6100 6200 6300 6400	393.8 403.4 413.1 423.1	23.5 24.0 24.5 25.1	0.09 0.09 0.09 0.09	11 10 10 10	9 9 9 10	23.5 24.0 24.5 25.1	8.2 8.5 8.7 9.0	0.25 0.25 0.26 0.26
6500	433.4	25.6	0.08	10	10	25.6	9.3	0.27
6600 6700 6800 6900	444.0 455.0 466.3 478.0	26.2 26.8 27.4 28.0	0.08 0.08 0.08 0.08	9998	11 11 12 13	26.2 26.8 27.4 28.0	9.6 9.9 10.2 10.5	0.27 0.28 0.29 0.29
7000	490.2	28.6	0.08	8	13	28.6	10.9	0.30

CHARGE 4W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	1	IR EMP PCT	A I DENS 1 F	I TY	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	M	М	М	М	М	М	М
3500	17.2	-15.0	3.7	-2.1	7.5	-4.5	-3.3	3.3	-19	20
3600 3700 3800 3900	17.7 18.1 18.5 19.0	-15.4 -15.8 -16.1 -16.5	3.8 4.0 4.1 4.3	-2.2 -2.3 -2.4 -2.5	7.8 8.0 8.3 8.5	-4.7 -4.8 -4.9 -5.1	-3.5 -3.7 -3.9 -4.0	3.5 3.7 3.9 4.1	-19 -20 -20 -20	20 21 21 21
4000	19.4	-16.9	4.4	-2.6	8.8	-5.2	-4.2	4.3	-21	22
4100 4200 4300 4400	19.9 20.3 20.7 21.2	-17.2 -17.6 -17.9 -18.3	4.6 4.7 4.9 5.0	-2.7 -2.8 -2.8 -2.9	9.0 9.3 9.5 9.7	-5.3 -5.4 -5.5 -5.6	-4.4 -4.6 -4.8 -5.0	4.5 4.7 4.9 5.1	-21 -21 -22 -22	22 23 23 23
4500	21.6	-18.7	5.2	-3.0	9.9	-5.7	-5.2	5.3	-22	24
4600 4700 4800 4900	22.0 22.5 22.9 23.4	-19.0 -19.4 -19.8 -20.1	5.4 5.5 5.7 5.8	-3.1 -3.2 -3.3 -3.4	10.1 10.3 10.5 10.7	-5.9 -6.0 -6.1 -6.1	-5.5 -5.7 -5.9 -6.1	5.5 5.7 5.9 6.2	-23 -23 -23 -24	24 24 25 25
5000	23.8	-20.5	6.0	-3.5	10.9	-6.2	-6.4	6.4	-24	25
5100 5200 5300 5400	24.2 24.7 25.1 25.6	-20.9 -21.2 -21.6 -22.0	6.1 6.3 6.4 6.5	-3.6 -3.7 -3.8 -3.9	11.1 11.3 11.5 11.6	-6.3 -6.4 -6.5 -6.5	-6.6 -6.8 -7.1 -7.3	6.7 6.9 7.2 7.4	-24 -25 -25 -25	26 26 27 27
5500	26.0	-22.3	6.7	-4.0	11.8	-6.6	-7 <b>.</b> 6	7.7	-25	27
5600 5700 5800 5900	26.5 26.9 27.4 27.8	-22.7 -23.1 -23.4 -23.8	6.8 7.0 7.1 7.3	-4.0 -4.1 -4.2 -4.3	11.9 12.1 12.2 12.3	-6.6 -6.7 -6.7 -6.8	-7.8 -8.1 -8.4 -8.6	8.0 8.3 8.6 8.8	-26 -26 -26 -26	28 28 28 29
6000	28.3	-24.2	7.4	-4.4	12.4	-6.8	-8.9	9.1	-27	29
6100 6200 6300 6400	28.8 29.2 29.7 30.1	-24.5 -24.9 -25.3 -25.7	7.5 7.7 7.8 7.9	-4.5 -4.6 -4.7 -4.8	12.5 12.6 12.7 12.8	-6.8 -6.9 -6.9 -6.9	-9.2 -9.5 -9.8 -10.1	9.4 9.7 10.0 10.3	-27 -27 -28 -28	29 30 30 30
6500	30.6	-26.1	8.1	-4.9	12.8	-6.9	-10.4	10.7	-28	30
6600 6700 6800 6900	31.0 31.5 32.0 32.4	-26.5 -26.9 -27.3 -27.7	8.2 8.3 8.5 8.6	-5.0 -5.1 -5.2 -5.3	12.9 12.9 12.9 13.0	-7.0 -7.0 -7.0 -7.0	-10.7 -11.1 -11.4 -11.7	11.0 11.3 11.6 12.0	-29 -29 -29 -29	31 31 31 32
7000	32.9	-28.1	8.7	-5.4	13.0	-7 <b>.</b> 0	-12.0	12.3	-30	32

CHARGE 4W

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	FEIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	490.2	28.6	0.08	8	13	28.6	10.9	0.30
7100 7200 7300 7400	502.8 516.1 530.1 544.9	29.3 30.0 30.7 31.4	0.07 0.07 0.07 0.07	8 7 7 7	14 15 16 18	29.3 30.0 30.7 31.4	11.3 11.7 12.1 12.6	0.30 0.31 0.32 0.32
7500	560.6	32.2	0.07	6	19	32.2	13.1	0.33
7600 7700 7800 7900	577.6 596.2 616.8 640.4	33.1 34.0 35.0 36.1	0.07 0.06 0.06 0.06	6 5 5 4	21 24 27 33	33.1 34.0 35.0 36.1	13.6 14.3 15.0 15.9	0.34 0.35 0.36 0.37
8000	669.1	37.4	0.06	3	44	37.4	17.0	0.38
8100	708.8	39.2	0.06			39.2	18.7	0.40
******	******	******	*****	******	***	*****	******	******
8100	845.4	45.0	0.05			45.0	25.7	0.50
8000	884.9	46.5	0.05	3	45	46.5	28.2	0.52
7900 7800 7700 7600	913.4 936.9 957.4 975.8	47.5 48.4 49.1 49.7	0.05 0.05 0.04 0.04	4 5 5 6	34 29 25 23	47.5 48.4 49.1 49.7	30.2 32.0 33.7 35.4	0.54 0.56 0.58 0.59
7500	992.7	50.3	0.04	6	21	50.3	36.9	0.61
7400 7300 7200 7100	1008.3 1023.0 1036.8 1050.0	50.8 51.3 51.7 52.1	0.04 0.04 0.04 0.04	7 7 7 8	19 18 16 15	50.8 51.3 51.7 52.1	38.5 40.0 41.6 43.1	0.63 0.64 0.66 0.67
7000	1062.5	52.5	0.04	8	15	52.5	44.7	0.69
6900 6800 6700 6600	1074.5 1086.1 1097.3 1108.1	52.9 53.2 53.5 53.8	0.04 0.04 0.04 0.04	8999	14 13 12 12	52.9 53.2 53.5 53.8	46.3 47.8 49.5 51.1	0.71 0.73 0.74 0.76
6500	1118.5	54.1	0.04	10	11	54.1	52.8	0.78
6400 6300 6200 6100	1128.6 1138.5 1148.1 1157.4	54.4 54.7 54.9 55.2	0.04 0.04 0.04 0.04	10 10 11 11	11 10 10 10	54.4 54.7 54.9 55.2	54.5 56.3 58.1 60.0	0.80 0.82 0.84 0.87
6000	1166.5	55.4	0.04	11	9	55.4	62.0	0.89

CHARGE 4W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
Ŗ				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	T	IR EMP PCT	A I DENS 1 F	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	M	M	М	М	М	М	М
7000	32.9	-28.1	8.7	-5.4	13.0	-7 <b>.</b> 0	-12.0	12.3	-30	32
7100 7200 7300 7400	33.4 33.9 34.4 34.8	-28.5 -28.9 -29.3 -29.7	8.9 9.0 9.1 9.3	-5.5 -5.6 -5.8 -5.9	13.0 13.0 13.0 13.0	-7.0 -7.0 -7.0 -7.0	-12.4 -12.7 -13.0 -13.4	12.7 13.0 13.4 13.8	-30 -30 -30 -31	32 33 33 33
7500	35.3	-30.1	9.4	-6.0	13.0	-6.9	-13.7	14.2	-31	33
7600 7700 7800 7900	35.8 36.3	-30.5 -30.9 -31.3 -31.8	9.5	-6.1 -6.2 -6.3 -6.5	13.0 13.0 12.9 12.7	-6.9 -6.9 -6.8 -6.8	-14.1 -14.5 -14.9 -15.3	14.6 15.0 15.5 16.0	-31 -31 -31 -32	34 34 34 34
8000		-32.2		-6.6	12.5	-6.7	-15.7		-32	35
8100		-32.6		-6.7		-6.7	-16.1		-32	
*****	*****	*****	*****	*****	*****	*****	******	****	*****	****
8100		-33.5		-7.5		-5.9	-17.7		-31	
8000		-33.1		-7.5	11.7	-5.7	-17.5		-31	34
7900 7800 7700 7600	36.7 36.3	-32.8 -32.4 -32.0 -31.7	9.6	-7.4 -7.3 -7.2 -7.1	11.3 11.0 10.8 10.5	-5.6 -5.5 -5.4 -5.3	-17.3 -17.2 -17.0 -16.7	17.0 16.9 16.8 16.6	-30 -30 -30 -29	34 33 33 32
7500	35.8	-31.3	9.5	-7.0	10.3	-5.2	-16.5	16.4	-29	32
7400 7300 7200 7100	35.4 35.0 34.5 34.1	-30.9 -30.5 -30.1 -29.7	9.4 9.3 9.2 9.1	-6.9 -6.8 -6.7 -6.6	10.1 10.0 9.8 9.6	-5.1 -5.0 -4.9 -4.8	-16.3 -16.1 -15.9 -15.6	16.2 16.0 15.8 15.6	-29 -28 -28 -27	32 31 31 30
7000	33.7	-29.3	9.0	-6.5	9.4	-4.7	-15.4	15.4	-27	30
6900 6800 6700 6600	33.2 32.8 32.3 31.8	-28.9 -28.5 -28.1 -27.7	8.9 8.8 8.7 8.6	-6.3 -6.2 -6.0 -5.9	9.3 9.1 9.0 8.8	-4.7 -4.6 -4.5 -4.4	-15.1 -14.9 -14.6 -14.4	15.1 14.9 14.7 14.5	-27 -26 -26 -25	29 29 28 28
6500	31.4	-27.3	8.4	-5.7	8.7	-4.4	-14.1	14.2	-25	27
6400 6300 6200 6100	30.9 30.5 30.0 29.5	-26.9 -26.5 -26.1 -25.7	8.3 8.2 8.1 8.0	-5.5 -5.3 -5.1 -4.8	8.6 8.4 8.3 8.2	-4.3 -4.2 -4.2 -4.1	-13.9 -13.6 -13.3 -13.1	14.0 13.7 13.5 13.2	-24 -24 -24 -23	27 26 26 25
6000	29.1	-25.3	7.8	-4.6	8.0	-4.0	-12.8	13.0	-23	25

CHARGE 4W

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A	E	FS FOR GRAZE	DFS PER	DR PER	F O	TIME		MUTH CTIONS
N G E	L E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
M	MIL			М	MIL	SEC	MIL	MIL
6000	1166.5	55.4	0.04	11	9	55.4	62.0	0.89
5900 5800 5700 5600	1175.4 1184.0 1192.5 1200.8	55.6 55.8 56.1 56.3	0.04 0.04 0.04 0.04	11 12 12 12	9 8 8	55.6 55.8 56.1 56.3	64.0 66.2 68.4 70.8	0.91 0.94 0.97 1.00
5500	1208.9	56.5	0.04	13	7	56.5	73.3	1.03
5400 5300 5200 5100	1216.8 1224.5 1232.0 1239.4	56.6 56.8 57.0 57.2	0.04 0.04 0.04 0.04	13 13 13 14	7 7 7 6	56.6 56.8 57.0 57.2	75.9 78.8 81.8 85.1	1.07 1.10 1.14 1.19
5000	1246.6	57.3	0.04	14	6	57.3	88.6	1.23
4900 4800 4700 4600	1253.6 1260.5 1267.2 1273.6	57.5 57.7 57.8 58.0	0.04 0.04 0.04 0.04	14 15 15 16	6 5 5 5	57.5 57.7 57.8 58.0	92.5 96.8 101.5 106.7	1.29 1.34 1.41 1.48
4500	1279.9	58.2	0.04	16		58.2	112.6	1.56
4400 4300 4200	1286.0 1291.9 1297.6	58.3 58.5 58.7	0.04 0.04 0.04	17 17		58.3 58.5 58.7	119.2 126.8 135.3	1.66
4156	1300.0							

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 4W TABLE F

CORRECTION FACTORS

, .	-,	*								
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE DCITY M/S	WI	NGE ND NO T	T	IR EMP PCT	AI DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	M	M	М	М	М	М	М
6000	29.1	-25.3	7.8	-4.6	8.0	-4.0	-12.8	13.0	-23	25
5900 5800 5700 5600	28.6 28.2 27.7 27.2	-24.9 -24.5 -24.1 -23.7	7.7 7.6 7.4 7.3	-4.3 -3.9	7.9 7.8 7.6 7.5	-4.0 -3.9 -3.8 -3.8	-12.5 -12.2 -11.9 -11.6	12.7 12.4 12.2 11.9	-22 -22 -21 -21	24 24 23 23
5500	26.8	-23.3	7.1		7.4	-3.7	-11.3	11.6	-20	22
5400 5300 5200 5100	26.3 25.8 25.4 24.9	-22.9 -22.5 -22.1 -21.6	7.0 6.8 6.6 6.5		7.3 7.2 7.1 7.0	-3.7 -3.6 -3.6 -3.5	-11.0 -10.7 -10.4 -10.0	11.3 11.1 10.8 10.5	-20 -19 -18 -18	21 21 20 20
5000	24.5	-21.2	6.3		6.9	-3.5	-9.7	10.1	-17	19
4900 4800 4700 4600	24.0 23.5 23.1 22.6	-20.8 -20.4 -20.0 -19.6	6.1 5.8 5.3		6.8 6.7 6.6 6.5	-3.4 -3.4 -3.3 -3.3	-9.3 -8.9 -8.5 -8.1	9.8 9.5 9.2 8.8	-16 -16 -15 -14	18 18 17 16
4500	22.2	-19.2	5.0		6.4	-3.3		8.4	-13	15
4400 4300 4200	21.7 21.3 20.8	-18.8	4.7 4.3 3.9		6.4 6.3 6.3	-3.2 -3.2 -3.2		8.0 7.6 7.1	-12 -11 -10	14 13 12

CHARGE 4W

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

_		_		_	_	-	•	•	40		10	10
1	2	3	4	5	6	7	8	9	10	11	12	13
R A	E L		PROB	ABLE	ERROF	RS .	ANGLE OF	COT ANGLE	TML VEL	МО	F	SITE OR
N G	E V			F	UZE MS	82	FALL	OF FALL			ANGLE (	OF SITE  -1 MIL
Ē		R	D	НВ	ТВ	RB					SITE	SITE
M	MIL	М	M	М	SEC	М	MIL		M/S	М	MIL	MIL
0	0.0	4	0				0		320	0	0.000	0.00
500 1000 1500 2000	24.9 50.7 77.5 105.3	5 6 7 9	0 0 1 1	1 1 1	0.04 0.04 0.04	12 12 12	25 53 81 112	40.1 19.4 12.5 9.0	311 304 297 291	3 13 29 54	0.000 0.002 0.005 0.009	
2500	134.2	11	1	2	0.04	13	145	7.0	286	86	0.015	-0.014
3000 3500 4000 4500	164.2 195.7 228.7 263.6	12 14 15 17	1 2 2 2	2 3 3 4	0.04 0.04 0.04 0.04	13 13 14 14	179 216 254 296	5.6 4.7 3.3	280 276 271 267	127 179 241 317	0.023 0.034 0.049 0.068	-0.031 -0.044
5000	300.8	19	3	5	0.04	15	341	2.9	263	406	0.095	-0.085
5500 6000 6500 7000	340.8 384.5 433.4 490.2	21 23 25 27	3 4 4	6 7 8 10	0.04 0.04 0.04 0.05	16 17 18 19	389 442 501 568	2.5 2.2 1.9 1.6	259 256 254 252	513 642 799 997	0.133 0.188 0.273 0.424	-0.116 -0.159 -0.226 -0.331
7500	560.6	29	4	12	0.05	20	650	1.3	251	1262	0.793	-0.528
8000	669.1	32	5	16		22	769	1.1	251	1701		-1.136
8000	****** 884.9	33	****		0.06	22	986	0.7	**** 257	2614	*****	2.17
7500	992.7	32	6	29	0.07	21	1085	0.6	260	3052	-1.826	1.56
7000 6500 6000 5500	1062.5 1118.5 1166.5 1208.9	30 28 25 23	66666	31 33 35 36	0.07 0.07 0.07 0.08	20 19 17 16	1148 1198 1242 1282	0.5 0.4 0.4 0.3	262 263 264 265	3316 3512 3668 3794	-1.454 -1.298 -1.207 -1.147	1.36 1.25 1.18 1.13
5000	1246.6	21	5	37	0.08	14	1319	0.3	265	3896	-1.103	1.09
4500	1279.9		5	38	0.08	13	1356	0.2	265	3978	-1.069	1.06

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H CHARGE 4W ROTATION - RANGE

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

	AZIMUTH OF TARGET - MILS												
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600				
500 1000 1500 2000	0 0 0 0	0 -1+ -1+ -2+	-1+ -2+ -3+ -3+	-1+ -3+ -4+ -5+	-2+ -3+ -5+ -6+	-2+ -4+ -5+ -7+	-2+ -4+ -6+ -8+	-2+ -4+ -6+ -8+	-2+ -5+ -7+ -9+				
2500	0	-2+	-4+	-6+	-7+	-9+	-10+	-10+	-10+				
3000 3500 4000 4500	0 0 0 0	-2+ -3+ -3+ -3+	-5+ -5+ -6+ -6+	-7+ -8+ -9+ -9+	-9+ -10+ -11+ -12+	-10+ -12+ -13+ -14+	-11+ -13+ -14+ -15+	-12+ -14+ -15+ -16+	-12+ -14+ -15+ -17+				
5000	0	-4+	-7+	-10+	-13+	-15+	-17+	-18+	-18+				
5500 6000 6500 7000	0 0 0 0	-4+ -4+ -4+ -4+	-7+ -8+ -8+ -8+	-11+ -11+ -11+ -11+	-13+ -14+ -14+ -14+	-16+ -16+ -17+ -17+	-18+ -18+ -19+ -19+	-19+ -19+ -20+ -20+	-19+ -20+ -20+ -20+				
7500	0	-4+	-8+	-11+	-14+	-16+	-18+	-19+	-20+				
8000	0	-3+	-7+	-10+	-12+	-15+	-16+	-17+	-18+				
*****	****	*****	*****	******	*****	*****	*****	*****	*****				
8000	0	-2+	-3+	-5+	-6+	-7+	-8+	-8+	-9+				
7500	0	-1+	-1+	-2+	-2+	-2+	-3+	-3+	-3+				
7000 6500 6000 5500	0 0 0 0	0 +1 <sup>-</sup> +2 <sup>-</sup> +2 <sup>-</sup>	+1- +2- +3- +4-	+1- +3- +5- +6-	+1- +4- +6- +8-	+1- +4- +7- +10-	+1- +5- +8- +11-	+1- +5- +8- +11-	+1- +5- +8- +12-				
5000	0	+3-	+6-	+8-	+11-	+13-	+14-	+15-	+15-				
4500	0	+4-	+8-	+11-	+14-	+17-	+18-	+19-	+20-				
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800				
		AZIMUTH OF TARGET - MILS											

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	. 9 4	. 87	.77	. 64	. 50	. 34

TABLE I ROTATION - AZIMUTH FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0		
2500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3000 3500 4000 4500	0.0 R0.1L R0.1L R0.1L	0.0 R0.1L R0.1L R0.1L	0.0 0.0 R0.1L R0.1L	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.1R		
5000	R0.1L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.1R		
5500 6000 6500 7000	R0.2L R0.2L R0.3L R0.4L	R0.2L R0.2L R0.3L R0.3L	R0.1L R0.2L R0.2L R0.2L	R0.1L R0.1L R0.1L R0.1L	0.0 0.0 0.0 0.0	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.3R L0.3R	L0.2R L0.2R L0.3R L0.4R		
7500	R0.5L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.5R		
8000	R0.7L	R0.6L	R0.5L	R0.3L	0.0	L0.3R	L0.5R	L0.6R	L0.7R		
*****	*****	*****	*****	*****	*****	*****	******	*****	*****		
8000	R1.3L	R1.2L	R0.9L	R0.5L	0.0	L0.5R	L0.9R	L1.2R	L1.3R		
7500	R1.7L	R1.6L	R1.2L	R0.7L	0.0	L0.7R	L1.2R	L1.6R	L1.7R		
7000 6500 6000 5500	R2.1L R2.4L R2.8L R3.2L	R1.9L R2.3L R2.6L R2.9L	R1.5L R1.7L R2.0L R2.3L	R0.8L R0.9L R1.1L R1.2L	0.0 0.0 0.0 0.0	L0.8R L0.9R L1.1R L1.2R	L1.5R L1.7R L2.0R L2.3R	L1.9R L2.3R L2.6R L2.9R	L2.1R L2.4R L2.8R L3.2R		
5000	R3.6L	R3.3L	R2.5L	R1.4L	0.0	L1.4R	L2.5R	L3.3R	L3.6R		
4500	R4.0L	R3.7L	R2.8L	R1.5L	0.0	L1.5R	L2.8R	L3.7R	L4.0R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGE 1	r - MILS	;				

#### 0 DEGREES LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4W

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	0.0 0.0 L0.1R L0.1R										
2500	L0.1R										
3000 3500 4000 4500	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.2R L0.3R	L0.2R L0.2R L0.2R L0.3R	L0.2R L0.2R L0.3R L0.3R		
5000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.4R		
5500 6000 6500 7000	L0.1R L0.1R 0.0 0.0	L0.1R L0.1R L0.1R 0.0	L0.1R L0.1R L0.1R L0.1R	L0.2R L0.2R L0.2R L0.2R	L0.3R L0.3R L0.3R L0.4R	L0.3R L0.4R L0.4R L0.5R	L0.4R L0.4R L0.5R L0.6R	L0.4R L0.5R L0.6R L0.7R	L0.4R L0.5R L0.6R L0.7R		
7500	R0.1L	0.0	L0.1R	L0.2R	L0.4R	L0.6R	L0.7R	L0.8R	L0.8R		
8000	R0.2L	R0.2L	0.0	L0.2R	L0.5R	L0.7R	L0.9R	L1.1R	L1.1R		
*****	*****	*****	*****	*****	*****	*****	******	******	*****		
8000	R0.7L	R0.6L	R0.3L	L0.1R	L0.6R	L1.0R	L1.4R	L1.7R	L1.8R		
7500	R1.1L	R1.0L	R0.6L	0.0	L0.6R	L1.3R	L1.8R	L2.2R	L2.3R		
7000 6500 6000 5500	R1.4L R1.8L R2.1L R2.5L	R1.3L R1.6L R1.9L R2.2L	R0.8L R1.0L R1.3L R1.5L	R0.2L R0.3L R0.4L R0.5L	L0.6R L0.6R L0.7R L0.7R	L1.4R L1.6R L1.7R L1.9R	L2.1R L2.3R L2.6R L2.9R	L2.5R L2.9R L3.2R L3.6R	L2.7R L3.0R L3.4R L3.8R		
5000	R2.9L	R2.6L	R1.8L	R0.7L	L0.7R	L2.0R	L3.2R	L3.9R	L4.2R		
4500	R3.2L	R2.9L	R2.1L	R0.8L	L0.7R	L2.2R	L3.4R	L4.3R	L4.6R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGE T	- MILS					

#### 10 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 20 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS									
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200	
500 1000 1500 2000	0.0 L0.1R L0.1R L0.1R	0.0 L0.1R L0.1R L0.2R								
2500	L0.2R									
3000 3500 4000 4500	L0.2R L0.2R L0.3R L0.3R	L0.2R L0.3R L0.3R L0.3R	L0.2R L0.3R L0.3R L0.3R	L0.2R L0.3R L0.3R L0.4R	L0.3R L0.3R L0.3R L0.4R	L0.3R L0.3R L0.4R L0.4R	L0.3R L0.3R L0.4R L0.5R	L0.3R L0.3R L0.4R L0.5R	L0.3R L0.4R L0.4R L0.5R	
5000	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	
5500 6000 6500 7000	L0.3R L0.4R L0.4R L0.4R	L0.4R L0.4R L0.4R L0.4R	L0.4R L0.4R L0.4R L0.5R	L0.4R L0.5R L0.5R L0.6R	L0.5R L0.6R L0.6R L0.7R	L0.6R L0.6R L0.7R L0.8R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.0R	
7500	L0.3R	L0.4R	L0.5R	L0.6R	L0.8R	L0.9R	L1.1R	L1.2R	L1.2R	
8000	L0.3R	L0.3R	L0.5R	L0.7R	L0.9R	L1.1R	L1.3R	L1.5R	L1.5R	
*****	*****	*****	*****	*****	*****	*****	******	******	*****	
8000	R0.1L	0.0	L0.3R	L0.6R	L1.1R	L1.6R	L2.0R	L2.2R	L2.3R	
7500	R0.4L	R0.3L	L0.1R	L0.6R	L1.2R	L1.8R	L2.3R	L2.7R	L2.8R	
7000 6500 6000 5500	R0.7L R1.0L R1.3L R1.7L	R0.6L R0.8L R1.1L R1.4L	R0.1L R0.3L R0.6L R0.8L	L0.5R L0.4R L0.3R L0.2R	L1.2R L1.3R L1.3R L1.3R	L2.0R L2.2R L2.3R L2.5R	L2.6R L2.9R L3.2R L3.4R	L3.1R L3.4R L3.7R L4.1R	L3.2R L3.6R L3.9R L4.3R	
5000	R2.0L	R1.8L	R1.1L	0.0	L1.3R	L2.6R	L3.7R	L4.4R	L4.7R	
4500	R2.4L	R2.1L	R1.3L	R0.1L	L1.3R	L2.7R	L4.0R	L4.8R	L5.1R	
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400	
			AZI	MUTH OF	TARGET	- MILS	1			

#### 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4W

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R		
2500	L0.3R										
3000 3500 4000 4500	L0.3R L0.4R L0.4R L0.5R	L0.3R L0.4R L0.4R L0.5R	L0.3R L0.4R L0.5R L0.5R	L0.4R L0.4R L0.5R L0.5R	L0.4R L0.4R L0.5R L0.6R	L0.4R L0.5R L0.5R L0.6R	L0.4R L0.5R L0.6R L0.6R	L0.4R L0.5R L0.6R L0.7R	L0.4R L0.5R L0.6R L0.7R		
5000	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R		
5500 6000 6500 7000	L0.6R L0.6R L0.7R L0.7R	L0.6R L0.6R L0.7R L0.7R	L0.6R L0.7R L0.7R L0.8R	L0.7R L0.7R L0.8R L0.9R	L0.7R L0.8R L0.9R L1.0R	L0.8R L0.9R L1.0R L1.1R	L0.8R L0.9R L1.1R L1.2R	L0.9R L1.0R L1.1R L1.3R	L0.9R L1.0R L1.1R L1.3R		
7500	L0.7R	L0.8R	L0.8R	L1.0R	L1.1R	L1.3R	L1.4R	L1.5R	L1.5R		
8000	L0.7R	L0.8R	L0.9R	L1.1R	L1.3R	L1.5R	L1.7R	L1.8R	L1.9R		
*****	******	*****	*****	*****	*****	*****	*****	*****	*****		
8000	L0.5R	L0.6R	L0.8R	L1.2R	L1.6R	L2.0R	L2.4R	L2.6R	L2.7R		
7500	L0.3R	L0.4R	L0.7R	L1.2R	L1.7R	L2.3R	L2.8R	L3.1R	L3.2R		
7000 6500 6000 5500	0.0 R0.2L R0.5L R0.8L	L0.2R R0.1L R0.3L R0.6L	L0.5R L0.4R L0.2R 0.0	L1.1R L1.1R L1.0R L0.9R	L1.8R L1.9R L1.9R L1.9R	L2.5R L2.7R L2.8R L3.0R	L3.1R L3.4R L3.6R L3.9R	L3.5R L3.8R L4.1R L4.5R	L3.6R L4.0R L4.3R L4.7R		
5000	R1.2L	R0.9L	R0.3L	L0.7R	L1.9R	L3.1R	L4.1R	L4.8R	L5.0R		
4500	R1.5L	R1.3L	R0.5L	L0.6R	L1.9R	L3.2R	L4.4R	L5.1R	L5.4R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGET	- MILS	i				

#### 30 DEGREES SOUTH LATITUDE

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 40 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.1R L0.2R L0.3R	L0.1R L0.2R L0.2R L0.3R								
2500	L0.4R										
3000 3500 4000 4500	L0.4R L0.5R L0.6R L0.7R	L0.4R L0.5R L0.6R L0.7R	L0.5R L0.5R L0.6R L0.7R	L0.5R L0.5R L0.6R L0.7R	L0.5R L0.6R L0.7R L0.7R	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.8R		
5000	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R		
5500 6000 6500 7000	L0.8R L0.9R L1.0R L1.0R	L0.8R L0.9R L1.0R L1.1R	L0.8R L0.9R L1.0R L1.1R	L0.9R L1.0R L1.1R L1.2R	L0.9R L1.0R L1.2R L1.3R	L1.0R L1.1R L1.2R L1.4R	L1.0R L1.2R L1.3R L1.5R	L1.1R L1.2R L1.4R L1.5R	L1.1R L1.2R L1.4R L1.6R		
7500	L1.1R	L1.1R	L1.2R	L1.3R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R		
8000	L1.2R	L1.2R	L1.3R	L1.5R	L1.7R	L1.9R	L2.0R	L2.2R	L2.2R		
*****	*****	*****	*****	*****	*****	*****	******	*****	*****		
8000	L1.1R	L1.2R	L1.4R	L1.7R	L2.1R	L2.5R	L2.8R	L3.0R	L3.1R		
7500	L0.9R	L1.0R	L1.3R	L1.7R	L2.2R	L2.7R	L3.2R	L3.5R	L3.6R		
7000 6500 6000 5500	L0.7R L0.5R L0.3R 0.0	L0.9R L0.7R L0.5R L0.2R	L1.2R L1.1R L0.9R L0.7R	L1.7R L1.7R L1.6R L1.5R	L2.3R L2.4R L2.4R L2.5R	L2.9R L3.1R L3.3R L3.4R	L3.5R L3.7R L4.0R L4.2R	L3.8R L4.1R L4.4R L4.7R	L3.9R L4.3R L4.6R L4.9R		
5000	R0.3L	0.0	L0.5R	L1.4R	L2.5R	L3.5R	L4.4R	L5.0R	L5.2R		
4500	R0.6L	R0.3L	L0.3R	L1.3R	L2.5R	L3.6R	L4.6R	L5.3R	L5.5R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGE T	- MILS	1				

#### 40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4W

### ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 50 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.2R L0.3R L0.4R										
2500	L0.5R										
3000 3500 4000 4500	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.8R	L0.5R L0.6R L0.7R L0.8R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.8R L1.0R		
5000	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R		
5500 6000 6500 7000	L1.0R L1.1R L1.2R L1.3R	L1.0R L1.1R L1.2R L1.3R	L1.0R L1.2R L1.3R L1.4R	L1.1R L1.2R L1.3R L1.5R	L1.1R L1.3R L1.4R L1.5R	L1.2R L1.3R L1.5R L1.6R	L1.2R L1.3R L1.5R L1.7R	L1.2R L1.4R L1.6R L1.8R	L1.2R L1.4R L1.6R L1.8R		
7500	L1.4R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R	L2.0R		
8000	L1.6R	L1.6R	L1.7R	L1.8R	L2.0R	L2.2R	L2.3R	L2.4R	L2.4R		
*****	******	*****	*****	*****	*****	*****	******	******	*****		
8000	L1.7R	L1.7R	L1.9R	L2.2R	L2.5R	L2.8R	L3.1R	L3.2R	L3.3R		
7500	L1.6R	L1.7R	L1.9R	L2.3R	L2.7R	L3.1R	L3.5R	L3.7R	L3.8R		
7000 6500 6000 5500	L1.4R L1.3R L1.1R L0.9R	L1.6R L1.4R L1.3R L1.1R	L1.8R L1.8R L1.6R L1.5R	L2.3R L2.3R L2.2R L2.2R	L2.8R L2.9R L2.9R L2.9R	L3.3R L3.5R L3.6R L3.7R	L3.7R L4.0R L4.2R L4.4R	L4.0R L4.3R L4.6R L4.8R	L4.1R L4.4R L4.7R L5.0R		
5000	L0.7R	L0.8R	L1.3R	L2.1R	L3.0R	L3.8R	L4.6R	L5.1R	L5.3R		
4500	L0.4R	L0.6R	L1.1R	L2.0R	L3.0R	L3.9R	L4.8R	L5.3R	L5.5R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
			AZ I	MUTH OF	TARGE T	- MILS	1				

#### 50 DEGREES SOUTH LATITUDE

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 60 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS									
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.2R L0.3R L0.4R										
2500	L0.5R										
3000 3500 4000 4500	L0.6R L0.7R L0.8R L1.0R	L0.6R L0.7R L0.8R L1.0R	L0.6R L0.7R L0.9R L1.0R	L0.6R L0.7R L0.9R L1.0R	L0.6R L0.8R L0.9R L1.0R	L0.6R L0.8R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.1R		
5000	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R		
5500 6000 6500 7000	L1.2R L1.3R L1.4R L1.6R	L1.2R L1.3R L1.4R L1.6R	L1.2R L1.3R L1.5R L1.6R	L1.2R L1.4R L1.5R L1.7R	L1.3R L1.4R L1.6R L1.8R	L1.3R L1.5R L1.6R L1.8R	L1.3R L1.5R L1.7R L1.9R	L1.3R L1.5R L1.7R L1.9R	L1.4R L1.5R L1.7R L1.9R		
7500	L1.7R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R		
8000	L1.9R	L2.0R	L2.0R	L2.1R	L2.3R	L2.4R	L2.5R	L2.6R	L2.6R		
*****	******	*****	*****	*****	*****	*****	*****	*****	*****		
8000	L2.2R	L2.2R	L2.4R	L2.6R	L2.8R	L3.0R	L3.3R	L3.4R	L3.4R		
7500	L2.2R	L2.2R	L2.4R	L2.7R	L3.0R	L3.4R	L3.6R	L3.8R	L3.9R		
7000 6500 6000 5500	L2.1R L2.0R L1.9R L1.7R	L2.2R L2.1R L2.0R L1.9R	L2.4R L2.4R L2.3R L2.2R	L2.8R L2.8R L2.8R L2.7R	L3.2R L3.2R L3.3R L3.3R	L3.5R L3.7R L3.8R L3.9R	L3.9R L4.1R L4.3R L4.5R	L4.1R L4.4R L4.6R L4.8R	L4.2R L4.5R L4.7R L4.9R		
5000	L1.6R	L1.7R	L2.1R	L2.7R	L3.4R	L4.0R	L4.6R	L5.0R	L5.1R		
4500	L1.4R	L1.5R	L1.9R	L2.6R	L3.3R	L4.1R	L4.7R	L5.2R	L5.3R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
		AZIMUTH OF TARGET - MILS									

#### **60 DEGREES SOUTH LATITUDE**

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 4W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS									
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200		
500 1000 1500 2000	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.4R	L0.1R L0.2R L0.3R L0.5R								
2500	L0.6R										
3000 3500 4000 4500	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L0.9R L1.1R	L0.7R L0.8R L1.0R L1.1R	L0.7R L0.8R L1.0R L1.1R	L0.7R L0.8R L1.0R L1.1R	L0.7R L0.8R L1.0R L1.1R	L0.7R L0.8R L1.0R L1.1R		
5000	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R		
5500 6000 6500 7000	L1.3R L1.5R L1.6R L1.8R	L1.3R L1.5R L1.6R L1.8R	L1.3R L1.5R L1.6R L1.8R	L1.4R L1.5R L1.7R L1.9R	L1.4R L1.5R L1.7R L1.9R	L1.4R L1.6R L1.7R L1.9R	L1.4R L1.6R L1.8R L2.0R	L1.4R L1.6R L1.8R L2.0R	L1.4R L1.6R L1.8R L2.0R		
7500	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R	L2.3R		
8000	L2.2R	L2.3R	L2.3R	L2.4R	L2.5R	L2.6R	L2.6R	L2.7R	L2.7R		
*****	******	*****	*****	*****	*****	*****	*****	*****	*****		
8000	L2.6R	L2.6R	L2.7R	L2.9R	L3.0R	L3.2R	L3.4R	L3.4R	L3.5R		
7500	L2.7R	L2.7R	L2.9R	L3.1R	L3.3R	L3.5R	L3.7R	L3.8R	L3.9R		
7000 6500 6000 5500	L2.7R L2.7R L2.6R L2.5R	L2.8R L2.7R L2.7R L2.6R	L2.9R L2.9R L2.9R L2.8R	L3.1R L3.2R L3.2R L3.2R	L3.4R L3.5R L3.6R L3.6R	L3.7R L3.8R L3.9R L4.0R	L3.9R L4.1R L4.3R L4.4R	L4.1R L4.3R L4.5R L4.6R	L4.1R L4.3R L4.5R L4.7R		
5000	L2.4R	L2.5R	L2.8R	L3.2R	L3.6R	L4.1R	L4.5R	L4.8R	L4.9R		
4500	L2.3R	L2.4R	L2.7R	L3.1R	L3.6R	L4.1R	L4.6R	L4.9R	L5.0R		
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400		
	AZIMUTH OF TARGET - MILS										

#### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J
4W
FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	CITY		IGE ND (NOT	AI TEN 1 F	MP .	DEN:	IR SITY PCT		VT SQ STD)
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	006 009 011	0.006 0.008 0.011	0.000 0.000 <i>001</i>	0.000 0.000 0.001	001 001 002	0.001 0.001 0.002	0.000 0.000 0.000	0.000	0.008 0.012 0.015	008 012 015
5	<i>014</i>	0.014	001	0.001	003	0.002	0.001	001	0.019	019
6 7 8 9	016 019 021 023	0.016 0.018 0.020 0.023	002 002	0.001 0.001 0.002 0.002	004 005 006 007	0.003 0.004 0.005 0.005	0.001 0.001 0.002 0.002	001 001 002 002	0.022 0.025 0.028 0.030	022 025 028 031
10	026	0.025	003	0.002	008	0.006	0.002	002	0.033	034
11 12 13 14	028 030 033 035	0.027 0.029 0.031 0.033	003 004 004 005	0.003 0.003 0.003 0.004	010 011 013 014	0.007 0.008 0.009 0.010	0.003 0.003 0.004 0.004	003 004	0.036 0.038 0.041 0.044	037 039 042 045
15	037	0.035	006	0.004	015	0.010	0.005	005	0.046	047
16 17 18 19	039 042 044 046	0.037 0.039 0.041 0.043	006 007 007 008	0.004 0.004 0.005 0.005	017 018 019 021	0.011 0.012 0.012 0.013	0.005 0.006 0.006 0.007	005 006 006 007	0.049 0.051 0.054 0.056	050 053 055 058
20	049	0.045	008	0.005	022	0.014	0.008	007	0.058	061
21 22 23 24	051 053 056 058	0.047 0.049 0.051 0.054	008 009 009 010	0.005 0.006 0.006 0.006	023 024 025 026	0.014 0.014 0.015 0.015	0.008 0.009 0.010 0.011	008 009 010 011	0.061 0.063 0.066 0.068	063 066 069 072
25	061	0.056	010	0.006	027	0.015	0.012	011	0.071	074
26 27 28 29	063 066 068 071	0.058 0.061 0.063 0.065	011 011 011 011	0.007 0.007 0.007 0.007	027 028 028 029	0.015 0.016 0.016 0.016	0.012 0.013 0.014 0.015	012 013 014 015	0.074 0.076 0.079 0.081	077 079 082 085
30	073	0.067	012	0.007	029	0.016	0.016	016	0.084	088
31 32 33 34	076 078 081 083	0.070 0.072 0.074 0.077	012 012 012 013	0.008 0.008 0.008 0.008	030 030 031 031	0.017 0.017 0.017 0.017	0.017 0.018 0.019 0.020	016 017 018 019	0.086 0.088 0.091 0.093	090 093 096 098
35	086	0.079	013	0.008	032	0.017	0.021	020	0.096	101

FT 155-AR-1 TABLE J
PART 1
PROJ, HE, M795
FUZE, MTSQ, M582

TABLE J
FUZE CORRECTION FACTORS

## CHARGE 4W

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	TY		IGE ND (NOT	AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	086	0.079	013	0.008	032	0.017	0.021	020	0.096	101
36 37 38 39	<b>091</b>	0.081 0.084 0.086 0.089	013 013	0.008 0.009 0.009 0.009	032 033	0.017 0.017 0.018 0.018	0.022 0.023 0.024 0.025	022 023	0.099 0.101 0.104 0.107	104 107 109 112
40	098	0.091	013	0.009	033	0.018	0.026	025	0.109	115
41 42 43 44	103	0.093 0.096 0.098 0.100	014 014	0.009 0.009 0.010 0.010	034 034	0.018 0.018 0.018 0.018		027 028	0.112 0.114 0.117 0.119	118 120 123 126
45	111	0.103	014	0.010	035	0.019	0.031	030	0.122	129
46 47 48 49	116	0.105 0.108 0.110 0.113	014 014 014 014	0.010 0.010	036 036	0.019 0.019 0.019 0.019	0.032 0.033 0.034 0.035	033	0.125 0.128 0.131 0.134	132 135 138 141
50	124	0.115	014	0.010	036	0.019	0.036	035	0.137	144
51 52 53 54	129 132	0.118 0.120 0.123 0.125	013 013	0.011 0.011 0.011 0.011	<i>037</i> <i>037</i>	0.019 0.019 0.019 0.020	0.037 0.038 0.039 0.040	038	0.140 0.143 0.147 0.150	147 150 153 157
55	137	0.128	013	0.012	038	0.020	0.041	040	0.154	160
56 57 58		0.130 0.133 0.135	013 013 015	0.014	038	0.020 0.020 0.020	0.042 0.044 0.047	042	0.159 0.164 0.172	164 169 177

CHARGE TABLE K FT 155-AR-1
4W PART 1
FUZE SETTING PROJ, HE, M795
FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

	ETTING M582	CORRECTIONS
FROM	TO	
1.9	20.0	-0.1
20.1	39.2	-0.2
39.3	58.7	-0.3

Part 1

Charge 5W

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-380\ M/S$ 

Propelling Charge M4A2 - Base and Increments 4 and 5  $\,$ 

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A

CHARGE 5W

HE, M795 LINE NUMBER

LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	L I NE NUMBER
0.0- 125.3	0
125.4- 243.5 243.6- 368.8 368.9- 491.0 491.1- 596.7	1 2 3 4
596.8- 741.9	5
742.0- 931.4 931.5- 1144.3 1144.4- 1300.0	6 7 8

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HE I (		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	0					0			
	100 200 300 400					0 0 0 0	0 0 1 1	0 2 2 3	1 4 5 6
	500					0	1	4	7
	600 700 800 900					0 0 0 0	2 2 2 3	4 5 6 6	8 9 10 10
	1000					0	3	7	11
	1100 1200 1300 1400					0 0 0 0	3 3 4 4	7 8 8 9	12 13 13 14
	1500					0	4	9	15
0	1600 1700 1800 1900				-4 -4 -5	0 0 0	4 5 5 5	10 10 10 11	15 16 17 17
	2000				-5	0	5	11	18
	2100 2200 2300 2400			-10 -11	-5 -5 -6 -6	0 0 0 0	566666	12 12 13 13	19 20 20 21
	2500			-11	-6	0	6	14	22
	2600 2700 2800 2900		-18 -19	-12 -12 -13 -13	-6 -7 -7 -7	0 0 0 0	7 7 7 7	14 15 15 16	22 23 24 24
	3000		-20	-14	-7	0	8	16	25
	3100 3200 3300 3400	-27 -28 -29	-20 -21 -22 -23	-14 -15 -15 -16	-8 -8 -8	0 0 0 0	8 8 8 9	16 17 17 18	26 27 27 28
	3500	-30	-23	-16	-9	0	9	18	29
		0				1			

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
							0	
2 6 7 9	8 10 13	10 13 17	12 16 20	14 19 24	16 23 29	26 33	100 200 300 400	
11	15	19	24	28	33	38	500	
12 13 14 15	17 18 20 21	21 24 25 27	27 29 31 34	32 35 38 41	38 41 45 48	43 48 52 55	600 700 800 900	
16	22	29	36	43	51	59	1000	
17 18 19 20	24 25 26 27	30 32 33 35	37 39 41 43	45 47 49 51	53 56 58 60	62 65 67 70	1100 1200 1300 1400	
21	28	36	44	53	63	72	1500	
22 23 24 25	29 31 32 33	37 39 40 41	46 48 49 51	55 57 59 61	65 67 69 71	75 77 80 82	1600 1700 1800 1900	3
26	34	43	52	62	73	84	2000	
27 28 28 29	35 36 37 38	44 45 47 48	54 55 57 58	64 66 68 70	75 77 79 81	87 89 91 93	2100 2200 2300 2400	
30	40	49	60	71	83	96	2500	
31 32 33 34	41 42 43 44	51 52 54 55	62 63 65 67	73 75 77 79	85 87 89 92	98 100 103 105	2600 2700 2800 2900	
35	45	56	68	81	94	108	3000	
36 37 38 39	47 48 49 50	58 59 61 62	70 72 73 75	83 85 87 89	96 98 100 103	110 113 115 118	3100 3200 3300 3400	
40	52	64	77	91	105	120	3500	
		2				3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	3500	-30	-23	-16	-9	0	9	18	29
	3600 3700 3800 3900	-31 -32 -33 -34	-24 -25 -26 -27	-17 -17 -18 -18	-9 -9 -9 -10	0 0 0 0	9 9 10 10	19 20 20 21	30 30 31 32
0	4000	-35	-27	-19	-10	0	10	21	33
	4100 4200 4300 4400	-36 -37 -39 -40	-28 -29 -30 -31	-20 -20 -21 -21	-10 -10 -11 -11	0 0 0 0	10 11 11 11	22 22 23 24	34 35 36 36
	4500	-41	-32	-22	-11	0	12	24	37
	4600 4700 4800 4900	-42 -43 -45 -46	-33 -34 -35 -36	-23 -23 -24 -24	-12 -12 -12 -13	0 0 0	12 12 13 13	25 26 26 27	38 39 41 42
	5000	-47	-37	-25	-13	0	13	28	43
	5100 5200 5300 5400	-49 -50 -52 -53	-38 -39 -40 -41	-26 -27 -27 -28	-13 -14 -14 -15	0 0 0 0	14 14 15 15	28 29 30 31	44 45 46 48
1	5500	-55	-42	-29	-15	0	15	32	49
	5600 5700 5800 5900	-56 -58 -60 -62	-43 -45 -46 -47	-30 -31 -32 -32	-15 -16 -16 -17	0 0 0 0	16 16 17 17	33 34 35 36	50 52 53 55
	6000	-63	-49	-33	-17	0	18	37	56
	6100 6200 6300 6400	-65 -67 -69 -71	-50 -52 -53 -55	-34 -35 -36 -37	-18 -18 -19 -19	0 0 0	18 19 19 20	38 39 40 41	58 60 61 63
	6500	-73	-56	-39	-20	0	21	42	65
2	6600 6700 6800 6900	-76 -78 -80 -83	-58 -60 -62 -63	-40 -41 -42 -43	-20 -21 -22 -22	0 0 0 0	21 22 22 23	43 45 46 47	67 68 70 72
	7000	-85	-65	-44	-23	0	24	49	75
					3				

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5W

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
40	52	64	77	91	105	120	3500	
41 42 43 44	53 54 56 57	65 67 69 70	79 81 83 85	93 95 97 100	108 110 113 115	123 126 129 132	3600 3700 3800 3900	
45	58	72	87	102	118	135	4000	
46 48 49 50	60 61 63 65	74 76 78 80	89 91 93 96	105 107 110 112	121 124 127 130	138 141 145 148	4100 4200 4300 4400	
51	66	82	98	115	133	152	4500	
53 54 56 57	68 70 72 73	84 86 88 91	101 103 106 109	118 121 124 127	137 140 143 147	156 160 164 168	4600 4700 4800 4900	3
59	75	93	111	131	151	172	5000	
60 62 64 65	77 80 82 84	95 98 101 103	114 117 120 124	134 138 141 145	155 159 163 167	176 181 186 191	5100 5200 5300 5400	
67	86	106	127	149	172	196	5500	
69 71 73 75	89 91 94 96	109 112 115 118	130 134 138 141	153 157 161 165	176 181 186 191	201 206 212 217	5600 5700 5800 5900	
77	99	121	145	170	196	223	6000	
79 81 84 86	101 104 107 110	125 128 132 135	149 153 157 162	175 179 184 189	201 207 213 219	229 236 242 249	6100 6200 6300 6400	
88	113	139	166	195	225	256	6500	
91 93 96 99	116 120 123 127	143 147 151 156	171 176 181 186	200 206 212 218	231 238 244 252	263 271 278 287	6600 6700 6800 6900	4
102	130	160	192	224	259	295	7000	
		3				4		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	7000	-85	-65	-44	-23	0	24	49	75
2	7100 7200 7300 7400	-87 -90 -93 -95	-67 -69 -71 -73	-46 -47 -48 -50	-23 -24 -25 -25	0 0 0 0	24 25 26 27	50 51 53 54	77 79 81 84
	7500	-98	-75	-51	-26	0	27	56	86
	7600 7700 7800 7900	-101 -104 -107 -110	-77 -80 -82 -84	-53 -54 -56 -58	-27 -28 -28 -29	0 0 0	28 29 30 31	58 60 61 63	89 92 95 98
	8000	-113	-87	-59	-30	0	32	65	101
2	8100 8200 8300 8400	-117 -120 -124 -129	-90 -93 -96 -99	-61 -63 -65 -67	-31 -32 -33 -34	0 0 0	33 34 35 36	68 70 72 74	104 107 110 114
J	8500	-133	-102	- <b>69</b>	-35	0	37	77	118
	8600 8700 8800 8900	-137 -141 -145 -150	-105 -108 -112 -115	-71 -74 -76 -79	-37 -38 -39 -41	0 0 0	39 40 42 43	79 83 86 89	123 128 133 138
	9000	-155	-120	-82	-42	0	45	93	144
4	9100 9200 9300 9400	-161 -167 -174 -181	-124 -129 -134 -140	-85 -89 -92 -96	-44 -46 -48 -50	0 0 0	47 49 51 54	97 101 106 112	150 157 166 175
-	9500	-188	-146	-100	-52	0	56	118	187
	9600 9700	-197 -206	-152 -160	-105 -111	-55 -58	0	60 64	127 140	205
5	9800 9900	-216 -227	-168 -178	-117 -125	-61 -67	0	72 *****		*****
6	9900 9800 9700 9600	-448 -470 -490 -510	-322 -340 -356 -371	-204 -217 -229 -240	-96 -104 -110 -116	0 0 0	89 99 106	183 201	280
/	9500	-529	-386	-250	-121	0	112	215	305
					6				

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5W

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
102	130	160	192	224	259	295	7000	
105 108 111 114	134 138 142 147	165 170 175 180	197 203 209 215	231 238 245 253	266 274 283 292	304 313 323 333	7100 7200 7300 7400	4
118	151	186	222	260	301	344	7500	
122 125 129 133	156 160 165 171	191 197 204 210	229 236 244 252	269 277 286 296	310 321 331 343	355 367 379 392	7600 7700 7800 7900	
137	176	217	260	306	355	407	8000	
142 146 151 157	182 188 194 202	224 232 240 250	269 279 289 301	317 329 341 355	368 382 397 413	422 439 457 476	8100 8200 8300 8400	5
162	209	259	313	370	431	497	8500	
169 175 183	218 227 236 246	270 281 293 307	326 340 355 373	386 403 423 445	450 472 497 527	521 549 581 623	8600 8700 8800 8900	
199	258	322	393	472	566	686	9000	
208 219 231 246	271 286 304 330	340 361 391 446	417 450 506	508 566	626		9100 9200 9300 9400	•
269							9500	
							9600 9700 9800 9900	6
*****	*****	*****	*****	*****	******	******	9900 9800 9700 9600	
379							9500	
				6				

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIG				UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	9500	-529	-386	-250	-121	0	112	215	305
	9400 9300 9200 9100	-548 -566 -584 -602	-400 -414 -428 -442	-259 -269 -278 -287	-126 -131 -135 -140	0 0 0 0	118 123 128 133	227 237 248 257	325 342 359 374
	9000	-621	-455	-296	-145	0	137	267	388
7	8900 8800 8700 8600	-639 -657 -676 -694	-469 -483 -496 -510	-306 -315 -324 -333	-149 -154 -158 -163	0 0 0 0	142 147 151 156	276 286 295 304	403 417 431 445
	8500	- <b>713</b>	-525	-343	-168	0	160	313	458
	8400 8300 8200 8100	-733 -752 -773 -793	-539 -553 -568 -583	-352 -362 -371 -381	-172 -177 -182 -187	0 0 0 0	165 170 174 179	322 332 341 350	472 486 500 514
	8000	-814	-599	-391	-192	0	184	360	528
	7900 7800 7700 7600	-836 -858 -882 -906	-615 -631 -648 -665	-402 -412 -423 -435	-197 -202 -207 -213	0 0 0	189 194 199 204	370 380 390 400	543 557 572 587
	7500	-931	-683	-446	-219	0	209	410	603
	7400 7300 7200 7100	-957 -984 -1013 -1043	-702 -722 -742 -763	-458 -471 -484 -497	-224 -230 -237 -243	0 0 0 0	215 221 226 232	421 432 444 455	618 635 651 668
	7000	-1076	- <b>786</b>	-511	-250	0	239	467	686
8	6900 6800 6700 6600	-1111 -1148 -1189 -1233	-810 -835 -862 -892	-526 -542 -559 -576	-257 -264 -272 -280	0 0 0	245 252 259 266	480 492 506 520	704 722 742 761
	6500	-1282	-923	-595	-289	0	274	534	782
	6400 6300 6200 6100		-958 -996 -1038	-615 -637 -661 -687	-298 -308 -318 -329	0 0 0 0	281 290 298 308	549 565 581 598	804 826 849 874
	6000			-716	-342	0	317	616	899
					8				

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 5W

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE		
400	500	600	700	800	900	1000	METERS	NO.		
379							9500			
411 437 460 481	480 518 550 578	583 627 664	687 737	791			9400 9300 9200 9100	6		
501	605	698	780	847	896		9000			
521 540 559 577	630 654 678 701	730 760 789 817	819 855 890 924	895 939 981 1021	958 1011 1060 1107	1001 1068 1127 1181	8900 8800 8700 8600			
596	725	845	957	1059	1151	1233	8500			
614 632 651 669	748 771 794 817	873 900 928 956	989 1022 1054 1086	1097 1134 1171 1208	1194 1237 1279 1320	1282 1330 1377 1423	8400 8300 8200 8100	7		
688	840	983	1118	1244	1361	1469	8000	1		
707 726 746 766	863 887 911 936	1011 1040 1068 1097	1151 1183 1216 1250	1281 1318 1355 1393	1403 1444 1486 1527	1515 1560 1606 1653	7900 7800 7700 7600			
786	961	1127	1283	1431	1570	1699	7500			
807 828 849 872	986 1012 1038 1065	1157 1187 1218 1250	1318 1353 1388 1425	1470 1509 1549 1590	1613 1656 1700 1745	1746 1794 1842 1891	7400 7300 7200 7100			
894	1093	1282	1462	1631	1791	1940	7000			
918 942 966 992	1122 1151 1181 1212	1315 1350 1385 1421	1499 1538 1578 1619	1673 1717 1761 1806	1837 1885 1933 1983	1991 2043 2095 2149	6900 6800 6700 6600	8		
1019	1244	1458	1661	1853	2034	2204	6500			
1046 1074 1104 1135	1277 1311 1346 1383	1496 1535 1576 1618	1704 1748 1794 1842	1900 1950 2000 2053	2086 2139 2195 2251	2260 2318 2377 2438	6400 6300 6200 6100			
1167	1421	1662	1891	2106	2310	2500	6000			
	8									

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIC	HT OF	TARGET	ABOVE G	UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	6000			-716	-342	0	317	616	899		
	5900 5800 5700 5600			-748	-355 -369 -386 -404	0 0 0 0	328 339 351 363	635 656 677 700	926 954 984 1015		
8	5500					0	377	724	1048		
	5400 5300 5200 5100					0 0 0	392 408 425 444	750 778 807 839	1083 1120 1160 1202		
	5000										
	4900	·			·						
	8										

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	METERS		RANGE	LINE		
400	500	600	700	800	900	1000	METERS	NO.		
1167	1421	1662	1891	2106	2310	2500	6000			
1201 1236 1273 1311	1461 1503 1546 1591	1708 1755 1805 1856	1942 1994 2049 2106	2162 2220 2279 2341	2370 2432 2496 2563	2565 2631 2700 2771	5900 5800 5700 5600			
1352	1639	1910	2165	2406	2632	2844	5500	8		
1395 1440 1488 1539	1689 1741 1796 1855	1966 2025 2086 2151	2227 2291 2359 2429	2473 2542 2615 2691	2703 2778 2855 2935	2919 2998 3079 3164	5400 5300 5200 5100			
		2219	2503	2770	3019	3252	5000			
						3343	4900			
	8									

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

		0.1.2.1.1.0 0.	ĺ	A ONE KNOT WIT		
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-			-0.2+ -1.1+								
+200-			-0.5+ -2.1+								-0.7+ -2.9+
+300-			-0.7+ -3.1+								

- NOTES 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
  2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
  3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-7.3	-40.0
-30	-6.8	-34.4
-20	-6.2	-28.9
-10	-5.5	-23.3
0	-4.9	-17.8
10	-4.3	-12.2
20	-3.6	-6.7
30	-2.9	-1.1
40	-2.2	4.4
50	-1.5	10.0
60	-0.8	15.6
70	0.0	21.1
80	0.8	26.7
90	1.6	32.2
100	2.4	37.8
110	3.2	43.3
120	4.0	48.9
130	4.9	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAITT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
0	0.0			28	1	0.0	0.0	0.00
100 200 300 400	3.6 7.1 10.6 14.3			28 28 28 27	1 1 1 1	0.3 0.5 0.8 1.1	0.1 0.1 0.2 0.3	0.01 0.01 0.02 0.03
500	17.9			27	1	1.3	0.4	0.03
600 700 800 900	21.7 25.4 29.3 33.1	1.9 2.2 2.5	1.08 0.94 0.83	27 26 26 26	1 1 1 1	1.6 1.9 2.2 2.5	0.4 0.5 0.6 0.7	0.04 0.05 0.05 0.06
1000	37.0	2.8	0.74	25	1	2.8	0.8	0.07
1100 1200 1300 1400	41.0 45.0 49.1 53.2	3.0 3.3 3.6 3.9	0.67 0.62 0.57 0.52	25 25 24 24	1 1 1 1	3.0 3.3 3.6 3.9	0.8 0.9 1.0 1.1	0.07 0.08 0.09 0.09
1500	57.4	4.2	0.49	24	1	4.2	1.2	0.10
1600 1700 1800 1900	61.6 65.8 70.1 74.5	4.5 4.8 5.1 5.4	0.45 0.43 0.40 0.38	24 23 23 23	1 1 1 1	4.5 4.8 5.1 5.4	1.3 1.4 1.5 1.5	0.11 0.11 0.12 0.12
2000	78.8	5.8	0.36	23	1	5.8	1.6	0.13
2100 2200 2300 2400	83.3 87.8 92.3 96.9	6.1 6.4 6.7 7.0	0.34 0.32 0.31 0.29	22 22 22 22 22	1 2 2 2	6.1 6.4 6.7 7.0	1.7 1.8 1.9 2.0	0.13 0.14 0.15 0.15
2500	101.5	7.3	0.28	22	2	7.3	2.1	0.16
2600 2700 2800 2900	106.2 110.9 115.6 120.4	7.7 8.0 8.3 8.6	0.27 0.26 0.25 0.24	21 21 21 21	2 2 2 2	7.7 8.0 8.3 8.6	2.2 2.3 2.4 2.5	0.16 0.17 0.17 0.18
3000	125.3	9.0	0.23	21	2	9.0	2.6	0.18
3100 3200 3300 3400	130.2 135.1 140.1 145.1	9.3 9.6 10.0 10.3	0.22 0.22 0.21 0.20	20 20 20 20	2 2 2 2	9.3 9.6 10.0 10.3	2.7 2.8 2.9 3.0	0.19 0.19 0.20 0.20
3500	150.2	10.7	0.19	20	2	10.7	3.1	0.21

FT 155-AR-1 TABLE F CHARGE 5W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE RANGE AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC INC HEAD TAIL DEC INC DEC INC DEC INC M M M M М M М M М М M 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0 0.0 100 0.6 0.0 0.0 0.0 0.0 0.0 0.0 -0.50.0 0.0 0.0 -1.0 -1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.1 -2 -3 200 1.1 2 3 3 300 1.6 2.1 -2.0-3 400 0.0 0.0 -0.1500 2.6 -2.5 0.0 -0.1 0.0 -0.1 -0.20.2 4 0.2 0.3 0.4 0.5 600 3.1 3.6 -2.9 -3.4 0.0  $-0.1 \\ -0.2$ -0.2 -0.1 0.0 -5 5 6 6 7 0.1  $-0.1 \\ -0.2$ 0.0 700 -0.3-6 4.0 4.5 0.1 0.0 -3.8 -4.3 -0.4-0.5800 -0.3-6 -7 900 -0.2-0.41000 4.9 -4.7 0.2 -0.30.1 -0.5-0.6 0.6 -7 8 -0.7 -0.8 1100 5.3 5.7 -5.1 -5.5  $0.2 \\ 0.3$ 0.1 0.2 -0.6 -0.8 0.7 0.8 -0.3-0.4-8 -8 8 1200 1300 6.1 -5.9 0.3 -0.50.2 -0.9-1.01.0 -9 1400 6.5 0.4 0.3 10 -6.3**-0.6** -1.1 -10 1500 6.9 -6.7 0.4 0.4 -1.3 1.2 -0.6 -1.3-10 10 -7.1 -7.4 -7.8 -8.1 -1.5 -1.7 -1.9 -2.1 7.2 7.6 7.9 0.6 0.7 0.9 -1.4 -1.6 -1.7 1600 0.5 -0.7 1.4 1.5 1.7 -10 11 -11 -11 0.6 0.7 -0.8 -0.9 1700 1800 12 1900 8.3 0.8 -1.01.0 -1.9 1.9 -12 2000 -1.1 1.2 8.6 -8.40.9 -2.4-2.02.0 -1212 2.2 2.4 2.5 2.7 -2.6 -2.9  $-2.2 \\ -2.4$ 2100 8.9 -8.7 1.0 -1.3 1.4 -12 13 9.2 9.5 9.8 2200 **-9.0** 1.1 -1.4 1.6 -13  $\begin{array}{c} -2.6 \\ -2.8 \end{array}$ 2300 2400  $-9.3 \\ -9.6$ 1.2 1.9 -3.2-3.413 14 -1.6 -13 2500 10.0 -9.9 1.5 -1.72.4 -3.7 -3.02.9 -13 14 -4.0 -4.3 -4.6 -5.0 1.6 1.7 2.6 2.9 3.1 3.3 14 14 2600 10.3 -10.2-1.9 -3.1-14 -2.0 -2.1 -2.32700 10.6 -10.5-3.3-14 3.5 3.7 -10.73.2 -3.5 -14 2800 10.8 1.9 15 -11.0 -3.7-14 15 2900 11.1 2.0 3.5 3000 11.3 -11.2 2.2 3.9 -2.43.8 -5.3-3.9 -15 15 2.3 2.5 2.7 2.8 -4.2 -4.4 -4.6 -4.8 4.1 4.3 4.5 4.7 15 16 16 16 -2.6 -2.7 -2.9 4.2 4.5 4.9 3100 11.6 -**5.6** -11.5 -15 -11.7 -11.9 -15 -15 3200 3300 11.8 12.0 -**6. 0 -6.3** -3.05.2 3400 12.3 -15 -12.2-6.7

3500

12.5

-12.4

3.0

-3.2

5.6

-7.*0* 

-5.0

4.9

-15

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TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	πГш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	150.2	10.7	0.19	20	2	10.7	3.1	0.21
3600 3700 3800 3900	155.3 160.5 165.7 171.0	11.0 11.3 11.7 12.0	0.19 0.18 0.18 0.17	19 19 19 19	2 2 2 2	11.0 11.3 11.7 12.0	3.2 3.3 3.4 3.5	0.21 0.22 0.22 0.22
4000	176.3	12.4	0.17	19	3	12.4	3.7	0.23
4100 4200 4300 4400	181.6 187.0 192.5 198.0	12.7 13.1 13.5 13.8	0.16 0.16 0.15 0.15	19 18 18 18	3 3 3	12.7 13.1 13.5 13.8	3.8 3.9 4.0 4.1	0.23 0.24 0.24 0.25
4500	203.5	14.2	0.15	18	3	14.2	4.3	0.25
4600 4700 4800 4900	209.2 214.8 220.5 226.3	14.5 14.9 15.3 15.7	0.14 0.14 0.14 0.13	18 18 17 17	3 3 3	14.5 14.9 15.3 15.7	4.4 4.5 4.6 4.8	0.25 0.26 0.26 0.27
5000	232.1	16.0	0.13	17	3	16.0	4.9	0.27
5100 5200 5300 5400	238.0 243.9 249.9 256.0	16.4 16.8 17.2 17.6	0.13 0.12 0.12 0.12	17 17 17 16	3 3 4	16.4 16.8 17.2 17.6	5.0 5.2 5.3 5.5	0.27 0.28 0.28 0.29
5500	262.1	17.9	0.12	16	4	17.9	5.6	0.29
5600 5700 5800 5900	268.3 274.6 280.9 287.3	18.3 18.7 19.1 19.5	0.11 0.11 0.11 0.11	16 16 16 16	4 4 4 4	18.3 18.7 19.1 19.5	5.8 5.9 6.1 6.2	0.29 0.30 0.30 0.31
6000	293.7	19.9	0.11	15	4	19.9	6.4	0.31
6100 6200 6300 6400	300.3 306.9 313.6 320.4	20.4 20.8 21.2 21.6	0.10 0.10 0.10 0.10	15 15 15 15	4 4 5 5	20.4 20.8 21.2 21.6	6.5 6.7 6.9 7.0	0.31 0.32 0.32 0.33
6500	327.3	22.0	0.10	14	5	22.0	7.2	0.33
6600 6700 6800 6900	334.3 341.4 348.6 355.9	22.5 22.9 23.3 23.8	0.09 0.09 0.09 0.09	14 14 14 14	5 5 5 5	22.5 22.9 23.3 23.8	7.4 7.6 7.8 8.0	0.33 0.34 0.34 0.35
7000	363.3	24.2	0.09	13	6	24.2	8.2	0.35

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 5W TABLE F CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RANGE WIND 1 KNOT		T	AIR TEMP 1 PCT		R I TY CT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	М	M	M	М	М	М	М	М	М
3500	12.5	-12.4	3.0	-3.2	5.6	-7.0	-5.0	4.9	-15	16
3600 3700 3800 3900	12.7 12.9 13.1 13.4	-12.6 -12.8 -13.0 -13.3	3.2 3.4 3.6 3.7	-3.3 -3.5 -3.6 -3.8	6.0 6.4 6.8 7.2	-7.4 -7.7 -8.1 -8.5	-5.2 -5.4 -5.6 -5.9	5.1 5.3 5.5 5.7	-15 -16 -16 -16	16 16 17 17
4000	13.6	-13.5	3.9	-4.0	7.6	-8.9	-6.1	5.9	-16	17
4100 4200 4300 4400	13.8 14.0 14.2 14.4	-13.7 -13.9 -14.1 -14.2	4.1 4.3 4.5 4.7	-4.1 -4.3 -4.4 -4.6	8.0 8.4 8.8 9.3	-9.2 -9.6 -10.0 -10.4	-6.3 -6.5 -6.8 -7.0	6.1 6.4 6.6 6.8	-16 -16 -16 -16	17 17 17 17
4500	14.6	-14.4	4.9	-4.8	9.7	-10.8	-7.2	7.0	-16	17
4600 4700 4800 4900	14.8 15.0 15.2 15.3	-14.6 -14.8 -15.0 -15.2	5.1 5.4 5.6 5.8	-5.0 -5.1 -5.3 -5.5	10.1 10.6 11.0 11.4	-11.1 -11.5 -11.9 -12.3	-7.5 -7.7 -7.9 -8.2	7.3 7.5 7.8 8.0	-16 -16 -17 -17	17 17 18 18
5000	15.5	-15.4	6.0	-5.6	11.9	-12.6	-8.4	8.3	-17	18
5100 5200 5300 5400	15.7 15.9 16.1 16.3	-15.5 -15.7 -15.9 -16.1	6.2 6.4 6.6 6.9	-5.8 -6.0 -6.2 -6.3	12.3 12.8 13.2 13.6	-13.0 -13.4 -13.7 -14.1	-8.7 -8.9 -9.2 -9.4	8.5 8.8 9.0 9.3	-17 -17 -17 -17	18 18 18 18
5500	16.5	-16.2	7.1	-6.5	14.1	-14.5	-9.7	9.6	-17	18
5600 5700 5800 5900	16.7 16.9 17.1 17.3	-16.4 -16.6 -16.8 -16.9	7.3 7.5 7.7 7.9	-6.7 -6.9 -7.0 -7.2	14.5 14.9 15.3 15.7	-14.8 -15.2 -15.5 -15.8	-10.0 -10.2 -10.5 -10.8	9.9 10.1 10.4 10.7	-17 -17 -17 -17	18 18 18 18
6000	17.5	-17.1	8.2	-7.4	16.1	-16.2	-11.1	11.0	-17	18
6100 6200 6300 6400	17.7 17.9 18.1 18.3	-17.3 -17.5 -17.7 -17.8	8.4 8.6 8.8 9.0	-7.6 -7.7 -7.9 -8.1	16.5 16.9 17.3 17.7	-16.5 -16.9 -17.2 -17.5	-11.4 -11.7 -12.0 -12.3	11.3 11.6 11.9 12.2	-17 -17 -17 -17	18 18 18 18
6500	18.5	-18.0	9.3	-8.2	18.1	-17.8	-12.6	12.5	-17	18
6600 6700 6800 6900	18.7 18.9 19.1 19.3	-18.2 -18.4 -18.6 -18.7	9.5 9.7 9.9 10.1	-8.4 -8.6 -8.8 -8.9	18.4 18.8 19.1 19.5	-18.1 -18.5 -18.8 -19.1	-12.9 -13.2 -13.6 -13.9	12.8 13.2 13.5 13.8	-17 -17 -17 -17	18 18 18 18
7000	19.5	-18.9	10.4	-9.1	19.8	-19.4	-14.2	14.2	-17	18

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	πГш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	FOR	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	363.3	24.2	0.09	13	6	24.2	8.2	0.35
7100 7200 7300 7400	370.8 378.4 386.2 394.1	24.7 25.2 25.6 26.1	0.09 0.08 0.08 0.08	13 13 13 13	6666	24.7 25.2 25.6 26.1	8.4 8.6 8.8 9.0	0.35 0.36 0.36 0.37
7500	402.2	26.6	0.08	12	6	26.6	9.3	0.37
7600 7700 7800 7900	410.4 418.8 427.3 436.1	27.1 27.6 28.1 28.6	0.08 0.08 0.08 0.07	12 12 12 11	7 7 7 7	27.1 27.6 28.1 28.6	9.5 9.7 10.0 10.2	0.38 0.38 0.38 0.39
8000	445.1	29.1	0.07	11	8	29.1	10.5	0.39
8100 8200 8300 8400	454.3 463.7 473.4 483.4	29.7 30.2 30.8 31.4	0.07 0.07 0.07 0.07	11 10 10 10	8899	29.7 30.2 30.8 31.4	10.8 11.1 11.4 11.7	0.40 0.40 0.41 0.41
8500	493.7	32.0	0.07	10	10	32.0	12.0	0.42
8600 8700 8800 8900	504.3 515.3 526.8 538.8	32.6 33.2 33.9 34.5	0.07 0.06 0.06 0.06	9 9 9 8	10 11 11 12	32.6 33.2 33.9 34.5	12.4 12.7 13.1 13.5	0.42 0.43 0.44 0.44
9000	551.4	35.2	0.06	8	13	35.2	13.9	0.45
9100 9200 9300 9400	564.6 578.7 593.9 610.2	36.0 36.8 37.6 38.5	0.06 0.06 0.06 0.06	7 7 6 6	14 15 17 18	36.0 36.8 37.6 38.5	14.4 14.9 15.5 16.1	0.46 0.46 0.47 0.48
9500	628.3	39.4	0.06	5	21	39.4	16.8	0.49
9600 9700 9800 9900	648.6 672.5 702.9 756.3	40.5 41.7 43.3 45.9	0.05 0.05 0.05 0.05	5 4 2	24 30 48	40.5 41.7 43.3 45.9	17.7 18.7 20.0 22.7	0.50 0.51 0.53
******* 9900 9800 9700 9600	******* 812.9 865.8 895.8 919.3	******* 48.5 50.9 52.2 53.2	0.05 0.04 0.04 0.04	****** 2 4 5	51 33 26	******* 48.5 50.9 52.2 53.2	25.8 29.3 31.4 33.3	0.65 0.67 0.69
9500	939.2	54.0	0.04	5	22	54.0	34.9	0.71

CHARGE 5W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

. 522,	D, M73	JAI								
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	1	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	М	М	M	М	М	М	М	М	М	М
7000	19.5	-18.9	10.4	-9.1	19.8	-19.4	-14.2	14.2	-17	18
7100 7200 7300 7400	19.7 19.9 20.1 20.3	-19.1 -19.3 -19.5 -19.7	10.6 10.8 11.0 11.2	-9.3 -9.5 -9.6 -9.8	20.2 20.5 20.8 21.1	-19.7 -19.9 -20.2 -20.5	-14.5 -14.9 -15.2 -15.6	14.5 14.9 15.3 15.7	-17 -17 -16 -16	18 18 18 18
7500	20.6	-19.8	11.4	-10.0	21.4	-20.7	-15.9	16.0	-16	18
7600 7700 7800 7900	20.8 21.0 21.3 21.5	-20.0 -20.2 -20.4 -20.6	11.7 11.9 12.1 12.3	-10.1 -10.3 -10.5 -10.6	21.7 22.0 22.3 22.6	-21.0 -21.2 -21.5 -21.7	-16.3 -16.6 -17.0 -17.4	16.4 16.8 17.2 17.6	-16 -16 -16 -16	18 18 18 18
8000	21.7	-20.8	12.5	-10.8	22.8	-21.9	-17.7	18.0	-16	18
8100 8200 8300 8400	22.0 22.2 22.4 22.7	-21.0 -21.2 -21.5 -21.7	12.7 12.9 13.1 13.3	-11.0 -11.1 -11.3 -11.4	23.0 23.3 23.5 23.7	-22.1 -22.3 -22.6 -22.8	-18.1 -18.5 -18.9 -19.3	18.4 18.8 19.2 19.7	-16 -16 -16 -16	18 18 18 18
8500	23.0	-21.9	13.5	-11.6	23.9	-23.0	-19.8	20.2	-16	18
8600 8700 8800 8900	23.2 23.5 23.8 24.1	-22.1 -22.3 -22.5 -22.8	13.7 13.9 14.1 14.3	-11.8 -11.9 -12.1 -12.2	24.1 24.2 24.3 24.4	-23.1 -23.3 -23.4 -23.6	-20.2 -20.6 -21.1 -21.5	20.7 21.1 21.7 22.2	-16 -16 -16 -16	18 18 18 18
9000	24.4	-23.0	14.5	-12.4	24.5	-23.7	-21.9	22.7	-16	18
9100 9200 9300 9400	24.7 25.0 25.3 25.6	-23.2 -23.5 -23.8 -24.0	14.7	-12.5 -12.7 -12.8 -13.0	24.5 24.6 24.6 24.6	-23.8 -23.9 -24.0 -24.0	-22.4 -22.9 -23.4 -23.9	23.2 23.7 24.2 24.8	-16 -15 -15 -15	18 18 18 18
9500	25.9	-24.3		-13.1	24.6	-24.1	-24.4	25.5	-15	18
9600 9700 9800 9900	26.4	-24.6 -24.8 -25.1 -25.4		-13.2 -13.4 -13.5 -13.7	24.5	-24.2 -24.3 -24.3 -24.3	-25.0 -25.5 -26.1 -26.6	26.3	-15 -15 -15 -15	18 18 18
*****	*****	******	*****	******	******	******	******	****	*****	****
9900 9800 9700 9600	26.8	-26.2 -26.0 -25.8 -25.6		-13.3 -13.1 -13.0 -12.8	23.3	-22.4 -22.0 -21.7 -21.4	-29.0 -28.8 -28.5 -28.3	27.2	-15 -14 -14 -14	17 17 17
9500	26.6	-25.4		-12.7	22.8	-21.2	-28.0	27.2	-14	17

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

						ı		
1	2	3	4	5	6	7	8	9
R A N	E L F	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	E V	FUZE M582	DEC HOB	D ELEV	K	1210111	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
9500	939.2	54.0	0.04	5	22	54.0	34.9	0.71
9400 9300 9200 9100	956.9 972.8 987.5 1001.3	54.7 55.3 55.8 56.4	0.04 0.04 0.04 0.04	6 7 7 8	20 18 16 15	54.7 55.3 55.8 56.4	36.5 38.0 39.5 40.9	0.73 0.75 0.76 0.78
9000	1014.1	56.8	0.04	8	14	56.8	42.3	0.79
8900 8800 8700 8600	1026.4 1038.0 1049.1 1059.7	57.3 57.7 58.1 58.4	0.04 0.04 0.04 0.04	8 9 9 10	13 13 12 11	57.3 57.7 58.1 58.4	43.7 45.1 46.5 47.9	0.81 0.83 0.84 0.86
8500	1070.0	58.8	0.04	10	11	58.8	49.4	0.87
8400 8300 8200 8100	1079.9 1089.4 1098.7 1107.7	59.1 59.4 59.7 60.0	0.04 0.04 0.04 0.04	10 11 11 11	10 10 9 9	59.1 59.4 59.7 60.0	50.8 52.2 53.7 55.2	0.89 0.91 0.92 0.94
8000	1116.4	60.3	0.04	12	9	60.3	56.7	0.96
7900 7800 7700 7600	1124.9 1133.2 1141.3 1149.2	60.6 60.8 61.1 61.3	0.04 0.04 0.04 0.04	12 12 13 13	8 8 7	60.6 60.8 61.1 61.3	58.3 59.9 61.5 63.2	0.98 1.00 1.02 1.04
7500	1156.9	61.6	0.04	13	7	61.6	64.9	1.06
7400 7300 7200 7100	1164.5 1171.9 1179.1 1186.2	61.8 62.0 62.2 62.4	0.04 0.04 0.04 0.04	13 14 14 14	7 7 6 6	61.8 62.0 62.2 62.4	66.6 68.4 70.3 72.2	1.08 1.10 1.13 1.15
7000	1193.2	62.6	0.04	15	6	62.6	74.2	1.18
6900 6800 6700 6600	1200.0 1206.7 1213.2 1219.6	62.8 63.0 63.2 63.4	0.04 0.04 0.04 0.04	15 15 15 16	6655	62.8 63.0 63.2 63.4	76.3 78.5 80.8 83.2	1.21 1.23 1.26 1.30
6500	1225.9	63.5	0.04	16	5	63.5	85.7	1.33
6400 6300 6200 6100	1232.1 1238.1 1244.1 1249.9	63.7 63.9 64.0 64.2	0.04 0.04 0.04 0.04	16 17 17 17	5544	63.7 63.9 64.0 64.2	88.4 91.2 94.2 97.5	1.37 1.40 1.45 1.49
6000	1255.5	64.4	0.04	18	4	64.4	101.0	1.54

CHARGE 5W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R			Г	RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	1	IR EMP PCT	A I DENS 1 F	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	М	M	M	M	М	М	M	М	М	М
9500	26.6	-25.4		-12.7	22.8	-21.2	-28.0	27.2	-14	17
9400 9300 9200 9100	26.5 26.3 26.1 25.8	-25.2 -25.0 -24.7 -24.5	14.9	-12.5 -12.3 -12.2 -12.0	22.4 22.0 21.7 21.4	-20.9 -20.6 -20.3 -20.1	-27.7 -27.4 -27.2 -26.9	27.0 26.9 26.6 26.4	-14 -14 -14 -14	17 16 16 16
9000	25.6	-24.3	14.8	-11.9	21.1	-19.8	-26.6	26.1	-13	16
8900 8800 8700 8600	25.4 25.1 24.9 24.7	-24.0 -23.8 -23.5 -23.3	14.7 14.5 14.4 14.2	-11.7 -11.5 -11.4 -11.2	20.8 20.5 20.2 20.0	-19.6 -19.3 -19.1 -18.8	-26.3 -25.9 -25.6 -25.3	25.9 25.6 25.3 25.0	-13 -13 -13 -13	15 15 15 15
8500	24.4	-23.0	14.1	-11.0	19.7	-18.6	-25.0	24.8	-12	15
8400 8300 8200 8100	24.1 23.9 23.6 23.4	-22.8 -22.5 -22.3 -22.0	14.0 13.8 13.7 13.5	-10.8 -10.7 -10.5 -10.3	19.5 19.2 19.0 18.7	-18.4 -18.2 -17.9 -17.7	-24.7 -24.4 -24.0 -23.7	24.5 24.2 23.9 23.6	-12 -12 -12 -11	14 14 14 14
8000	23.1	-21.8	13.4	-10.1	18.5	-17.5	-23.4	23.3	-11	13
7900 7800 7700 7600	22.8 22.6 22.3 22.0	-21.5 -21.2 -21.0 -20.7	13.2 13.1 13.0 12.8	-9.8 -9.6 -9.4 -9.1	18.2 18.0 17.8 17.5	-17.3 -17.1 -16.9 -16.7	-23.0 -22.7 -22.4 -22.0	22.9 22.6 22.3 22.0	-11 -11 -10 -10	13 13 13 13
7500	21.7	-20.4	12.7	-8.9	17.3	-16.4	-21.7	21.7	-10	12
7400 7300 7200 7100	21.5 21.2 20.9 20.6	-20.2 -19.9 -19.6 -19.3	12.5 12.4 12.2 12.0	-8.6 -8.3 -8.0 -7.6	17.1 16.9 16.7 16.5	-16.2 -16.0 -15.9 -15.7	-21.3 -21.0 -20.6 -20.3	21.3 21.0 20.7 20.3	-10 -9 -9 -9	12 12 11 11
7000	20.3	-19.1	11.9	-7.3	16.3	-15.5	-19.9	20.0	-8	11
6900 6800 6700 6600	20.0 19.7 19.5 19.2	-18.8 -18.5 -18.2 -17.9	11.7 11.6 11.4 11.2		16.1 15.9 15.7 15.5	-15.3 -15.1 -14.9 -14.7	-19.5 -19.1 -18.8 -18.4	19.7 19.3 19.0 18.6	-8 -8 -7 -7	11 10 10 9
6500	18.9	-17.6	11.0		15.3	-14.6	-18.0	18.3	-6	9
6400 6300 6200 6100	18.6 18.3 18.0 17.7	-17.3 -17.1 -16.8 -16.5	10.8 10.7 10.5 10.2		15.1 14.9 14.8 14.6	-14.4 -14.2 -14.1 -13.9	-17.6 -17.2 -16.8 -16.3	17.9 17.5 17.2 16.8	-6 -5 -5 -4	9 8 8 7
6000	17.3	-16.2	10.0		14.4	-13.8	-15.9	16.4	-4	7

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A	E L	FS FOR GRAZE	DFS PER	DR PER	F O	TIME		MUTH CTIONS
N G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
6000	1255.5	64.4	0.04	18	4	64.4	101.0	1.54
5900 5800 5700 5600	1261.1 1266.5 1271.8 1277.0	64.5 64.7 64.8 65.0	0.04 0.04 0.04 0.04	18 19 19 20	4 4 4	64.5 64.7 64.8 65.0	104.8 108.8 113.3 118.1	1.59 1.65 1.71 1.78
5500	1282.0	65.1	0.04	20		65.1	123.5	1.86
5400 5300 5200	1286.9 1291.6 1296.2	65.3 65.4 65.6	0.04 0.04 0.04	21 21		65.3 65.4 65.6	129.4 135.9 143.1	
5115	1300.0							

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 5W TABLE F CORRECTION FACTORS

IUZL, F	-,	· /···										
1	10	11	12	12 13 14 15 16 17 18								
R				RANGE	CORREC	TIONS F	OR					
A N G E		ZLE CITY M/S	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		A I DENS 1 F	I TY	PROJ WT OF 1 SQ (4 SQ STD)			
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC		
M	М	M	M	M	М	М	М	M	М	М		
6000	17.3	-16.2	10.0		14.4	-13.8	-15.9	16.4	-4	7		
5900 5800 5700 5600	17.0 16.7 16.4 16.1	-15.8 -15.5 -15.2 -14.9	9.8 9.5 9.3 9.0		14.3 14.1 14.0 13.9	-13.7 -13.5 -13.4 -13.3	-15.4 -15.0 -14.5	16.0 15.6 15.2 14.8	-3 -3 -2 -1	6 6 5 4		
5500	15.8	-14.6	8.7		13.8	-13.3		14.3	0	3		
5400 5300 5200	15.4 15.1 14.7	-14.3 -13.9	8.4 8.0 7.7		13.7 13.6 13.5	-13.2 -13.1		13.9 13.4 12.9	1 2 3	2 1 0		

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
Ŗ	E	ı	PROB	ABLE	ERROF	RS	ANGLE	СОТ	TML	МО		SITE
A N	L E			F	UZE M	82	OF FALL	ANGLE OF	VEL		ANGLE	OR OF SITE
G E	V	R	D	НВ	ТВ	RB		FALL			+1 MIL SITE	-1 MIL SITE
M	MIL	М	M	М	SEC	М	MIL		M/S	M	MIL	MIL
0	0.0	6	0				0		380	0	0.000	0.00
500 1000 1500 2000	17.9 37.0 57.4 78.8	6 6 7 8	0 0 1 1	1 1 1	0.04 0.04 0.04	14 14 13	19 39 63 88	55.0 25.8 16.2 11.6	362 347 334 323	2 9 22 41	0.000 0.001 0.003 0.005	0.00 -0.001 -0.002 -0.004
2500	101.5	9	1	2	0.04	13	115	8.8	315	67	0.008	-0.007
3000 3500 4000 4500	125.3 150.2 176.3 203.5	10 11 12 13	1 2 2 2	2 2 3 3	0.04 0.04 0.04 0.04	13 13 13 13	144 175 207 240	7.0 5.8 4.9 4.2	307 301 296 291	100 141 191 251	0.011 0.016 0.022 0.030	-0.010 -0.014 -0.020 -0.027
5000	232.1	14	2	4	0.04	14	276	3.6	287	320	0.041	-0.035
5500 6000 6500 7000	262.1 293.7 327.3 363.3	15 16 17 19	3 3 4	4 5 6 6	0.04 0.04 0.04 0.04	14 14 15 16	313 352 394 439	3.2 2.8 2.5 2.2	283 280 277 274	401 495 604 730	0.054 0.072 0.097 0.130	-0.047 -0.062 -0.082 -0.110
7500	402.2	20	4	7	0.05	16	486	1.9	272	877	0.177	-0.147
8000 8500 9000 9500	445.1 493.7 551.4 628.3	21 23 25 27	4 5 5 6	8 10 11 14	0.05 0.05 0.05 0.05	17 18 20 21	539 597 664 751	1.7 1.5 1.3 1.1	270 269 268 269	1051 1262 1529 1908	0.249 0.367 0.615 1.787	-0.200 -0.282 -0.421 -0.737
9500 9000 8500 8000	939.2 1014.1 1070.0 1116.4	30 28 27 25	7 8 7 7	25 28 31 32	0.07 0.08 0.08 0.08	22 21 20 19	1056 1121 1170 1210	0.6 0.5 0.4 0.4	281 284 286 288	3540 3914 4177 4383	-2.852 -1.676 -1.424 -1.298	1.80 1.49 1.34 1.25
7500	1156.9	24	7	34	0.08	18	1245	0.4	289	4551	-1.219	1.19
7000 6500 6000 5500	1193.2 1225.9 1255.5 1282.0	22 20 18	7 7 6 6	35 36 37 38	0.09 0.09 0.09 0.09	17 15 14 12	1277 1308 1337 1367	0.3 0.3 0.3 0.2	290 291 291 291	4692 4811 4911 4993	-1.164 -1.123 -1.091 -1.064	1.14 1.11 1.08 1.05

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H CHARGE 5W ROTATION - RANGE

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

	AZIMUTH OF TARGET - MILS												
RANGE	0	200	400	600	800	1000	1200	1400	1600				
METERS	3200	3000	2800	2600	2400	2200	2000	1800	1600				
500	0	-1+	-1+	-2+	-2+	-2+	-3+	-3+	-3+				
1000	0	-1+	-2+	-3+	-4+	-4+	-5+	-5+	-5+				
1500	0	-1+	-3+	-4+	-5+	-6+	-7+	-7+	-7+				
2000	0	-2+	-4+	-5+	-7+	-8+	-9+	-9+	-10+				
2500	0	-2+	-4+	-6+	-8+	-10+	-11+	-11+	-12+				
3000	0	-3+	-5+	-7+	-9+	-11+	-12+	-13+	- 13+				
3500	0	-3+	-6+	-8+	-11+	-13+	-14+	-15+	- 15+				
4000	0	-3+	-6+	-9+	-12+	-14+	-16+	-17+	- 17+				
4500	0	-4+	-7+	-10+	-13+	-15+	-17+	-18+	- 19+				
5000	0	-4+	-8+	-11+	-14+	-17+	-19+	-20+	-20+				
5500	0 0 0	-4+	-8+	-12+	-15+	-18+	-20+	-21+	-21+				
6000		-4+	-9+	-13+	-16+	-19+	-21+	-22+	-23+				
6500		-5+	-9+	-13+	-17+	-20+	-22+	-23+	-24+				
7000		-5+	-9+	-14+	-18+	-21+	-23+	-24+	-25+				
7500	0	-5+	-10+	-14+	-18+	-21+	-24+	-25+	-26+				
8000	0	-5+	-10+	-14+	-18+	-22+	-24+	-25+	-26+				
8500	0	-5+	-10+	-14+	-18+	-22+	-24+	-25+	-26+				
9000	0	-5+	-10+	-14+	-18+	-21+	-24+	-25+	-25+				
9500	0	-5+	-9+	-13+	-17+	-20+	-22+	-23+	-24+				
*****	****	*****	*****	******	*****	*****	******	*****	******				
9500	0	-1+	-3+	- 4+	-5+	-6+	-7+	-7+	-7+				
9000	0	0	-1+	- 1+	-1+	-1+	-2+	-2+	-2+				
8500	0	+1-	+1-	+2-	+2-	+2-	+3-	+3-	+3-				
8000	0	+1-	+3-	+4-	+5-	+6-	+6-	+7-	+7-				
7500	0	+2-	+4-	+6-	+8-	+9-	+10-	+10-	+11-				
7000	0	+3-	+5-	+8 <sup>-</sup>	+10 <sup>-</sup>	+12 <sup>-</sup>	+13 <sup>-</sup>	+14-	+14-				
6500	0	+4-	+7-	+10 <sup>-</sup>	+13 <sup>-</sup>	+15 <sup>-</sup>	+17 <sup>-</sup>	+18-	+18-				
6000	0	+4-	+9-	+13 <sup>-</sup>	+16 <sup>-</sup>	+19 <sup>-</sup>	+21 <sup>-</sup>	+22-	+23-				
5500	0	+6-	+11-	+16 <sup>-</sup>	+20 <sup>-</sup>	+24 <sup>-</sup>	+26 <sup>-</sup>	+28-	+28-				
	3200	3400	3600	3800	4000	4200	4400	4600	4800				
	6400	6200	6000	5800	5600	5400	5200	5000	4800				
			A	ZIMUTH (	OF TARG	ET - MII	LS						

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	. 94	. 87	. 77	. 64	. 50	. 34

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4000	R0.1L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	L0.1R		
4500	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R		
5000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R		
5500	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R		
6000	R0.1L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.1R		
6500	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R		
7000	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R		
7500	R0.3L	R0.2L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.2R	L0.3R		
8000	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R		
8500	R0.4L	R0.4L	R0.3L	R0.1L	0.0	L0.1R	L0.3R	L0.4R	L0.4R		
9000	R0.5L	R0.5L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.5R	L0.5R		
9500	R0.6L	R0.6L	R0.5L	R0.2L	0.0	L0.2R	L0.5R	L0.6R	L0.6R		
9500 9000 8500 8000	******** R1.6L R2.0L R2.3L R2.7L	R1.5L R1.9L R2.2L R2.5L	R1 . 2L R1 . 4L R1 . 7L R1 . 9L	R0.6L R0.8L R0.9L R1.0L	0.0 0.0 0.0 0.0	L0.6R L0.8R L0.9R L1.0R	L1.2R L1.4R L1.7R L1.9R	L1.5R L1.9R L2.2R L2.5R	L1.6R L2.0R L2.3R L2.7R		
7500	R3.0L	R2.8L	R2.1L	R1.2L	0.0	L1.2R	L2.1R	L2.8R	L3.0R		
7000	R3.4L	R3.1L	R2.4L	R1.3L	0.0	L1.3R	L2.4R	L3.1R	L3.4R		
6500	R3.7L	R3.4L	R2.6L	R1.4L	0.0	L1.4R	L2.6R	L3.4R	L3.7R		
6000	R4.1L	R3.8L	R2.9L	R1.6L	0.0	L1.6R	L2.9R	L3.8R	L4.1R		
5500	R4.4L	R4.1L	R3.1L	R1.7L	0.0	L1.7R	L3.1R	L4.1R	L4.4R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZI	MUTH OF	TARGE 1	Γ - MILS	i				

### 0 DEGREES LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1500	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
3500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R		
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
4500	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
5000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R		
5500	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R		
6000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R		
6500	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R		
7000	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.4R	L0.5R	L0.5R		
7500	L0.1R	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.5R	L0.6R	L0.6R		
8000	0.0	L0.1R	L0.1R	L0.2R	L0.4R	L0.5R	L0.6R	L0.6R	L0.7R		
8500	0.0	0.0	L0.1R	L0.2R	L0.4R	L0.5R	L0.7R	L0.7R	L0.8R		
9000	R0.1L	0.0	L0.1R	L0.2R	L0.4R	L0.6R	L0.8R	L0.9R	L0.9R		
9500	R0.2L	R0.1L	0.0	L0.2R	L0.5R	L0.7R	L0.9R	L1.1R	L1.1R		
9500 9000 8500 8000	******** R1 . 0L R1 . 3L R1 . 6L R1 . 9L	R0.8L R1.1L R1.4L R1.7L	R0.5L R0.7L R0.9L R1.1L	0.0 R0.1L R0.2L R0.3L	L0.6R L0.7R L0.7R L0.7R L0.7R	L1.3R L1.4R L1.6R L1.7R	L1.8R L2.1R L2.3R L2.6R	L2.1R L2.5R L2.8R L2.8R L3.2R	L2.3R L2.7R L3.0R L3.4R		
7500	R2.2L	R2.0L	R1.4L	R0.4L	L0.7R	L1.9R	L2.8R	L3.5R	L3.7R		
7000	R2.6L	R2.3L	R1.6L	R0.5L	L0.7R	L2.0R	L3.1R	L3.8R	L4.0R		
6500	R2.9L	R2.6L	R1.8L	R0.7L	L0.7R	L2.1R	L3.3R	L4.1R	L4.4R		
6000	R3.3L	R3.0L	R2.1L	R0.8L	L0.7R	L2.3R	L3.6R	L4.5R	L4.8R		
5500	R3.6L	R3.3L	R2.3L	R0.9L	L0.7R	L2.4R	L3.8R	L4.8R	L5.1R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGET	· - MILS					

### 10 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 20 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R		
2500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
3500	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R		
4500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R		
5000	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R		
5500	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R		
6000	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R		
6500	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R		
7000	L0.4R	L0.4R	L0.4R	L0.5R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R		
7500	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L0.9R		
8000	L0.4R	L0.4R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L1.0R	L1.0R		
8500	L0.4R	L0.4R	L0.5R	L0.6R	L0.8R	L0.9R	L1.0R	L1.1R	L1.1R		
9000	L0.4R	L0.4R	L0.5R	L0.7R	L0.8R	L1.0R	L1.2R	L1.3R	L1.3R		
9500	L0.3R	L0.4R	L0.5R	L0.7R	L0.9R	L1.2R	L1.4R	L1.5R	L1.5R		
9500	R0.3L	R0.1L	L0.2R	L0.7R	L1.3R	L1.9R	L2.4R	L2.7R	L2.8R		
9000	R0.5L	R0.4L	0.0	L0.6R	L1.3R	L2.1R	L2.7R	L3.1R	L3.2R		
8500	R0.8L	R0.7L	R0.2L	L0.5R	L1.4R	L2.2R	L2.9R	L3.4R	L3.6R		
8000	R1.1L	R0.9L	R0.4L	L0.4R	L1.4R	L2.4R	L2.2R	L3.7R	L3.9R		
7500	R1.4L	R1.2L	R0.6L	L0.4R	L1.4R	L2.5R	L3.4R	L4.1R	L4.3R		
7000	R1.7L	R1.5L	R0.8L	L0.2R	L1.5R	L2.7R	L3.7R	L4.4R	L4.6R		
6500	R2.0L	R1.8L	R1.0L	L0.1R	L1.5R	L2.8R	L3.9R	L4.7R	L5.0R		
6000	R2.4L	R2.1L	R1.2L	0.0	L1.5R	L2.9R	L4.2R	L5.0R	L5.3R		
5500	R2.7L	R2.4L	R1.5L	R0.1L	L1.5R	L3.1R	L4.4R	L5.3R	L5.6R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZI	MUTH OF	TARGE T	- MILS					

20 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

160

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5W

### ROTATION - AZIMUTH

### CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	0.0	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1500	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
3500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R		
4500	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R		
5000	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
5500	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R		
6000	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R		
6500	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R		
7000	L0.7R	L0.7R	L0.7R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R		
7500	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.1R	L1.2R		
8000	L0.7R	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R		
8500	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.4R	L1.4R	L1.5R		
9000	L0.8R	L0.8R	L0.9R	L1.1R	L1.2R	L1.4R	L1.5R	L1.6R	L1.7R		
9500	L0.8R	L0.9R	L1.0R	L1.2R	L1.4R	L1.6R	L1.8R	L1.9R	L1.9R		
9500 9000 8500 8000	******** L0.4R L0.2R 0.0 R0.3L	L0.6R L0.3R L0.1R R0.1L	L0.9R L0.7R L0.6R L0.4R	L1.3R L1.3R L1.2R L1.2R L1.2R	L1.9R L2.0R L2.0R L2.0R L2.1R	L2.4R L2.6R L2.8R L2.8R L3.0R	L2.9R L3.2R L3.5R L3.7R	L3.2R L3.6R L3.9R L4.2R	L3.3R L3.7R L4.1R L4.4R		
7500	R0.5L	R0.3L	L0.3R	L1.1R	L2.1R	L3.1R	L3.9R	L4.5R	L4.7R		
7000	R0.8L	R0.6L	L0.1R	L1.0R	L2.1R	L3.2R	L4.2R	L4.8R	L5.0R		
6500	R1.1L	R0.8L	R0.1L	L0.9R	L2.1R	L3.4R	L4.4R	L5.1R	L5.4R		
6000	R1.4L	R1.1L	R0.4L	L0.8R	L2.1R	L3.5R	L4.6R	L5.4R	L5.7R		
5500	R1.7L	R1.4L	R0.6L	L0.7R	L2.1R	L3.6R	L4.8R	L5.7R	L6.0R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGE T	- MILS					

### 30 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 40 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R		
3000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
3500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R		
4000	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
4500	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R		
5000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R		
5500	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R		
6000	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R		
6500	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R		
7000	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R		
7500	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R		
8000	L1.1R	L1.1R	L1.1R	L1.2R	L1.3R	L1.4R	L1.5R	L1.5R	L1.6R		
8500	L1.1R	L1.2R	L1.2R	L1.3R	L1.4R	L1.6R	L1.6R	L1.7R	L1.7R		
9000	L1.2R	L1.2R	L1.3R	L1.4R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R		
9500	L1.3R	L1.3R	L1.4R	L1.6R	L1.8R	L1.9R	L2.1R	L2.2R	L2.3R		
9500 9000 8500 8000	******** L1.1R L1.0R L0.8R L0.6R	L1.2R L1.1R L0.9R L0.8R	L1.5R L1.4R L1.3R L1.2R	L1.9R L1.9R L1.9R L1.9R L1.9R	L2.4R L2.5R L2.6R L2.7R	L2.9R L3.1R L3.3R L3.4R	L3.3R L3.6R L3.9R L4.1R	L3.5R L3.9R L4.3R L4.5R	L3.6R L4.1R L4.4R L4.7R		
7500	L0.4R	L0.6R	L1.1R	L1.8R	L2.7R	L3.6R	L4.3R	L4.8R	L5.0R		
7000	L0.2R	L0.4R	L0.9R	L1.7R	L2.7R	L3.7R	L4.5R	L5.1R	L5.3R		
6500	R0.1L	L0.1R	L0.7R	L1.7R	L2.7R	L3.8R	L4.8R	L5.4R	L5.6R		
6000	R0.4L	R0.1L	L0.5R	L1.6R	L2.8R	L3.9R	L5.0R	L5.6R	L5.9R		
5500	R0.7L	R0.4L	L0.3R	L1.4R	L2.7R	L4.0R	L5.1R	L5.9R	L6.1R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGET	- MILS					

40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5W ROTATION - AZIMUTH

### CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 50 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200			
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200			
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R			
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R			
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R			
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R			
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R			
3000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R			
3500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R			
4000	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R			
4500	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R			
5000	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R			
5500	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R			
6000	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R			
6500	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R			
7000	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R			
7500	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.6R			
8000	L1.4R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.7R	L1.8R	L1.8R			
8500	L1.5R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L1.9R	L2.0R			
9000	L1.6R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.2R	L2.2R			
9500	L1.7R	L1.7R	L1.8R	L1.9R	L2.1R	L2.3R	L2.4R	L2.5R	L2.5R			
9500 9000 8500 8000	******** L1.8R L1.7R L1.6R L1.4R	L1.9R L1.8R L1.7R L1.6R	L2.1R L2.1R L2.1R L2.0R L1.9R	L2.4R L2.5R L2.5R L2.5R L2.5R	L2.9R L3.0R L3.1R L3.2R	L3.3R L3.5R L3.7R L3.7R L3.8R	L3.6R L3.9R L4.2R L4.4R	L3.8R L4.2R L4.5R L4.8R	L3.9R L4.3R L4.6R L4.9R			
7500	L1.3R	L1.4R	L1.8R	L2.5R	L3.2R	L4.0R	L4.6R	L5.0R	L5.2R			
7000	L1.1R	L1.3R	L1.7R	L2.4R	L3.3R	L4.1R	L4.8R	L5.2R	L5.4R			
6500	L0.9R	L1.1R	L1.6R	L2.4R	L3.3R	L4.2R	L5.0R	L5.5R	L5.7R			
6000	L0.7R	L0.9R	L1.4R	L2.3R	L3.3R	L4.3R	L5.1R	L5.7R	L5.9R			
5500	L0.4R	L0.6R	L1.3R	L2.2R	L3.3R	L4.4R	L5.3R	L5.9R	L6.1R			
	3200	2800	2400	2000	1600	1200	800	400	0			
	3200	3600	4000	4400	4800	5200	5600	6000	6400			
			AZ I	MUTH OF	TARGE T	- MILS						

### 50 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 60 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
2000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
3000	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
3500	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
4000	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
4500	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
5000	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R
5500	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R
6000	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R
6500	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R
7000	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
7500	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R
8000	L1.6R	L1.6R	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R
8500	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.1R	L2.1R	L2.1R
9000	L1.9R	L1.9R	L2.0R	L2.0R	L2.1R	L2.2R	L2.3R	L2.4R	L2.4R
9500	L2.0R	L2.1R	L2.1R	L2.2R	L2.4R	L2.5R	L2.6R	L2.7R	L2.7R
*****	******	*****	*****	*****	******	******	******	*****	*****
9500	L2.4R	L2.5R	L2.6R	L2.9R	L3.2R	L3.5R	L3.8R	L4.0R	L4.0R
9000	L2.4R	L2.5R	L2.7R	L3.0R	L3.4R	L3.8R	L4.1R	L4.3R	L4.4R
8500	L2.3R	L2.4R	L2.7R	L3.0R	L3.5R	L3.9R	L4.3R	L4.6R	L4.7R
8000	L2.2R	L2.3R	L2.6R	L3.1R	L3.6R	L4.1R	L4.5R	L4.8R	L4.9R
7500	L2.1R	L2.2R	L2.6R	L3.1R	L3.6R	L4.2R	L4.7R	L5.0R	L5.1R
7000	L2.0R	L2.1R	L2.5R	L3.0R	L3.7R	L4.3R	L4.9R	L5.2R	L5.4R
6500	L1.8R	L2.0R	L2.4R	L3.0R	L3.7R	L4.4R	L5.0R	L5.4R	L5.6R
6000	L1.7R	L1.8R	L2.3R	L2.9R	L3.7R	L4.5R	L5.1R	L5.6R	L5.7R
5500	L1.5R	L1.6R	L2.1R	L2.8R	L3.7R	L4.5R	L5.3R	L5.7R	L5.9R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZI	MUTH OF	TARGE T	- MILS			

60 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 5W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS										
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
1500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
2000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
2500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R		
3000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
3500	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R		
4000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R		
4500	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R		
5000	L1.0R	L1.0R	L1.1R								
5500	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R		
6000	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R		
6500	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R		
7000	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R		
7500	L1.7R	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R	L1.8R	L1.8R		
8000	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.0R	L2.0R	L2.0R		
8500	L2.0R	L2.0R	L2.0R	L2.0R	L2.1R	L2.2R	L2.2R	L2.2R	L2.2R		
9000	L2.1R	L2.2R	L2.2R	L2.2R	L2.3R	L2.4R	L2.4R	L2.5R	L2.5R		
9500	L2.4R	L2.4R	L2.4R	L2.5R	L2.6R	L2.7R	L2.7R	L2.8R	L2.8R		
9500 9000 8500 8000	L2.9R L3.0R L3.0R L3.0R L3.0R	L3.0R L3.0R L3.1R L3.0R	L3.1R L3.2R L3.2R L3.2R	L3.3R L3.4R L3.5R L3.5R	L3.5R L3.7R L3.8R L3.9R	L3.7R L3.9R L4.1R L4.2R	L3.9R L4.2R L4.4R L4.5R	L4.0R L4.3R L4.5R L4.7R	L4.1R L4.4R L4.6R L4.8R		
7500	L2.9R	L3.0R	L3.2R	L3.5R	L3.9R	L4.3R	L4.7R	L4.9R	L5.0R		
7000	L2.8R	L2.9R	L3.2R	L3.5R	L4.0R	L4.4R	L4.8R	L5.1R	L5.1R		
6500	L2.7R	L2.8R	L3.1R	L3.5R	L4.0R	L4.5R	L4.9R	L5.2R	L5.3R		
6000	L2.6R	L2.7R	L3.0R	L3.5R	L4.0R	L4.6R	L5.0R	L5.3R	L5.4R		
5500	L2.5R	L2.6R	L2.9R	L3.4R	L4.0R	L4.6R	L5.1R	L5.4R	L5.5R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
			AZ I	MUTH OF	TARGE T	· - MILS					

### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J
5W FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE					
	MUZZ VELOC 1 M/	: I TY	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	005 008 010	0.005 0.008 0.010	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.001	0.000 0.001 0.001	0.000 001 001	0.008 0.012 0.016	008 012 016
5	012	0.012	0.000	0.001	0.000	0.001	0.002	001	0.019	019
6 7 8 9	014 016 018 019	0.014 0.016 0.018 0.020	0.000 0.000 001 001	0.001 0.001 0.002 0.002		0.002 0.003 0.004 0.005	0.002 0.003 0.003 0.004	002 003 003 004	0.021 0.024 0.026 0.028	022 024 027 029
10	021	0.022	001	0.003	003	0.006	0.005	005	0.030	031
11 12 13 14	022 024 025 027	0.023 0.025 0.026 0.027	002 002 003 003	0.003 0.004 0.004 0.005	004 005 007 008	0.008 0.009 0.011 0.013	0.006 0.007 0.008 0.008	006 006 007 008	0.032 0.033 0.035 0.036	033 034 036 037
15	028	0.029	004	0.006	010	0.015	0.009	009	0.037	039
16 17 18 19	029 030 032 033	0.030 0.031 0.032 0.033	004 005 005 006	0.006 0.007 0.008 0.008	012 014 016 018	0.017 0.019 0.021 0.023	0.010 0.011 0.012 0.012	009 010 011 012	0.038 0.040 0.041 0.042	040 041 043 044
20	034	0.034	007	0.009	020	0.024	0.013	012	0.043	045
21 22 23 24	035 036 037 039	0.036 0.037 0.038 0.039	007 008 009 009	0.010 0.010 0.011 0.012	022 024 026 028	0.026 0.028 0.030 0.032	0.014 0.015 0.016 0.017	013 014 015 016	0.044 0.045 0.046 0.047	046 047 049 050
25	040	0.040	010	0.012	030	0.034	0.018	017	0.048	<i>051</i>
26 27 28 29	041 042 043 045	0.041 0.042 0.043 0.045	011 011 012 012	0.013 0.013 0.014 0.015	032 034 036 038	0.035 0.037 0.039 0.040	0.019 0.020 0.021 0.022	018 019 020 021	0.049 0.050 0.051 0.052	052 053 055 056
30	046	0.046	013	0.015	040	0.042	0.023	022	0.054	057
31 32 33 34	047 048 050 051	0.047 0.048 0.050 0.051	014 014 015 015	0.016 0.016 0.016 0.017	041 043 045 046	0.043 0.044 0.045 0.047	0.024 0.025 0.026 0.027	023 024 025 026	0.055 0.056 0.057 0.058	058 060 061 062
35	053	0.052	016	0.017	047	0.048	0.029	028	0.059	063

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

## TABLE J CHARGE 5W

### FUZE CORRECTION FACTORS

	_						_	_		
1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZLE VELOCITY 1 M/S		RANGE WIND 1 KNOT		AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	053	0.052	016	0.017	047	0.048	0.029	028	0.059	063
36 37 38 39	054 056 057 059	0.054 0.055 0.057 0.058	016 017 017 017	0.018 0.018 0.018 0.018	049 049 050 051	0.049 0.050 0.051 0.052	0.030 0.032 0.033 0.035	029 030 032 033	0.060 0.062 0.063 0.064	065 066 067 068
40	060	0.060	018	0.019	052	0.053	0.036	034	0.065	070
41 42 43 44	062 063 065 066	0.061 0.063 0.064 0.066	018 018 019 019	0.019 0.019 0.019 0.020	053 054 055 056	0.053 0.054 0.055 0.056	0.038 0.039 0.040 0.042	036 037 038 040	0.067 0.068 0.069 0.070	071 073 075 076
45	068	0.067	019	0.020	057	0.057	0.043	041	0.072	078
46 47 48 49	070 071 073 075	0.069 0.070 0.072 0.073	019 019 020 020	0.020 0.020 0.020 0.020	058 059 059 060	0.058 0.059 0.059 0.060	0.045 0.046 0.048 0.049	042 044 045 046	0.073 0.075 0.076 0.078	079 081 082 084
50	076	0.075	020	0.020	061	0.061	0.050	048	0.080	086
51 52 53 54	078 080 081 083	0.077 0.078 0.080 0.082	020 020 020 020	0.020 0.020 0.020 0.020	062 063 063 064	0.062 0.062 0.063 0.064	0.052 0.053 0.055 0.056	049 050 052 053	0.081 0.083 0.085 0.087	088 089 091 093
55	085	0.083	020	0.020	065	0.065	0.058	054	0.089	094
56 57 58 59	086 088 090 092	0.085 0.087 0.089 0.090	020 020 019 019	0.020 0.019 0.019 0.019	065 066 067 067	0.065 0.066 0.067 0.067	0.059 0.060 0.062 0.063	056 057 058 060	0.091 0.093 0.095 0.097	096 098 100 103
60	094	0.092	019	0.019	068	0.068	0.064	061	0.100	106
61 62 63 64	095 097 099 101	0.094 0.096 0.098 0.100	019 019 019 019	0.019 0.019 0.021	068 069 069 069	0.068 0.069 0.069 0.069	0.066 0.067 0.069 0.070	062 064 065 066	0.102 0.106 0.110 0.115	109 112 117 123
65	104	0.102	021		068	0.068	0.074	069	0.126	134

CHARGE TABLE K FT 155-AR-1
5W PART 1
FUZE SETTING PROJ, HE, M795
FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

	ETTING M582	CORRECTIONS
FROM	TO	
1.9	57.7	-0.1
57.8	65.6	-0.2

Part 1

Charge 6W

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-453\ M/S$ 

Propelling Charge M4A2 - Base and Increments 4, 5, and 6

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A

CHARGE 6W

LINE NUMBER

LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	L I NE NUMBER
0.0- 106.1	0
106.2- 208.8 208.9- 319.9 320.0- 429.0 429.1- 522.6	1 2 3 4
522.7- 648.1	5
648.2- 803.2 803.3- 958.7 958.8- 1132.9 1133.0- 1295.0	6 7 8 9

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	100 200 300 400					0 0 0 0	0 0 0 1	0 1 1 2	0 3 3 4
	500					0	1	3	5
	600 700 800 900					0 0 0 0	1 1 1	3 3 4 4	5 6 7 7
	1000					0	2	4	7
	1100 1200 1300 1400					0 0 0 0	2 2 2 2	4 5 5 5	8 8 9 9
	1500					0	2	5	9
0	1600 1700 1800 1900					0 0 0	2 2 3 3	6 6 6 7	10 10 11 11
	2000				-2	0	3	7	12
	2100 2200 2300 2400				-2 -3 -3 -3	0 0 0	33 3 3	7 7 8 8	12 12 13 13
	2500				-3	0	3	8	14
	2600 2700 2800 2900			-6 -6 -7	-4 -4 -4	0 0 0 0	4 4 4 4	9 9 9	14 15 15 15
	3000			-7	-4	0	4	10	16
	3100 3200 3300 3400		-10 -10 -11	-7 -8 -8 -8	-4 -5 -5 -5	0 0 0 0	4 4 5 5	10 10 10 11	16 17 17 18
	3500		-11	-9	-5	0	5	11	18
			0					1	

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 6W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT		ET ABOVE				RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
							0	
0 4 6 7	6 8 10	8 11 13	10 13 17	12 16 20	14 19 24	22 28	100 200 300 400	
8	12	16	20	24	28	33	500	
9 10 10 11	13 14 15 16	17 18 20 21	22 23 25 26	26 29 31 33	31 35 37 39	37 40 43 46	600 700 800 900	
12	16	22	28	34	41	49	1000	
12 13 13 14	17 18 19 19	23 24 25 26	29 30 32 33	36 37 39 40	43 45 47 49	51 53 55 57	1100 1200 1300 1400	
14	20	27	34	42	50	59	1500	
15 16 16 17	21 22 22 23	27 28 29 30	35 36 37 38	43 44 46 47	52 53 55 56	61 63 64 66	1600 1700 1800 1900	3
17	24	31	39	48	58	68	2000	
18 18 19 20	25 25 26 27	32 33 34 35	40 41 42 43	49 50 52 53	59 60 62 63	69 71 73 74	2100 2200 2300 2400	
20	27	35	44	54	64	76	2500	
21 21 22 22	28 29 30 30	36 37 38 39	45 46 47 48	55 56 57 58	66 67 68 69	77 78 80 81	2600 2700 2800 2900	
23	31	40	49	60	71	82	3000	
24 24 25 25	32 32 33 34	40 41 42 43	50 51 52 53	61 62 63 64	72 73 74 75	84 85 86 88	3100 3200 3300 3400	
26	34	44	54	65	76	89	3500	
		2				3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	HEIGHT OF TARGET ABOVE GUN - METERS									
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	3500		-11	-9	-5	0	5	11	18		
	3600 3700 3800 3900	-14 -15 -16	-12 -13 -13 -14	-9 -9 -10 -10	-5 -5 -6 -6	0 0 0 0	5 5 5 5	11 12 12 12	18 19 19 20		
	4000	-17	-14	-10	-6	0	6	12	20		
0	4100 4200 4300 4400	-18 -18 -19 -20	-15 -15 -16 -16	-11 -11 -11 -12	-6 -6 -6 -7	0 0 0 0	6 6 6 6	13 13 13 14	21 21 21 22		
	4500	-21	-17	-12	-7	0	6	14	22		
	4600 4700 4800 4900	-21 -22 -23 -24	-17 -18 -18 -19	-12 -13 -13 -14	-7 -7 -7 -7	0 0 0	6 7 7 7	14 15 15 15	23 23 24 24		
	5000	-24	-19	-14	-8	0	7	16	25		
	5100 5200 5300	-25 -26 -27	-20 -21 -21	-14 -15 -15	-8 -8 -8	0 0 0	7 8 8	16 16 17	25 26 27		
	5400	-27	-22	-15	-8	Ö	8	17	27		
	5500	-28	-22	-16	-9	0	8	18	28		
	5600 5700 5800 5900	-29 -30 -31 -32	-23 -24 -24 -25	-16 -17 -17 -18	-9 -9 -9	0 0 0 0	8 9 9 9	18 18 19 19	28 29 30 30		
1	6000	-33	-26	-18	-10	0	9	20	31		
I	6100 6200 6300 6400	-33 -34 -35 -36	-26 -27 -28 -28	-18 -19 -19 -20	-10 -10 -10 -11	0 0 0 0	9 10 10 10	20 21 21 22	32 32 33 34		
	6500	-37	-29	-20	-11	0	10	22	34		
	6600 6700 6800 6900	-38 -39 -40 -42	-30 -31 -31 -32	-21 -21 -22 -22	-11 -11 -12 -12	0 0 0 0	11 11 11 12	23 23 24 24	35 36 37 38		
2	7000	-43	-33	-23	-12	0	12	25	39		
				2			•		3		

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 6W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT		ET ABOVE		E TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
26	34	44	54	65	76	89	3500	
26 27 27 28	35 36 36 37	44 45 46 47	55 56 57 58	66 67 68 69	78 79 80 81	90 91 93 94	3600 3700 3800 3900	
29	38	48	59	70	82	95	4000	
29 30 30 31	39 39 40 41	49 49 50 51	60 60 62 63	71 72 73 75	84 85 86 87	97 98 99 101	4100 4200 4300 4400	
32	41	52	64	76	89	102	4500	
32 33 33 34	42 43 44 45	53 54 55 56	65 66 67 68	77 78 79 81	90 91 93 94	104 105 107 108	4600 4700 4800 4900	
35	46	57	69	82	96	110	5000	
36 36 37 38	46 47 48 49	58 59 60 61	70 72 73 74	83 85 86 88	97 99 100 102	112 114 115 117	5100 5200 5300 5400	3
39	50	62	76	89	104	119	5500	
39 40 41 42	51 52 53 54	64 65 66 67	77 78 80 81	91 92 94 96	106 107 109 111	121 123 125 127	5600 5700 5800 5900	
43	55	69	83	98	113	130	6000	
44 45 46 47	57 58 59 60	70 72 73 75	84 86 88 90	100 101 103 106	115 118 120 122	132 135 137 140	6100 6200 6300 6400	
48	61	76	92	108	125	143	6500	
49 50 51 52	63 64 66 67	78 79 81 83	93 95 97 100	110 112 115 117	127 130 133 135	145 148 151 155	6600 6700 6800 6900	
53	69	85	102	120	138	158	7000	
				3				

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	7000	-43	-33	-23	-12	0	12	25	39
	7100 7200 7300 7400	-44 -45 -46 -48	-34 -35 -36 -37	-24 -24 -25 -25	-12 -13 -13 -13	0 0 0 0	12 13 13 13	26 26 27 28	40 41 42 43
	7500	- <b>49</b>	-38	-26	-14	0	14	28	44
2	7600 7700 7800 7900	-50 -52 -53 -55	-39 -40 -41 -42	-27 -28 -28 -29	-14 -14 -15 -15	0 0 0 0	14 14 15 15	29 30 31 31	45 46 47 49
	8000	-56	-43	-30	-15	0	16	32	50
	8100 8200 8300 8400	-58 -59 -61 -63	-45 -46 -47 -48	-31 -31 -32 -33	-16 -16 -17 -17	0 0 0 0	16 16 17 17	33 34 35 36	51 53 54 56
	8500	-65	-50	-34	-18	0	18	37	57
	8600 8700 8800 8900	-67 -69 -71 -73	-51 -53 -54 -56	-35 -36 -37 -38	-18 -19 -19 -20	0 0 0	18 19 20 20	38 39 41 42	59 61 62 64
	9000	-75	-58	-39	-20	0	21	43	66
3	9100 9200 9300 9400	-77 -80 -82 -85	-59 -61 -63 -65	-41 -42 -43 -44	-21 -22 -22 -23	0 0 0	21 22 23 24	44 46 47 48	68 70 72 74
	9500	-87	-67	-46	-23	0	24	50	77
	9600 9700 9800 9900	-90 -93 -96 -99	-69 -71 -73 -76	-47 -49 -50 -52	-24 -25 -26 -27	0 0 0 0	25 26 27 27	51 53 55 56	79 81 84 87
	10000	-102	-78	-53	-27	0	28	58	90
4	10100 10200 10300 10400	-105 -108 -112 -115	-80 -83 -86 -88	-55 -57 -58 -60	-28 -29 -30 -31	0 0 0 0	29 30 31 32	60 62 64 67	93 96 99 103
	10500	-119	- <b>91</b>	-62	-32	0	34	69	107
		4					5		

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 6W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT		RANGE	LINE				
400	500	600	700	800	900	1000	METERS	NO.
53	69	85	102	120	138	158	7000	3
55 56 57 59	70 72 74 75	87 89 91 93	104 107 109 112	122 125 128 131	141 145 148 151	161 165 169 173	7100 7200 7300 7400	
60	77	95	114	134	155	177	7500	
62 63 65 67	79 81 83 86	98 100 103 105	117 120 123 126	137 141 144 148	159 163 167 171	181 185 190 195	7600 7700 7800 7900	4
68	88	108	130	152	175	200	8000	•
70 72 74 76	90 93 95 98	111 114 117 120	133 137 140 144	156 160 164 169	180 185 190 195	205 210 216 222	8100 8200 8300 8400	
78	101	124	148	173	200	228	8500	
81 83 85 88	103 106 109 112	127 131 135 138	152 156 161 165	178 183 188 194	206 211 217 223	234 241 247 254	8600 8700 8800 8900	
90	116	142	170	199	230	262	9000	
93 96 99 102	119 123 126 130	147 151 155 160	175 180 186 191	205 211 218 224	237 244 251 259	270 278 286 295	9100 9200 9300 9400	
105	134	165	197	231	267	305	9500	_
108 111 115 119	138 143 147 152	170 175 181 187	203 210 217 225	239 246 255 264	276 285 295 305	315 325 337 349	9600 9700 9800 9900	5
123	157	194	232	273	316	361	10000	
127 131 136 141	163 169 175 181	201 208 216 224	241 250 259 269	283 293 305 316	327 340 353 368	375 389 405 423	10100 10200 10300 10400	
147	188	233	279	330	384	443	10500	6
		5				(	5	1

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIO	GHT OF	TARGET A	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	10500	-119	-91	-62	-32	0	34	69	107
4	10600 10700 10800 10900	-123 -127 -132 -137	-95 -98 -102 -106	-65 -67 -70 -72	-33 -34 -36 -37	0 0 0 0	35 36 38 39	72 75 78 81	111 115 120 125
	11000	-142	-110	-75	-39	0	41	84	130
5	11100 11200 11300 11400	-148 -154 -160 -166	-114 -119 -123 -128	-78 -81 -84 -88	-40 -42 -44 -45	0 0 0 0	42 44 47 50	88 92 97 104	136 144 153 163
	11500	-173	-134	-93	-48	0	53	111	176
	11600 11700 11800	-182 -192 -203	-141 -150 -159	-98 -104 -111	-51 -55 -59	0 0 0	57 62	120 137	197
	*****		*****	*****	*****	*****	*****	*****	*****
7	11800 11700 11600	-431 -450 -469	-311 -327 -341	-198 -210 -220	-94 -101 -106	0 0 0	90 98	163 184	254
	11500	-487	-355	-230	-111	0	103	198	281
	11400 11300 11200 11100	-504 -521 -538 -554	-368 -381 -394 -406	-239 -248 -256 -265	-116 -121 -125 -129	0 0 0	109 114 118 123	209 220 229 238	300 317 332 346
	11000	-570	-419	-273	-133	0	127	247	360
8	10900 10800 10700 10600	-586 -602 -618 -634	-431 -443 -455 -467	-281 -289 -297 -305	-137 -141 -146 -150	0 0 0 0	131 135 139 143	255 264 272 280	373 385 398 410
	10500	-651	-479	-313	-154	0	147	288	422
	10400 10300 10200 10100	-667 -684 -700 -717	-491 -503 -516 -528	-321 -329 -338 -346	-158 -162 -166 -170	0 0 0 0	151 155 159 163	296 304 312 320	434 446 458 470
	10000	-734	-541	-354	-174	0	167	328	483
					8				

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 6W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
147	188	233	279	330	384	443	10500	
152 158 164 171	196 203 212 222	242 252 263 277	291 304 319 337	344 361 380 403	402 423 448 477	466 492 523 562	10600 10700 10800 10900	
179	233	292	358	431	514	617	11000	6
189 201 214 230	247 263 282 309	311 333 362 423	382 414 469	465 518	568		11100 11200 11300 11400	
254							11500	
							11600 11700 11800	
*****	*****	*****	*****	*****	*****	******	*****	
							11800 11700 11600	
348							11500	7
380 405 427 446	444 481 511 538	542 584 619	642 689	672 743	772		11400 11300 11200 11100	<i>'</i>
465	562	650	728	794	845	872	11000	
483 500	585 607	679 707	764 798	839 879	901 950	948 1009	10900 10800	
517 533	629 650	733 758	829 860	917 952	994 1036	1062 1110	10700 10600	
550	670	783	889	987	1076	1157	10500	
566 582 598 614	690 711 731 751	808 832 856 880	918 947 975 1003	1020 1053 1086 1118	1115 1152 1189 1226	1201 1243 1285 1326	10400 10300 10200 10100	8
630	771	904	1031	1150	1262	1366	10000	
				8				

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIO	HT OF	TARGET A	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	10000	- <b>734</b>	-541	-354	-174	0	167	328	483
8	9900 9800 9700 9600	-752 -769 -787 -806	-554 -567 -580 -594	-363 -371 -380 -389	-178 -182 -187 -191	0 0 0 0	171 176 180 184	336 345 353 361	495 507 519 532
	9500	-825	-608	-398	-196	0	188	370	544
	9400 9300 9200 9100	-844 -864 -884 -905	-622 -637 -651 -667	-407 -417 -427 -437	-200 -205 -210 -214	0 0 0 0	193 197 202 206	379 387 396 405	557 570 583 597
	9000	-927	-682	-447	-219	0	211	415	610
	8900 8800 8700 8600	-949 -973 -997 -1023	-699 -715 -733 -751	-457 -468 -479 -490	-224 -230 -235 -241	0 0 0 0	216 221 226 231	424 434 444 454	624 639 653 668
	8500	-1049	- <b>770</b>	-503	-246	0	237	464	683
	8400 8300 8200 8100	-1077 -1107 -1139 -1172	-790 -810 -832 -855	-515 -528 -542 -556	-252 -259 -265 -272	0 0 0 0	242 248 254 260	475 486 497 509	699 715 731 748
9	8000	-1208	-879	-571	-279	0	266	521	766
	7900 7800 7700 7600	-1247 -1289 -1336	-905 -933 -963 -996	-587 -604 -621 -640	-286 -294 -302 -311	0 0 0 0	272 279 286 294	534 546 560 574	784 802 822 842
	7500		-1031	- <b>661</b>	-320	0	302	589	862
	7400 7300 7200 7100		-1069	-683 -707 -733 -761	-329 -340 -351 -363	0 0 0 0	310 318 327 337	604 620 637 654	884 907 930 955
	7000				-376	0	347	673	980
	6900 6800 6700 6600				-390 -406 -423	0 0 0 0	358 369 381 394	692 713 734 757	1007 1036 1065 1097
	6500					0	408	782	1130
				9					

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 6W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT		ET ABOVE		IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
630	771	904	1031	1150	1262	1366	10000	
646 662 679 695	791 811 831 852	928 952 977 1001	1059 1087 1115 1143	1182 1214 1246 1278	1298 1334 1369 1405	1406 1446 1486 1525	9900 9800 9700 9600	8
712	872	1025	1171	1310	1441	1565	9500	
729 746 763 781	893 914 936 957	1050 1075 1100 1126	1200 1229 1258 1287	1342 1375 1408 1441	1477 1514 1550 1587	1605 1645 1685 1726	9400 9300 9200 9100	
799	979	1152	1317	1475	1625	1767	9000	
817 836 854 874	1002 1024 1048 1071	1179 1205 1233 1261	1348 1379 1410 1442	1509 1544 1579 1615	1663 1701 1740 1780	1808 1850 1893 1936	8900 8800 8700 8600	
894	1096	1289	1474	1651	1820	1980	8500	
914 935 956 978	1120 1146 1171 1198	1318 1348 1378 1409	1507 1541 1576 1611	1688 1726 1765 1804	1861 1902 1945 1988	2024 2070 2116 2163	8400 8300 8200 8100	
1000	1225	1441	1647	1844	2032	2211	8000	
1023 1047 1072 1098	1253 1282 1312 1343	1474 1507 1542 1577	1684 1722 1761 1801	1885 1927 1971 2015	2077 2123 2171 2219	2260 2310 2361 2413	7900 7800 7700 7600	9
1124	1374	1614	1842	2061	2269	2466	7500	
1152 1180 1210 1240	1407 1441 1476 1513	1652 1691 1731 1773	1885 1929 1974 2021	2107 2156 2205 2257	2320 2372 2426 2481	2521 2578 2636 2695	7400 7300 7200 7100	
1273	1551	1816	2069	2310	2539	2756	7000	
1306 1341 1378 1416	1590 1632 1675 1719	1861 1908 1956 2007	2119 2171 2224 2280	2364 2421 2479 2540	2598 2658 2721 2786	2819 2884 2951 3020	6900 6800 6700 6600	
1457	1766	2060	2338	2603	2853	3091	6500	
				9				

### TABLE B

### FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPLEMENTARY RANGE LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIGHT OF TARGET ABOVE GUN - METERS									
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	6500					0	408	782	1130			
9	6400 6300 6200 6100					0	423 439	808 835 865	1165 1202 1241			

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	LINE NUMBERS OF METEOROLOGICAL MESSAGE										
	HEIGHT OF TARGET ABOVE GUN - METERS										
400	500	600	700	800	900	1000	ME TERS	NO.			
1457	1766	2060	2338	2603	2853	3091	6500				
1500 1544 1591	1816 1867 1921	2115 2172 2232	2399 2461 2527 2595	2668 2736 2806 2879	2923 2995 3070 3148	3165 3241 3320 3402	6400 6300 6200 6100	9			
								-			

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPONENTS OF A ONE KNOT WIND

COMPONENTS OF A ONE KNOT WIND										
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND				
MIL	KNOT	KNOT		MIL	KNOT	KNOT				
0	0	H1.00		3200	0	T1.00				
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96				
400	R. 38	H. 92		3600	L.38	T. 92				
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77				
800	R. 71	H. 71		4000	L.71	T. 71				
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47				
1200	R. 92	H. 38		4400	L.92	T. 38				
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10				
1600	R1.00	0		4800	L1.00	0				
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29				
2000	R. 92	T. 38		5200	L.92	H. 38				
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63				
2400	R. 71	T. 71		5600	L.71	H. 71				
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88				
2800	R. 38	T.92		6000	L.38	H. 92				
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99				
3200	0	T1.00		6400	0	H1 . 00				

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-											-0.4+ -1.9+
+200-	DT DD	-0.5+ -2.0+	-0.5+ -2.1+	-0.5+ -2.2+	-0.6+ -2.3+	-0.6+ -2.4+	-0.6+ -2.5+	-0.6+ -2.6+	-0.7+ -2.7+	-0.7+ -2.8+	-0.7+ -2.9+
+300-											-0.9+ -3.9+

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-11.0	-40.0
-30	-10.0	-34.4
-20	-9.0	-28.9
-10	-8.0	-23.3
0	-7.0	-17.8
10	-6.0	-12.2
20	-5.0	-6.7
30	-4.0	-1.1
40	-3.0	4.4
50	-2.0	10.0
60	-1.0	15.6
70	0.0	21.1
80	1.0	26.7
90	2.0	32.2
100	3.0	37.8
110	4.0	43.3
120	4.9	48.9
130	5.9	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAITT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
0	0.0			40	1	0.0	0.0	0.00
100 200 300 400	2.5 5.0 7.5 10.0			40 40 40 39	1 1 1	0.2 0.4 0.7 0.9	0.1 0.1 0.2 0.2	0.01 0.01 0.02 0.02
500	12.6			39	1	1.1	0.3	0.03
600 700 800 900	15.2 17.9 20.6 23.3	1.8 2.1	1.12 0.99	38 38 37 37	1 1 1	1.4 1.6 1.8 2.1	0.4 0.4 0.5 0.5	0.03 0.04 0.05 0.05
1000	26.0	2.3	0.89	36	1	2.3	0.6	0.06
1100 1200 1300 1400	28.8 31.6 34.5 37.4	2.6 2.8 3.0 3.3	0.81 0.74 0.68 0.63	36 35 35 34	1 1 1	2.6 2.8 3.0 3.3	0.7 0.7 0.8 0.9	0.06 0.07 0.08 0.08
1500	40.4	3.6	0.58	34	1	3.6	0.9	0.09
1600 1700 1800 1900	43.4 46.4 49.5 52.6	3.8 4.1 4.3 4.6	0.54 0.51 0.48 0.45	33 33 32 32	1 1 1	3.8 4.1 4.3 4.6	1.0 1.1 1.2 1.2	0.09 0.10 0.11 0.11
2000	55.7	4.9	0.43	31	1	4.9	1.3	0.12
2100 2200 2300 2400	58.9 62.2 65.5 68.8	5.1 5.4 5.7 5.9	0.41 0.39 0.37 0.35	31 31 30 30	1 1 1	5.1 5.4 5.7 5.9	1.4 1.5 1.5 1.6	0.13 0.13 0.14 0.14
2500	72.2	6.2	0.34	29	1	6.2	1.7	0.15
2600 2700 2800 2900	75.6 79.1 82.6 86.2	6.5 6.8 7.1 7.4	0.32 0.31 0.30 0.28	29 29 28 28	1 1 1	6.5 6.8 7.1 7.4	1.8 1.9 1.9 2.0	0.16 0.16 0.17 0.18
3000	89.8	7.7	0.27	27	1	7.7	2.1	0.18
3100 3200 3300 3400	93.5 97.2 101.0 104.8	8.0 8.3 8.6 8.9	0.26 0.25 0.24 0.24	27 27 26 26	1 1 1 2	8.0 8.3 8.6 8.9	2.2 2.3 2.4 2.5	0.19 0.20 0.20 0.21
3500	108.7	9.2	0.23	26	2	9.2	2.6	0.22

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE. PD. M739A1 CHARGE 6W TABLE F CORRECTION FACTORS

UZE, P	D, M73	9 A1								
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	INGE ND INO T	1	IR EMP PCT	AI DENS 1 P		PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	М	М	М	М	М	M	М	M
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.5 0.9 1.4 1.8	-0.4 -0.9 -1.3 -1.7	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 -0.1	0.0 0.0 0.0 0.1	-1 -2 -3 -3	1 2 3 3
500	2.2	-2.1	0.0	0.0	0.0	0.0	-0.1	0.1	-4	4
600 700 800 900	2.7 3.1 3.5 3.9	-2.5 -2.9 -3.3 -3.7	0.0 0.0 0.1 0.1	0.0 0.0 -0.1 -0.1	0.0 -0.1 -0.1 -0.1	0.0 0.1 0.1 0.1	-0.2 -0.3 -0.4 -0.5	0.2 0.3 0.4 0.5	-5 -6 -6 -7	5 6 7 7
1000	4.3	-4.1	0.1	-0.1	-0.1	0.1	-0.6	0.6	-8	8
1100 1200 1300 1400	4.7 5.2 5.6 5.9	-4.5 -4.9 -5.2 -5.6	0.1 0.1 0.2 0.2	-0.1 -0.1 -0.2 -0.2	-0.2 -0.2 -0.2 -0.3	0.1 0.2 0.2 0.2	-0.7 -0.9 -1.0 -1.2	0.7 0.9 1.1 1.2	-8 -9 -10 -10	9 9 10 10
1500	6.3	-6.0	0.2	-0.2	-0.3	0.2	-1.4	1.4	-11	11
1600 1700 1800 1900	6.7 7.1 7.5 7.8	-6.3 -6.7 -7.1 -7.4	0.2 0.3 0.3 0.4	-0.2 -0.3 -0.3 -0.3	-0.3 -0.4 -0.4 -0.5	0.3 0.3 0.3 0.4	-1.6 -1.8 -2.0 -2.2	1.6 1.8 2.0 2.2	-11 -12 -12 -13	12 12 13 13
2000	8.2	-7.8	0.4	-0.4	-0.5	0.4	-2.4	2.5	-13	14
2100 2200 2300 2400	8.6 8.9 9.3 9.6	-8.1 -8.5 -8.8 -9.1	0.4 0.5 0.5 0.6	-0.4 -0.5 -0.5 -0.6	-0.6 -0.6 -0.6 -0.7	0.4 0.5 0.5 0.5	-2.6 -2.9 -3.2 -3.4	2.7 3.0 3.2 3.5	-14 -14 -15 -15	14 15 15 15
2500	10.0	-9.5	0.6	-0.6	-0.7	0.5	-3.7	3.8	-15	16
2600 2700 2800 2900	10.3 10.6 10.9 11.2	-9.8 -10.1 -10.4 -10.7	0.7 0.8 0.8 0.9	-0.7 -0.8 -0.8 -0.9	-0.8 -0.8 -0.9 -0.9	0.5 0.5 0.4 0.4	-4.0 -4.3 -4.6 -4.9	4.1 4.4 4.7 5.0	-16 -16 -16 -17	16 17 17 17
3000	11.5	-11.0	1.0	-1.0	-0.9	0.3	-5.2	5.3	-17	17
3100 3200 3300 3400	11.8 12.1 12.4 12.6	-11.3 -11.6 -11.9 -12.2	1.1 1.1 1.2 1.3	-1.1 -1.1 -1.2 -1.3	-0.9 -0.9 -0.9 -0.9	0.2 0.2 0.1 -0.1	-5.5 -5.8 -6.2 -6.5	5.6 5.9 6.2 6.5	-17 -17 -17 -18	18 18 18 18
3500	12.9	-12.4	1.4	-1.4	-0.9	-0.2	-6.8	6.8	-18	19

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	шГш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	FOR	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	108.7	9.2	0.23	26	2	9.2	2.6	0.22
3600 3700 3800 3900	112.6 116.6 120.6 124.7	9.5 9.8 10.1 10.4	0.22 0.21 0.21 0.20	25 25 25 24	2 2 2 2	9.5 9.8 10.1 10.4	2.7 2.8 2.9 3.0	0.22 0.23 0.23 0.24
4000	128.8	10.7	0.20	24	2	10.7	3.1	0.25
4100 4200 4300 4400	132.9 137.1 141.4 145.7	11.0 11.4 11.7 12.0	0.19 0.18 0.18 0.17	24 24 23 23	2 2 2 2	11.0 11.4 11.7 12.0	3.2 3.3 3.4 3.5	0.25 0.26 0.26 0.27
4500	150.1	12.3	0.17	23	2	12.3	3.6	0.27
4600 4700 4800 4900	154.4 158.9 163.4 167.9	12.7 13.0 13.3 13.7	0.17 0.16 0.16 0.15	23 22 22 22	2 2 2 2	12.7 13.0 13.3 13.7	3.7 3.8 3.9 4.0	0.28 0.28 0.29 0.30
5000	172.5	14.0	0.15	22	2	14.0	4.1	0.30
5100 5200 5300 5400	177.1 181.8 186.6 191.3	14.3 14.7 15.0 15.4	0.15 0.14 0.14 0.14	21 21 21 21	2 2 2 3	14.3 14.7 15.0 15.4	4.2 4.3 4.4 4.6	0.31 0.31 0.32 0.32
5500	196.2	15.7	0.13	21	3	15.7	4.7	0.33
5600 5700 5800 5900	201.0 206.0 210.9 215.9	16.1 16.4 16.8 17.1	0.13 0.13 0.12 0.12	20 20 20 20	3333	16.1 16.4 16.8 17.1	4.8 4.9 5.0 5.2	0.33 0.34 0.34 0.35
6000	221.0	17.5	0.12	20	3	17.5	5.3	0.35
6100 6200 6300 6400	226.1 231.3 236.5 241.8	17.9 18.2 18.6 19.0	0.12 0.11 0.11 0.11	19 19 19 19	თთთთ	17.9 18.2 18.6 19.0	5.4 5.5 5.7 5.8	0.35 0.36 0.36 0.37
6500	247.1	19.3	0.11	19	3	19.3	5.9	0.37
6600 6700 6800 6900	252.5 257.9 263.4 268.9	19.7 20.1 20.4 20.8	0.11 0.10 0.10 0.10	19 18 18 18	3 3 4	19.7 20.1 20.4 20.8	6.1 6.2 6.4 6.5	0.38 0.38 0.39 0.39
7000	274.5	21.2	0.10	18	4	21.2	6.7	0.39

CHARGE 6W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	1	IR EMP PCT	A I DENS 1 F	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	M	М	М	М	M	М	М
3500	12.9	-12.4	1.4	-1.4	-0.9	-0.2	-6.8	6.8	-18	19
3600 3700 3800 3900	13.1 13.4 13.6 13.9	-12.7 -12.9 -13.2 -13.4	1.5 1.6 1.7 1.9	-1.5 -1.6 -1.7 -1.8	-0.8 -0.7 -0.7 -0.6	-0.3 -0.5 -0.6 -0.8	-7.1 -7.5 -7.8 -8.1	7.1 7.4 7.7 8.1	-18 -18 -18 -18	19 19 19 19
4000	14.1	-13.7	2.0	-2.0	-0.5	-1.0	-8.5	8.4	-19	19
4100 4200 4300 4400	14.3 14.5 14.8 15.0	-13.9 -14.1 -14.4 -14.6	2.1 2.2 2.4 2.5	-2.1 -2.2 -2.3 -2.4	-0.3 -0.2 0.0 0.1	-1.2 -1.4 -1.6 -1.8	-8.8 -9.1 -9.5 -9.8	8.7 9.0 9.3 9.6	-19 -19 -19 -19	20 20 20 20
4500	15.2	-14.8	2.7	-2.6	0.3	-2.1	-10.1	9.9	-19	20
4600 4700 4800 4900	15.4 15.6 15.8 15.9	-15.0 -15.2 -15.4 -15.6	2.8 3.0 3.1 3.3	-2.7 -2.8 -3.0 -3.1	0.5 0.7 0.9 1.2	-2.3 -2.6 -2.8 -3.1	-10.5 -10.8 -11.1 -11.5	10.2 10.6 10.9 11.2	-19 -19 -19 -19	20 20 20 20
5000	16.1	-15.8	3.4	-3.3	1.4	-3.4	-11.8	11.5	-19	20
5100 5200 5300 5400	16.3 16.5 16.7 16.8	-16.0 -16.1 -16.3 -16.5	3.6 3.8 4.0 4.1	-3.4 -3.6 -3.7 -3.9	1.7 1.9 2.2 2.5	-3.7 -4.0 -4.3 -4.6	-12.1 -12.4 -12.8 -13.1	11.8 12.1 12.4 12.7	-19 -19 -19 -19	20 20 20 20 20
5500	17.0	-16.7	4.3	-4.0	2.8	-4.9	-13.4	13.0	-19	20
5600 5700 5800 5900	17.2 17.3 17.5 17.6	-16.8 -17.0 -17.2 -17.3	4.5 4.7 4.9 5.1	-4.2 -4.4 -4.5 -4.7	3.1 3.4 3.8 4.1	-5.2 -5.6 -5.9 -6.2	-13.7 -14.1 -14.4 -14.7	13.3 13.6 13.9 14.2	-19 -19 -19 -19	20 20 20 20 20
6000	17.8	-17.5	5.3	-4.8	4.5	-6.6	-15.0	14.5	-19	20
6100 6200 6300 6400	17.9 18.1 18.2 18.4	-17.6 -17.8 -17.9 -18.1	5.5 5.7 5.9 6.1	-5.0 -5.2 -5.4 -5.5	4.8 5.2 5.6 6.0	-6.9 -7.3 -7.7 -8.0	-15.4 -15.7 -16.0 -16.3	14.8 15.2 15.5 15.8	-19 -19 -19 -19	20 20 20 20 20
6500	18.5	-18.2	6.3	-5.7	6.4	-8.4	-16.7	16.1	-19	20
6600 6700 6800 6900	18.6 18.8 18.9 19.1	-18.4 -18.5 -18.6 -18.8	6.5 6.7 6.9 7.2	-5.9 -6.1 -6.2 -6.4	6.8 7.2 7.6 8.0	-8.7 -9.1 -9.5 -9.8	-17.0 -17.3 -17.6 -17.9	16.4 16.7 17.0 17.4	-19 -19 -19 -19	20 20 20 20 20
7000	19.2	-18.9	7.4	-6.6	8.4	-10.2	-18.3	17.7	-19	20

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E V	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	٧	FUZE M582	DEC HOB	D ELEV	K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	274.5	21.2	0.10	18	4	21.2	6.7	0.39
7100 7200 7300 7400	280.1 285.8 291.6 297.4	21.6 22.0 22.4 22.8	0.10 0.10 0.09 0.09	18 17 17 17	4 4 4 4	21.6 22.0 22.4 22.8	6.8 7.0 7.1 7.3	0.40 0.40 0.41 0.41
7500	303.3	23.2	0.09	17	4	23.2	7.4	0.42
7600 7700 7800 7900	309.3 315.3 321.4 327.5	23.6 24.0 24.4 24.8	0.09 0.09 0.09 0.08	17 17 16 16	4 4 4 4	23.6 24.0 24.4 24.8	7.6 7.7 7.9 8.1	0.42 0.42 0.43 0.43
8000	333.7	25.2	0.08	16	5	25.2	8.3	0.44
8100 8200 8300 8400	340.0 346.4 352.8 359.4	25.6 26.0 26.5 26.9	0.08 0.08 0.08 0.08	16 16 15 15	5 5 5 5	25.6 26.0 26.5 26.9	8.4 8.6 8.8 9.0	0.44 0.44 0.45 0.45
8500	366.0	27.3	0.08	15	5	27.3	9.2	0.46
8600 8700 8800 8900	372.7 379.5 386.4 393.4	27.8 28.2 28.7 29.1	0.08 0.08 0.07 0.07	15 15 14 14	5 5 5 6	27.8 28.2 28.7 29.1	9.4 9.6 9.8 10.0	0.46 0.46 0.47 0.47
9000	400.5	29.6	0.07	14	6	29.6	10.2	0.48
9100 9200 9300 9400	407.8 415.1 422.6 430.2	30.1 30.5 31.0 31.5	0.07 0.07 0.07 0.07	14 14 13 13	6 6 6	30.1 30.5 31.0 31.5	10.4 10.6 10.9 11.1	0.48 0.49 0.49 0.49
9500	437.9	32.0	0.07	13	7	32.0	11.4	0.50
9600 9700 9800 9900	445.8 453.9 462.1 470.5	32.5 33.0 33.5 34.0	0.07 0.06 0.06 0.06	13 12 12 12	7 7 7 8	32.5 33.0 33.5 34.0	11.6 11.9 12.1 12.4	0.50 0.51 0.51 0.52
10000	479.1	34.6	0.06	12	8	34.6	12.7	0.52
10100 10200 10300 10400	487.9 496.9 506.2 515.7	35.1 35.7 36.3 36.9	0.06 0.06 0.06 0.06	11 11 11 10	8 8 9 9	35.1 35.7 36.3 36.9	13.0 13.3 13.6 14.0	0.53 0.53 0.54 0.54
10500	525.6	37.5	0.06	10	10	37.5	14.3	0.55

FT 155-AR-1 TABLE F CHARGE 6W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 17 18 19 10 11 13 15 16 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP AIR PROJ WT G **VELOCITY DENSITY** OF 1 SQ WIND 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC TAIL INC M M M M М M M M M M M 7000 19.2 7.4 17.7 20 -18.9 -6.6 8.4 -10.2-18.3 -19 7.6 7.8 8.1 8.3 -6.8 -7.0 -7.1 -7.3 19.3 -19.0 8.8 9.2 9.7 7100 *-10.6* -18.6 18.0 -18 20 -19.2 -19.3 -10.9 -11.3 18.3 18.7 19.5 19.6 19.7 7200 7300 -18.9 -19.2 -18 20 20 -18 -18 2ŏ 7400 10.1 19.0 7500 19.9 -19.6 8.5 -**7.5** 10.5 -12.0 -19.9 19.4 -18 20 8.8 9.0 9.2 9.5 7600 20.0 20.1 -19.7 -19.8 -19.9 -7.7 -7.9 10.9 11.4 -20.2 19.7 20 20 -12.4 -18 -12.8 20.1 20.4 20.8 -20.6-18 7700 -8.1 -8.3 11.8 12.2 -13.120.3 -20.9-18 20 7800 -13.5-21.3-18 19 7900 -20.18000 20.5 -20.29.7 -8.512.6 -13.8-21.6 21.1 -18 19 8100 20.7 20.8 9.9 10.2 -8.7 -8.8 -22.0 -22.3 21.5 21.9 22.3 -20.3-20.413.0 13.5 -14.2 -14.5 19 19 -17 -17 8200 20.9 20.6 10.4 -9.0 13.9 -14.9 -22.7 -17 19 8300 -17 10.7 -9.2-15.222.7 19 8500 21.2 10.9 14.7 -15.5 -23.4 23.1 -20.8**-9.4** -17 19 23.5 23.9 24.3 24.7 21.3 21.5 21.6 11.1 11.4 8600 -20.9 -9.6 15.1 15.5 15.8 -15.9 -23.7-17 19 -21.1 -21.2 -16.2 -16.5 -24.1 -24.5 -17 -16 19 19 -9.88700 8800 11.6 -10.08900 -21.311.9 -10.216.2 -16.8-24.9-16 18 -25.39000 21.9 -21.512.1 -10.416.5 -17.225.1 -16 18 22.0 22.2 22.3 22.5 25.5 25.9 26.4 26.8 16.9 17.2 9100 -21.6 12.4 -10.6 -17.5 -25.7-16 18 12.6 12.9 13.1 9200 -21.7 -10.8 -17.8 -26.1-16 18  $\begin{array}{c} -21.8 \\ -22.0 \end{array}$ 17.6 17.9 -26.5-26.918 18 9300 -11.0 9400 -11.1-18.4-16 9500 22.6 -22.113.4 -11.3 18.2 -18.7-27.327.3 18 -15-27.8 9600 22.8 -22.2 13.6 -11.5 18.6 -19.0 27.7 -15 18 -22.428.2 28.7 9700 22.9 13.9 -11.7 18.9 -19.3 -28.2-15 17 -22.5-11.9 19.2 -28.6 -29.1 -15 9800 23.1 14.1 -19.6 17 -22.7 -19.8 29.2 -15 9900 23.2 14.4 -12.119.5 17 10000 23.4 14.6 19.8 -29.5 -22.8-12.3-20.129.7 -15 17 30.2 30.7 31.3 31.8 23.5 23.7 23.9 -12.5 -12.7 -12.9 20.1 20.4 20.6 -14 -14 -14 -22.9 14.9 10100 -**20.4** -**30.0** 17 -23.1 -23.216 16 16 10200 15.1 15.4  $^{-20.6}_{-20.8}$ -30.410300 24.0 -23.415.7 20.9 -21.1 -31.4 -14 10400 -13.1

10500

24.2

-23.5

16.0

-13.3

21.1

-21.3

-31.8

32.3

-14

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE	DFS PER	DR PER 1 MIL	F O R	TIME OF		MUTH CTIONS
G E	V	BURST FUZE M582	10 M DEC HOB	D ELEV	K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
M	MIL			М	MIL	SEC	MIL	MIL
10500	525.6	37.5	0.06	10	10	37.5	14.3	0.55
10600 10700 10800 10900	535.7 546.3 557.3 568.8	38.1 38.7 39.4 40.1	0.06 0.06 0.05 0.05	10 9 9 8	10 11 11 12	38.1 38.7 39.4 40.1	14.7 15.1 15.5 15.9	0.55 0.56 0.56 0.57
11000	580.8	40.8	0.05	8	13	40.8	16.4	0.58
11100 11200 11300 11400	593.5 607.0 621.4 637.1	41.6 42.4 43.2 44.1	0.05 0.05 0.05 0.05	8 7 7 6	13 14 16 18	41.6 42.4 43.2 44.1	16.9 17.5 18.1 18.7	0.58 0.59 0.60 0.61
11500	654.6	45.2	0.05	5	20	45.2	19.5	0.62
11600 11700 11800	674.5 698.6 731.3	46.3 47.6 49.4 ******	0.05 0.05 0.04	5 4 ******	24 31	46.3 47.6 49.4	20.4 21.5 23.2	0.63 0.64 0.66
11800 11700 11600	850.7 882.8 906.1	55.6 57.2 58.2	0.04 0.04 0.04	4 5	34 26	55.6 57.2 58.2	30.4 32.8 34.6	0.77 0.80 0.82
11500	925.4	59.1	0.04	6	22	59.1	36.3	0.84
11400 11300 11200 11100	942.2 957.3 971.0 983.8	59.9 60.6 61.2 61.7	0.04 0.04 0.04 0.04	6 7 8 8	19 17 16 14	59.9 60.6 61.2 61.7	37.8 39.2 40.6 41.9	0.85 0.87 0.89 0.90
11000	995.8	62.2	0.04	9	13	62.2	43.2	0.92
10900 10800 10700 10600	1007.1 1017.8 1028.0 1037.8	62.7 63.1 63.5 63.9	0.04 0.04 0.04 0.04	9 10 10 10	13 12 11 11	62.7 63.1 63.5 63.9	44.5 45.8 47.0 48.3	0.93 0.95 0.96 0.98
10500	1047.2	64.3	0.04	11	10	64.3	49.6	0.99
10400 10300 10200 10100	1056.3 1065.0 1073.5 1081.7	64.6 65.0 65.3 65.6	0.04 0.04 0.04 0.03	11 12 12 12	10 9 9	64.6 65.0 65.3 65.6	50.8 52.1 53.4 54.7	1.01 1.02 1.04 1.06
10000	1089.7	65.9	0.03	13	8	65.9	56.0	1.07

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 6W TABLE F CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		AIR DENSITY 1 PCT		PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	M	M	М	М	М	М	М	М	M
10500	24.2	-23.5	16.0	-13.3	21.1	-21.3	-31.8	32.3	-14	16
10600 10700 10800 10900	24.4 24.6 24.8 24.9	-23.7 -23.8 -24.0 -24.1	16.3 16.5 16.8 17.1	-13.5 -13.7 -13.9 -14.0	21.3 21.5 21.7 21.9	-21.5 -21.7 -21.9 -22.1	-32.3 -32.8 -33.3 -33.8	32.8 33.4 34.0 34.7	-13 -13 -13 -13	16 16 16 15
11000	25.1	-24.3		-14.2	22.1	-22.3	-34.3	35.4	-13	15
11100 11200 11300 11400	25.4 25.6 25.9 26.1	-24.5 -24.6 -24.8 -25.0		-14.4 -14.6 -14.8 -15.0	22.2 22.3 22.4 22.3	-22.5 -22.7 -22.8 -22.9	-34.9 -35.4 -36.0 -36.5	36.2 36.9 37.7 38.7	-13 -13 -12 -12	15 15 14 14
11500	26.4	-25.2		-15.2	22.0	-22.9	-37.1		-12	14
11600 11700 11800	26.8	-25.4 -25.6 -25.9		-15.4 -15.6 -15.8	21.8	-22.9 -22.9 -22.9	-37.7 -38.3 -38.9		-11 -11 -11	13 13 13
*****	*****	******	*****	*****	*****	*****	******	****	*****	****
11800 11700 11600	26.9	-26.7 -26.5 -26.4		-16.6 -16.4 -16.3	20.9	-21.2 -21.0 -20.7	-43.5 -43.2 -42.9		-10 -10 -9	12 11 11
11500	26.8	-26.2		-16.2	20.4	-20.4	-42.6		-9	11
11400 11300 11200 11100	26.7 26.6 26.4 26.2	-26.0 -25.8 -25.6 -25.4		-16.1 -15.9 -15.8 -15.7	20.1 19.8 19.5 19.3	-20.2 -20.0 -19.7 -19.5	-42.3 -41.9 -41.6 -41.2	40.3 40.3 40.1 39.9	-9 -9 -9	11 10 10 10
11000	26.1	-25.2		-15.6	19.0	-19.3	-40.9	39.7	-8	10
10900 10800 10700 10600	25.9 25.7 25.5 25.3	-25.0 -24.8 -24.6 -24.4	17.7 17.7 17.6 17.6	-15.4 -15.3 -15.1 -15.0	18.8 18.6 18.4 18.2	-19.1 -18.9 -18.7 -18.5	-40.5 -40.2 -39.8 -39.4	39.4 39.1 38.8 38.5	-8 -8 -8	10 10 10 10
10500	25.1	-24.2	17.5	-14.9	18.0	-18.3	-39.1	38.2	-7	10
10400 10300 10200 10100	24.9 24.7 24.5 24.2	-23.9 -23.7 -23.5 -23.3	17.4 17.3 17.2 17.1	-14.7 -14.6 -14.4 -14.2	17.8 17.6 17.4 17.2	-18.2 -18.0 -17.8 -17.6	-38.7 -38.3 -38.0 -37.6	37.9 37.6 37.2 36.9	-7 -7 -7 -7	10 9 9
10000	24.0	-23.1	17.0	-14.1	17.0	-17.4	-37.2	36.5	-7	9

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	E V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
10000	1089.7	65.9	0.03	13	8	65.9	56.0	1.07
9900 9800 9700 9600	1097.4 1105.0 1112.3 1119.5	66.2 66.5 66.7 67.0	0.03 0.03 0.03 0.03	13 13 14 14	8 7 7	66.2 66.5 66.7 67.0	57.3 58.6 59.9 61.3	1.09 1.11 1.12 1.14
9500	1126.5	67.2	0.03	14	7	67.2	62.7	1.16
9400 9300 9200 9100	1133.4 1140.1 1146.7 1153.2	67.5 67.7 67.9 68.1	0.03 0.03 0.03 0.03	15 15 15 16	7 7 6 6	67.5 67.7 67.9 68.1	64.1 65.6 67.1 68.6	1.18 1.20 1.21 1.23
9000	1159.5	68.4	0.03	16	6	68.4	70.2	1.26
8900 8800 8700 8600	1165.7 1171.8 1177.7 1183.6	68.6 68.8 69.0 69.2	0.03 0.03 0.03 0.03	16 17 17 17	6655	68.6 68.8 69.0 69.2	71.8 73.4 75.1 76.8	1.28 1.30 1.32 1.34
8500	1189.4	69.3	0.03	18	5	69.3	78.6	1.37
8400 8300 8200 8100	1195.0 1200.6 1206.1 1211.4	69.5 69.7 69.9 70.0	0.03 0.03 0.03 0.03	18 18 18 19	5 5 5 4	69.5 69.7 69.9 70.0	80.4 82.3 84.3 86.4	1.39 1.42 1.45 1.47
8000	1216.7	70.2	0.03	19	4	70.2	88.5	1.50
7900 7800 7700 7600	1221.9 1227.0 1232.0 1236.9	70.4 70.5 70.7 70.9	0.03 0.03 0.03 0.03	19 20 20 21	4 4 4	70.4 70.5 70.7 70.9	90.7 93.1 95.6 98.2	1.54 1.57 1.60 1.64
7500	1241.8	71.0	0.03	21	4	71.0	100.9	1.68
7400 7300 7200 7100	1246.5 1251.2 1255.7 1260.2	71.2 71.3 71.5 71.6	0.03 0.03 0.03 0.03	21 22 22 23	4333	71.2 71.3 71.5 71.6	103.8 106.9 110.2 113.7	1.72 1.76 1.81 1.86
7000	1264.6	71.7	0.03	23	3	71.7	117.4	1.91
6900 6800 6700 6600	1268.9 1273.0 1277.1 1281.1	71.9 72.0 72.2 72.3	0.03 0.03 0.03 0.03	24 24 25 25		71.9 72.0 72.2 72.3	121.5 125.8 130.5 135.7	1.97 2.03 2.10 2.18
6500	1285.0	72.5	0.03	26		72.5	141.2	

CHARGE 6W TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND (NO T	1	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	M	M	М	М	М	М	М	М	М
10000	24.0	-23.1	17.0	-14.1	17.0	-17.4	-37.2	36.5	-7	9
9900 9800 9700 9600	23.8 23.6 23.3 23.1	-22.9 -22.6 -22.4 -22.2	16.9 16.8 16.7 16.6	-13.9 -13.7 -13.6 -13.4	16.8 16.6 16.4 16.3	-17.3 -17.1 -16.9 -16.8	-36.8 -36.4 -36.0 -35.6	36.2 35.8 35.5 35.1	-6 -6 -6 -6	9 9 9 8
9500	22.9	-21.9	16.5	-13.2	16.1	-16.6	-35.2	34.7	-6	8
9400 9300 9200 9100	22.6 22.4 22.2 21.9	-21.7 -21.5 -21.3 -21.0	16.4 16.3 16.2 16.1	-13.0 -12.8 -12.6 -12.3	15.9 15.7 15.6 15.4	-16.5 -16.3 -16.1 -16.0	-34.8 -34.4 -34.0 -33.6	34.4 34.0 33.6 33.2	-6 -5 -5 -5	8 8 7 7
9000	21.7	-20.8	15.9	-12.1	15.3	-15.8	-33.2	32.9	-5	7
8900 8800 8700 8600	21.4 21.2 21.0 20.7	-20.6 -20.3 -20.1 -19.8	15.8 15.7 15.6 15.4	-11.8 -11.6 -11.3 -11.0	15.1 14.9 14.8 14.6	-15.7 -15.6 -15.4 -15.3	-32.7 -32.3 -31.9 -31.4	32.5 32.1 31.7 31.3	-5 -4 -4 -4	7 6 6 6
8500	20.5	-19.6	15.3	-10.7	14.5	-15.1	-31.0	30.9	-4	5
8400 8300 8200 8100	20.2 20.0 19.7 19.4	-19.3 -19.1 -18.8 -18.6	15.1 15.0 14.9 14.7	-10.3 -9.9 -9.5 -9.1	14.4 14.2 14.1 14.0	-15.0 -14.8 -14.7 -14.6	-30.6 -30.1 -29.7 -29.2	30.5 30.1 29.7 29.2	-3 -3 -3 -2	5 5 4 4
8000	19.2	-18.3	14.6		13.8	-14.4	-28.7	28.8	-2	4
7900 7800 7700 7600	18.9 18.7 18.4 18.2	-18.1 -17.8 -17.6 -17.3	14.4 14.2 14.1 13.9		13.7 13.6 13.5 13.3	-14.3 -14.2 -14.1 -14.0	-28.3 -27.8 -27.3 -26.8	28.4 28.0 27.5 27.1	-1 -1 -1 0	3 3 2 2
7500	17.9	-17.0	13.7		13.2	-13.9	-26.3	26.7	0	1
7400 7300 7200 7100	17.6 17.3 17.1 16.8	-16.8 -16.5 -16.2 -15.9	13.6 13.4 13.2 13.0		13.1 13.0 12.9 12.8	-13.8 -13.7 -13.6 -13.5	-25.8 -25.3 -24.8 -24.2	26.2 25.8 25.3 24.8	1 2 2 3	1 0 0 -1
7000	16.5	-15.6	12.7		12.8	-13.4	-23.7	24.4	4	-2
6900 6800 6700 6600	16.2 15.9 15.6 15.3	-15.3 -15.1 -14.8 -14.5	12.5 12.2 12.0 11.7		12.7 12.6 12.6	-13.3 -13.3 -13.3 -13.2		23.9 23.4 22.9 22.4	55	-2 -3 -4 -5
6500	15.0	-14.1	11.4			-13.2		21.8		-6

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1 R A	2 E L	3 FS FOR GRAZE	DFS PER	5 DR PER	6 F O	7 TIME OF		9 MUTH CTIONS
N G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
6500	1285.0	72.5	0.03	26		72.5	141.2	
6400 6300	1288.8 1292.4	72.7 72.8	0.03 0.03	27		72.7 72.8	147.2 153.7	
6227	1295.0							

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 6W TABLE F CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE DCITY M/S	WI	INGE ND INO T	1	AIR TEMP PCT	A I DENS 1 F	S I TY	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	М	М	М	М	М	М	М	М	М
6500	15.0	-14.1	11.4			-13.2		21.8		-6
6400 6300	14.7	-13.8	11.1 10.7			-13.2		21.3		-8 -9

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	3	4	5		6	7	8	9	10	11	12	13
R A	E L		P	ROB	ABLE	ER	ROF	RS	ANGLE OF	COT ANGLE	TML VEL	MO		S I TE OR
N G	Ē V				FI	UZE	M5	82	FÄLL	OF FALL			ANGLE	OF SITE
E		F	1	D	НВ	Т	В	RB					SITE	SITE
M	MIL	N	Л	M	M	S	EC	M	MIL		M/S	M	MIL	MIL
0	0.0	0	8	0					0		453	0	0.000	0.00
500 1000 1500 2000	12.0 26.0 40.4 55.	0	8 8 8 8	0 0 1 1	0 1 1		04 04 04	17 16 15	13 28 45 64	78.2 36.6 22.8 16.0	432 412 392 373	2 7 16 29	0.000 0.000 0.001 0.002	0.00 0.00 -0.001 -0.001
2500	72.	2	8	1	1	0.	04	15	85	11.9	357	48	0.003	-0.002
3000 3500 4000 4500	89.3 108. 128.3 150.	7   1 8   1	9 10 11 12	1 2 2 2	2 2 2 3	0. 0. 0.	04 04	14 14 14 14	109 135 163 193	9.3 7.5 6.2 5.2	342 331 321 314	73 105 144 191	0.005 0.008 0.011 0.014	-0.006 -0.008
5000	172.	5 1	13	2	3	0.	04	14	224	4.5	308	247	0.019	-0.015
5500 6000 6500 7000	196.2 221.0 247. 274.5	0   1	13 14 15 16	3 3 3	4 4 5 5	0. 0. 0.	04	14 14 15 15	256 290 325 361	3.9 3.4 3.0 2.7	302 298 295 292	313 388 474 572	0.024 0.031 0.040 0.051	-0.025
7500	303.	3 1	17	4	6	0.	04	15	398	2.4	289	683	0.066	-0.053
8000 8500 9000 9500	333. 366. 400. 437.	0   1	18 19 20 21	4 4 5 5	7 7 8 9	0. 0. 0.	05 05	16 16 17 18	438 478 521 567	2.2 2.0 1.8 1.6	287 286 284 284	808 949 1110 1295	0.085 0.111 0.146 0.197	-0.068 -0.089 -0.116 -0.155
10000	479.	1 2	22	6	10	0.	05	19	616	1.4	284	1510	0.273	-0.209
10500 11000 11500	525.0 580.3 654.0	8 2	24 25 27	6 7 7	12 13 16	0. 0. 0.	05 06	20 21 22	670 732 810	1.3 1.1 1.0	284 285 288	1767 2089 2541		-0.438 $-0.762$
	*****			***	****	***				*****			*****	
11500 11000 10500	925.4 995.3 1047.2	8 2	30 29 28	9 9 9	28 31 33	0. 0. 0.	09	24 23 22	1065 1125 1167	0.6 0.5 0.4	303 306 309	4291 4728 5032	-1.789 -1.493	1.88 1.54 1.38
10000	1089.	7 2	26	9	35	0.	09	21	1202	0.4	310	5271	-1.351	1.29
9500 9000 8500 8000	1126. 1159. 1189. 1216.	5   2	25 24 22 21	9 9 8 8	37 38 39 41	0. 0. 0.	10 10	20 19 18 17	1233 1261 1287 1312	0.4 0.3 0.3 0.3	311 312 313 313	5467 5633 5776 5898	-1.264 -1.204 -1.160 -1.126	1.22 1.17 1.14 1.11
7500	1241.	8 1	19	8	42	0.	11	16	1336	0.3	314	6003	-1.098	1.08
7000 6500	1264. 1285.		18	8 7	43 44	0. 0.		15 14	1360 1383	0.2 0.2	314 314	6093 6169	-1.074 -1.054	1.06 1.05

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H CHARGE 6W ROTATION - RANGE

## CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

		AZIMUTH OF TARGET - MILS											
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600				
500 1000 1500 2000	0 0 0	-1+ -1+ -2+ -2+	-1+ -2+ -3+ -4+	-2+ -3+ -5+ -6+	-2+ -4+ -6+ -8+	-3+ -5+ -7+ -9+	-3+ -6+ -8+ -10+	-3+ -6+ -9+ -11+	-3+ -6+ -9+ -11+				
2500	0	-3+	-5+	-7+	-9+	-11+	-12+	-13+	-13+				
3000 3500 4000 4500	0000	-3+ -3+ -4+ -4+	-6+ -6+ -7+ -8+	-8+ -9+ -10+ -11+	-11+ -12+ -13+ -14+	-12+ -14+ -15+ -17+	-14+ -15+ -17+ -18+	-15+ -16+ -18+ -20+	- 15+ - 17+ - 18+ - 20+				
5000	0	-4+	-8+	-12+	-15+	-18+	-20+	-21+	-21+				
5500 6000 6500 7000	0000	-4+ -5+ -5+ -5+	-9+ -9+ -10+ -10+	-13+ -14+ -14+ -15+	-16+ -17+ -18+ -19+	-19+ -20+ -21+ -23+	-21+ -23+ -24+ -25+	-23+ -24+ -25+ -27+	-23+ -24+ -26+ -27+				
7500	0	-6+	-11+	-16+	-20+	-24+	-26+	-28+	-28+				
8000 8500 9000 9500	0 0 0 0	-6+ -6+ -6+ -6+	-11+ -12+ -12+ -12+	-16+ -17+ -17+ -18+	-21+ -21+ -22+ -22+	-24+ -25+ -26+ -26+	-27+ -28+ -29+ -29+	-29+ -30+ -31+ -31+	-29+ -30+ -31+ -32+				
10000	0	-6+	-12+	-18+	-23+	-27+	-30+	-31+	-32+				
10500 11000 11500	0 0 0	-6+ -6+ -6+	-12+ -12+ -11+	-18+ -17+ -16+	-23+ -22+ -20+	-26+ -26+ -24+	-29+ -29+ -27+	-31+ -30+ -28+	-32+ -31+ -29+				
*****	****	*****	*****	*****	*****	*****	*****	*****	******				
11500 11000 10500	0 0 0	-2+ -1+ 0	-4+ -2+ +1-	-6+ -2+ +1-	-7+ -3+ +1-	-9+ -3+ +1-	-10+ -4+ +1-	-10+ -4+ +1-	-11+ -4+ +1-				
10000	0	+1-	+2-	+3-	+4-	+5-	+6-	+6-	+6-				
9500 9000 8500 8000	0000	+2- +3- +4- +5-	+4- +6- +7- +9-	+6- +8- +11- +13-	+8- +11- +13- +17-	+9- +12- +16- +19-	+10 <sup>-</sup> +14 <sup>-</sup> +18 <sup>-</sup> +22 <sup>-</sup>	+10 <sup>-</sup> +15 <sup>-</sup> +19 <sup>-</sup> +23 <sup>-</sup>	+11- +15- +19- +23-				
7500	0	+6-	+11-	+16-	+20-	+23-	+26-	+28-	+28-				
7000 6500	0	+7- +8-	+13- +16-	+19- +23-	+24- +30-	+28- +35-	+32- +39-	+33- +41-	+34- +42-				
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800				
		AZIMUTH OF TARGET - MILS											

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70	
MULTIPLY BY	.98	. 9 4	. 87	.77	. 64	. 50	. 34	199
								-

### CHARGE TABLE I 6W ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 0 DEGREES LATITUDE

			AZI	MUTH OF	TARGET	- MILS	1		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R
5500	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R
6000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R
6500	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R
7000	R0.1L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.1R
7500	R0.2L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.2R
8000	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R
8500	R0.2L	R0.2L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.2R	L0.2R
9000	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R
9500	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R
10000	R0.4L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.4R
10500	R0.5L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.5R
11000	R0.6L	R0.5L	R0.4L	R0.2L	0.0	L0.2R	L0.4R	L0.5R	L0.6R
11500	R0.8L	R0.7L	R0.5L	R0.3L	0.0	L0.3R	L0.5R	L0.7R	L0.8R
*****	*****	*****	*****	*****	******	******	******	******	*****
11500	R1.7L	R1.6L	R1 . 2L	R0.7L	0.0	L0.7R	L1.2R	L1.6R	L1.7R
11000	R2.1L	R1.9L	R1 . 5L	R0.8L	0.0	L0.8R	L1.5R	L1.9R	L2.1R
10500	R2.4L	R2.2L	R1 . 7L	R0.9L	0.0	L0.9R	L1.7R	L2.2R	L2.4R
10000	R2.7L	R2.5L	R1.9L	R1.0L	0.0	L1.0R	L1.9R	L2.5R	L2.7R
9500	R3.0L	R2.8L	R2.1L	R1.2L	0.0	L1.2R	L2.1R	L2.8R	L3.0R
9000	R3.3L	R3.1L	R2.3L	R1.3L	0.0	L1.3R	L2.3R	L3.1R	L3.3R
8500	R3.6L	R3.4L	R2.6L	R1.4L	0.0	L1.4R	L2.6R	L3.4R	L3.6R
8000	R3.9L	R3.6L	R2.8L	R1.5L	0.0	L1.5R	L2.8R	L3.6R	L3.9R
7500	R4.3L	R3.9L	R3.0L	R1.6L	0.0	L1.6R	L3.0R	L3.9R	L4.3R
7000	R4.6L	R4.2L	R3.2L	R1.7L	0.0	L1.7R	L3.2R	L4.2R	L4.6R
6500	R4.9L	R4.5L	R3.4L	R1.9L	0.0	L1.9R	L3.4R	L4.5R	L4.9R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZI	MUTH OF	TARGET	- MILS	1		

### 0 DEGREES LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 6W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 10 DEGREES NORTH LATITUDE

				MUTH OF		- MILS				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
ME TERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
3500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	
4500	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
5000	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
5500	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	
6000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	
6500	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	
7000	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	
7500	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	
8000	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.4R	L0.4R	L0.5R	L0.5R	
8500	L0.1R	L0.1R	L0.2R	L0.2R	L0.3R	L0.4R	L0.5R	L0.5R	L0.6R	
9000	L0.1R	L0.1R	L0.2R	L0.2R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	
9500	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.5R	L0.6R	L0.7R	L0.7R	
10000	0.0	L0.1R	L0.1R	L0.3R	L0.4R	L0.6R	L0.7R	L0.8R	L0.8R	
10500	0.0	0.0	L0.1R	L0.3R	L0.4R	L0.6R	L0.8R	L0.9R	L0.9R	
11000	R0.1L	R0.1L	L0.1R	L0.3R	L0.5R	L0.7R	L0.9R	L1.0R	L1.1R	
11500	R0.2L	R0.2L	0.0	L0.2R	L0.5R	L0.8R	L1.1R	L1.2R	L1.3R	
*****	*****	*****	*****	*****	*****	*****	*****	******	*****	
11500	R1.0L	R0.9L	R0.5L	L0.1R	L0.7R	L1.3R	L1.9R	L2.3R	L2.4R	
11000	R1.3L	R1.2L	R0.7L	R0.1L	L0.7R	L1.5R	L2.2R	L2.6R	L2.8R	
10500	R1.6L	R1.4L	R0.9L	R0.1L	L0.8R	L1.7R	L2.4R	L2.9R	L3.1R	
10000	R1.9L	R1.7L	R1.1L	R0.2L	L0.8R	L1.8R	L2.7R	L3.2R	L3.4R	
9500	R2.2L	R2.0L	R1.3L	R0.3L	L0.8R	L1.9R	L2.9R	L3.5R	L3.8R	
9000	R2.5L	R2.2L	R1.5L	R0.5L	L0.8R	L2.0R	L3.1R	L3.8R	L4.1R	
8500	R2.8L	R2.5L	R1.7L	R0.6L	L0.8R	L2.2R	L3.3R	L4.1R	L4.4R	
8000	R3.1L	R2.8L	R1.9L	R0.7L	L0.8R	L2.3R	L3.6R	L4.4R	L4.7R	
7500	R3.4L	R3.1L	R2.2L	R0.8L	L0.8R	L2.4R	L3.8R	L4.7R	L5.0R	
7000	R3.7L	R3.3L	R2.4L	R0.9L	L0.8R	L2.5R	L4.0R	L5.0R	L5.3R	
6500	R4.0L	R3.6L	R2.6L	R1.0L	L0.8R	L2.6R	L4.2R	L5.2R	L5.6R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
	AZIMUTH OF TARGET - MILS									

### 10 DEGREES SOUTH LATITUDE

### CHARGE TABLE I 6W ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 20 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2500	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R
5500	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
6000	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R
6500	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R
7000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R
7500	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.7R	L0.7R	L0.7R
8000	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R
8500	L0.4R	L0.4R	L0.5R	L0.6R	L0.6R	L0.7R	L0.8R	L0.8R	L0.9R
9000	L0.4R	L0.5R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L0.9R	L1.0R
9500	L0.4R	L0.5R	L0.5R	L0.6R	L0.8R	L0.9R	L1.0R	L1.0R	L1.1R
10000	L0.4R	L0.5R	L0.5R	L0.7R	L0.8R	L1.0R	L1.1R	L1.2R	L1.2R
10500	L0.4R	L0.5R	L0.6R	L0.7R	L0.9R	L1.1R	L1.2R	L1.3R	L1.3R
11000	L0.4R	L0.4R	L0.6R	L0.7R	L1.0R	L1.2R	L1.3R	L1.5R	L1.5R
11500	L0.3R	L0.4R	L0.5R	L0.8R	L1.1R	L1.3R	L1.6R	L1.7R	L1.8R
*****	******	*****	*****	*****	******	******	******	******	*****
11500	R0.2L	R0.1L	L0.2R	L0.8R	L1.4R	L2.0R	L2.5R	L2.9R	L3.0R
11000	R0.5L	R0.4L	L0.1R	L0.7R	L1.4R	L2.2R	L2.8R	L3.3R	L3.4R
10500	R0.8L	R0.6L	R0.1L	L0.6R	L1.5R	L2.4R	L3.1R	L3.6R	L3.8R
10000	R1.0L	R0.8L	R0.3L	L0.6R	L1.5R	L2.5R	L3.3R	L3.9R	L4.1R
9500	R1.3L	R1.1L	R0.5L	L0.5R	L1.6R	L2.6R	L3.6R	L4.2R	L4.4R
9000	R1.5L	R1.3L	R0.6L	L0.4R	L1.6R	L2.8R	L3.8R	L4.5R	L4.7R
8500	R1.8L	R1.6L	R0.8L	L0.3R	L1.6R	L2.9R	L4.0R	L4.7R	L5.0R
8000	R2.1L	R1.8L	R1.0L	L0.2R	L1.6R	L3.0R	L4.2R	L5.0R	L5.3R
7500	R2.4L	R2.1L	R1.2L	L0.1R	L1.6R	L3.1R	L4.4R	L5.3R	L5.6R
7000	R2.7L	R2.4L	R1 . 4L	0.0	L1.6R	L3.2R	L4.6R	L5.6R	L5.9R
6500	R3.0L	R2.6L	R1 . 6L	R0.2L	L1.6R	L3.3R	L4.8R	L5.8R	L6.1R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZI	MUTH OF	TARGET	- MILS	i		

### 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 6W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 30 DEGREES NORTH LATITUDE

				MUTH OF		- MILS				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
ME TERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
1500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
2500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
3500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	
4500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	
5000	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	
5500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	
6000	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	
6500	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	
7000	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.9R	
7500	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	
8000	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	
8500	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.1R	L1.1R	L1.1R	
9000	L0.8R	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.2R	L1.3R	
9500	L0.8R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.3R	L1.4R	L1.4R	
10000	L0.8R	L0.9R	L0.9R	L1.1R	L1.2R	L1.3R	L1.4R	L1.5R	L1.5R	
10500	L0.9R	L0.9R	L1.0R	L1.1R	L1.3R	L1.4R	L1.6R	L1.7R	L1.7R	
11000	L0.9R	L0.9R	L1.0R	L1.2R	L1.4R	L1.6R	L1.8R	L1.9R	L1.9R	
11500	L0.9R	L0.9R	L1.1R	L1.3R	L1.5R	L1.8R	L2.0R	L2.2R	L2.2R	
*****	******	*****	*****	*****	*****	*****	*****	*****	*****	
11500	L0.5R	L0.6R	L1.0R	L1.4R	L2.0R	L2.6R	L3.1R	L3.4R	L3.5R	
11000	L0.3R	L0.4R	L0.8R	L1.4R	L2.1R	L2.8R	L3.4R	L3.8R	L3.9R	
10500	L0.1R	L0.3R	L0.7R	L1.4R	L2.2R	L3.0R	L3.7R	L4.1R	L4.3R	
10000	R0.1L	L0.1R	L0.6R	L1.3R	L2.2R	L3.1R	L3.9R	L4.4R	L4.6R	
9500	R0.3L	R0.1L	L0.4R	L1.3R	L2.3R	L3.3R	L4.1R	L4.7R	L4.9R	
9000	R0.6L	R0.4L	L0.3R	L1.2R	L2.3R	L3.4R	L4.3R	L5.0R	L5.2R	
8500	R0.8L	R0.6L	L0.1R	L1.1R	L2.3R	L3.5R	L4.5R	L5.2R	L5.5R	
8000	R1.1L	R0.8L	R0.1L	L1.0R	L2.3R	L3.6R	L4.7R	L5.5R	L5.7R	
7500	R1 . 4L	R1.1L	R0.3L	L0.9R	L2.3R	L3.7R	L4.9R	L5.7R	L6.0R	
7000	R1 . 6L	R1.3L	R0.5L	L0.8R	L2.3R	L3.8R	L5.1R	L6.0R	L6.3R	
6500	R1 . 9L	R1.6L	R0.7L	L0.7R	L2.3R	L3.9R	L5.3R	L6.2R	L6.5R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
	AZIMUTH OF TARGET - MILS									

### 30 DEGREES SOUTH LATITUDE

### CHARGE TABLE I 6W ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 40 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGE T	- MILS	i				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200		
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200		
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R		
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R		
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R		
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
3500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R		
4000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R		
4500	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R		
5000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R		
5500	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R		
6000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R		
6500	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R		
7000	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R		
7500	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.2R		
8000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.3R		
8500	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R		
9000	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.4R	L1.5R	L1.5R	L1.5R		
9500	L1.2R	L1.2R	L1.2R	L1.3R	L1.4R	L1.5R	L1.6R	L1.6R	L1.7R		
10000	L1.2R	L1.2R	L1.3R	L1.4R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R		
10500	L1.3R	L1.3R	L1.4R	L1.5R	L1.7R	L1.8R	L1.9R	L2.0R	L2.0R		
11000	L1.3R	L1.4R	L1.5R	L1.6R	L1.8R	L2.0R	L2.1R	L2.2R	L2.3R		
11500	L1.4R	L1.4R	L1.6R	L1.8R	L2.0R	L2.2R	L2.4R	L2.5R	L2.6R		
*****	******	*****	*****	*****	*****	*****	******	*****	*****		
11500	L1.3R	L1.4R	L1.7R	L2.1R	L2.6R	L3.1R	L3.5R	L3.8R	L3.9R		
11000	L1.1R	L1.2R	L1.6R	L2.1R	L2.7R	L3.3R	L3.8R	L4.2R	L4.3R		
10500	L1.0R	L1.1R	L1.5R	L2.1R	L2.8R	L3.5R	L4.1R	L4.5R	L4.6R		
10000	L0.8R	L1.0R	L1.4R	L2.1R	L2.9R	L3.7R	L4.3R	L4.8R	L4.9R		
9500	L0.6R	L0.8R	L1.3R	L2.0R	L2.9R	L3.8R	L4.6R	L5.1R	L5.2R		
9000	L0.4R	L0.6R	L1.2R	L2.0R	L3.0R	L3.9R	L4.8R	L5.3R	L5.5R		
8500	L0.2R	L0.4R	L1.0R	L1.9R	L3.0R	L4.0R	L4.9R	L5.5R	L5.8R		
8000	0.0	L0.2R	L0.9R	L1.8R	L3.0R	L4.2R	L5.1R	L5.8R	L6.0R		
7500	R0.3L	0.0	L0.7R	L1.8R	L3.0R	L4.3R	L5.3R	L6.0R	L6.3R		
7000	R0.5L	R0.2L	L0.5R	L1.7R	L3.0R	L4.3R	L5.5R	L6.2R	L6.5R		
6500	R0.7L	R0.5L	L0.3R	L1.6R	L3.0R	L4.4R	L5.6R	L6.4R	L6.7R		
	3200	2800	2400	2000	1600	1200	800	400	0		
	3200	3600	4000	4400	4800	5200	5600	6000	6400		
	AZIMUTH OF TARGET - MILS										

40 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 6W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 50 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS	1		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
2500	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R
3000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
3500	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
4000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
4500	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
5000	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
5500	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R
6000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R
6500	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R
7000	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R
7500	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R
8000	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.5R
8500	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.6R
9000	L1.4R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R
9500	L1.5R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R
10000	L1.6R	L1.6R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.1R
10500	L1.7R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.2R	L2.3R	L2.3R
11000	L1.8R	L1.8R	L1.9R	L2.0R	L2.1R	L2.3R	L2.4R	L2.5R	L2.5R
11500	L1.9R	L1.9R	L2.0R	L2.2R	L2.4R	L2.6R	L2.7R	L2.8R	L2.9R
11500	L2.0R	L2.1R	L2.3R	L2.7R	L3.1R	L3.5R	L3.9R	L4.1R	L4.2R
11000	L1.9R	L2.0R	L2.3R	L2.7R	L3.2R	L3.8R	L4.2R	L4.5R	L4.6R
10500	L1.8R	L1.9R	L2.3R	L2.8R	L3.3R	L3.9R	L4.4R	L4.8R	L4.9R
10000	L1.7R	L1.8R	L2.2R	L2.8R	L3.4R	L4.1R	L4.7R	L5.0R	L5.2R
9500	L1.5R	L1.7R	L2.1R	L2.7R	L3.5R	L4.2R	L4.8R	L5.3R	L5.4R
9000	L1.4R	L1.6R	L2.0R	L2.7R	L3.5R	L4.3R	L5.0R	L5.5R	L5.7R
8500	L1.2R	L1.4R	L1.9R	L2.7R	L3.6R	L4.4R	L5.2R	L5.7R	L5.9R
8000	L1.0R	L1.2R	L1.8R	L2.6R	L3.6R	L4.5R	L5.4R	L5.9R	L6.1R
7500	L0.8R	L1.1R	L1.6R	L2.5R	L3.6R	L4.6R	L5.5R	L6.1R	L6.3R
7000	L0.6R	L0.9R	L1.5R	L2.4R	L3.6R	L4.7R	L5.6R	L6.3R	L6.5R
6500	L0.4R	L0.7R	L1.3R	L2.4R	L3.5R	L4.7R	L5.8R	L6.4R	L6.7R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZI	MUTH OF	TARGET	- MILS	i		

## 50 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

## TABLE I ROTATION - AZIMUTH

CHARGE

6W

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 60 DEGREES NORTH LATITUDE

	AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
3000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
3500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
4000	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
4500	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
5000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R
5500	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R
6000	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R
6500	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
7000	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R
7500	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R
8000	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
8500	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R
9000	L1.6R	L1.6R	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R
9500	L1.7R	L1.8R	L1.8R	L1.8R	L1.9R	L2.0R	L2.0R	L2.1R	L2.1R
10000	L1.9R	L1.9R	L1.9R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R
10500	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.3R	L2.4R	L2.4R	L2.5R
11000	L2.1R	L2.1R	L2.2R	L2.3R	L2.4R	L2.5R	L2.6R	L2.7R	L2.7R
11500	L2.3R	L2.3R	L2.4R	L2.5R	L2.7R	L2.8R	L2.9R	L3.0R	L3.1R
*****	*****	*****	*****	*****	*****	******	******	******	*****
11500	L2.6R	L2.7R	L2.9R	L3.2R	L3.5R	L3.8R	L4.1R	L4.3R	L4.3R
11000	L2.6R	L2.7R	L2.9R	L3.3R	L3.7R	L4.1R	L4.4R	L4.6R	L4.7R
10500	L2.6R	L2.7R	L2.9R	L3.3R	L3.8R	L4.2R	L4.6R	L4.9R	L5.0R
10000	L2.5R	L2.6R	L2.9R	L3.3R	L3.9R	L4.4R	L4.8R	L5.1R	L5.2R
9500	L2.4R	L2.5R	L2.9R	L3.4R	L3.9R	L4.5R	L5.0R	L5.3R	L5.4R
9000	L2.3R	L2.4R	L2.8R	L3.3R	L4.0R	L4.6R	L5.2R	L5.5R	L5.6R
8500	L2.2R	L2.3R	L2.7R	L3.3R	L4.0R	L4.7R	L5.3R	L5.7R	L5.8R
8000	L2.1R	L2.2R	L2.6R	L3.3R	L4.0R	L4.8R	L5.4R	L5.9R	L6.0R
7500	L1.9R	L2.1R	L2.5R	L3.2R	L4.0R	L4.9R	L5.6R	L6.0R	L6.2R
7000	L1.8R	L1.9R	L2.4R	L3.2R	L4.0R	L4.9R	L5.7R	L6.1R	L6.3R
6500	L1.6R	L1.8R	L2.3R	L3.1R	L4.0R	L4.9R	L5.7R	L6.3R	L6.4R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

60 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 6W ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 70 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
500	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
1000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
1500	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
2500	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
3000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
3500	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
4000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
4500	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
5000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
5500	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R
6000	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R
6500	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R
7000	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R	L1.4R	L1.4R
7500	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R
8000	L1.6R	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R
8500	L1.7R	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R	L1.8R	L1.9R
9000	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.0R	L2.0R	L2.0R
9500	L2.0R	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.1R	L2.2R	L2.2R
10000	L2.1R	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R	L2.3R	L2.4R	L2.4R
10500	L2.3R	L2.3R	L2.3R	L2.4R	L2.4R	L2.5R	L2.5R	L2.6R	L2.6R
11000	L2.4R	L2.4R	L2.5R	L2.5R	L2.6R	L2.7R	L2.8R	L2.8R	L2.8R
11500	L2.6R	L2.7R	L2.7R	L2.8R	L2.9R	L3.0R	L3.1R	L3.1R	L3.2R
*****	*****	*****	*****	*****	*****	*****	******	*****	*****
11500	L3.2R	L3.2R	L3.4R	L3.6R	L3.8R	L4.0R	L4.2R	L4.3R	L4.4R
11000	L3.3R	L3.3R	L3.5R	L3.7R	L4.0R	L4.2R	L4.5R	L4.6R	L4.7R
10500	L3.3R	L3.3R	L3.5R	L3.8R	L4.1R	L4.4R	L4.7R	L4.9R	L4.9R
10000	L3.3R	L3.3R	L3.5R	L3.8R	L4.2R	L4.5R	L4.9R	L5.1R	L5.1R
9500	L3.2R	L3.3R	L3.5R	L3.9R	L4.3R	L4.7R	L5.0R	L5.2R	L5.3R
9000	L3.2R	L3.3R	L3.5R	L3.9R	L4.3R	L4.8R	L5.1R	L5.4R	L5.5R
8500	L3.1R	L3.2R	L3.5R	L3.9R	L4.4R	L4.8R	L5.2R	L5.5R	L5.6R
8000	L3.0R	L3.1R	L3.4R	L3.9R	L4.4R	L4.9R	L5.3R	L5.6R	L5.7R
7500	L2.9R	L3.0R	L3.4R	L3.8R	L4.4R	L4.9R	L5.4R	L5.7R	L5.8R
7000	L2.8R	L2.9R	L3.3R	L3.8R	L4.4R	L5.0R	L5.5R	L5.8R	L5.9R
6500	L2.7R	L2.8R	L3.2R	L3.7R	L4.4R	L5.0R	L5.5R	L5.9R	L6.0R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZI	MUTH OF	TARGET	- MILS	i		

### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

	2	3	4	5	6	7	8	9	10	11
FS		_		FUZI		CTIONS	FOR			
	MUZZ VELOC 1 M/	I TY		IGE ND (NO T	A I TEN 1 F		DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
3	004 006 009	0.004 0.006 0.008	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.001 0.001	0.000 001 001	0.008 0.012 0.016	008 012 016
5	011	0.010	0.000	0.000	0.000	0.000	0.002	002	0.019	<i>019</i>
7 8	015 017	0.013 0.015 0.016 0.018	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.001 0.001 0.002 0.002	001 001 002 002	0.002 0.003 0.005 0.006	002 003 005 006	0.022 0.025 0.028 0.030	023 026 028 031
10	020	0.020	0.000	0.000	0.003	002	0.007	007	0.033	033
12 13	<i>024</i>	0.022 0.024 0.025 0.027	0.000 0.000 0.000 0.000	0.000 0.001 0.001 0.001	0.004 0.004 0.004 0.004	002 002 002 002	0.009 0.010 0.012 0.013	008 010 011 013	0.034 0.036 0.038 0.039	035 037 039 040
15	028	0.028	001	0.001	0.004	001	0.015	014	0.040	042
17 18	029 031 032 033	0.030 0.031 0.032 0.033	001 001 002 002	0.002 0.002 0.002 0.003	0.004 0.004 0.003 0.002	0.000 0.001 0.002 0.003	0.016 0.018 0.019 0.021	015 017 018 019	0.041 0.042 0.043 0.044	043 044 045 046
20	034	0.034	002	0.003	0.001	0.004	0.022	020	0.045	047
22 23	036 037	0.035 0.037 0.038 0.039	003 003 004 004	0.004 0.004 0.005 0.006	0.000 001 003 004	0.006 0.008 0.009 0.011	0.024 0.025 0.026 0.027	022 023 024 025	0.046 0.047 0.048 0.048	048 049 050 051
25	039	0.040	005	0.006	006	0.013	0.029	026	0.049	052
27 28	041 042	0.040 0.041 0.042 0.043	005 006 006 007	0.007 0.007 0.008 0.009	008 009 011 013	0.015 0.016 0.018 0.020	0.030 0.031 0.032 0.033	027 028 029 030	0.050 0.051 0.052 0.052	053 054 055 056
30	044	0.044	007	0.009	015	0.022	0.034	031	0.053	056
32 33	045 046 047 048	0.045 0.046 0.047 0.048	008 008 009 010	0.010 0.010 0.011 0.012	017 019 021 023	0.024 0.025 0.027 0.029	0.035 0.037 0.038 0.039	032 034 035 036	0.054 0.055 0.055 0.056	057 058 059 060
35	<i>049</i>	0.049	010	0.012	025	0.030	0.040	037	0.057	060

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

TABLE J

CHARGE 6W

FUZE CORRECTION FACTORS

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	CITY		IGE ND (NOT	AI TEN 1 F		DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	049	0.049	010	0.012	025	0.030	0.040	037	0.057	060
36 37 38 39	050 051 052 053	0.050 0.051 0.051 0.052	011 011 012 012	0.013 0.013 0.014 0.014	026 028 030 032	0.032 0.034 0.035 0.037	0.042 0.043 0.044 0.046	038 040 041 042	0.058 0.058 0.059 0.060	061 062 063 064
40	054	0.053	013	0.015	033	0.038	0.047	043	0.061	065
41 42 43 44	055 056 057 058	0.054 0.055 0.056 0.058	013 014 014 015	0.015 0.016 0.016 0.016	035 036 038 039	0.039 0.040 0.041 0.042	0.048 0.050 0.051 0.053	045 046 048 050	0.062 0.063 0.064 0.064	066 066 067 068
45	059	0.059	015	0.017	040	0.042	0.055	052	0.065	069
46 47 48 49	060 062 063 064	0.060 0.061 0.063 0.064	016 016 016 016	0.017 0.017 0.017 0.018	041 041 041 042	0.043 0.044 0.045 0.045	0.057 0.059 0.061 0.063	054 055 057 059	0.066 0.067 0.068 0.069	069 070 071 072
50	065	0.065	017	0.018	042	0.046	0.065	061	0.070	073
51 52 53 54	067 068 069 071	0.066 0.068 0.069 0.070	017 017 017 018	0.018 0.018 0.018 0.019	043 044 044 045	0.047 0.048 0.048 0.049	0.067 0.069 0.071 0.073	062 064 066 068	0.071 0.072 0.073 0.074	074 074 076 077
55	072	0.072	018	0.019	045	0.050	0.075	069	0.075	078
56 57 58 59	073 075 076 077	0.073 0.075 0.076 0.077	018 018 018 018	0.019 0.019 0.019 0.019	045 046 046 047	0.050 0.051 0.051 0.052	0.077 0.079 0.080 0.082	071 073 074 076	0.077 0.078 0.079 0.080	079 080 081 082
60	<i>079</i>	0.079	018	0.019	047	0.052	0.084	078	0.082	084
61 62 63 64	080 082 083 085	0.080 0.082 0.083 0.085	018 018 018 018	0.019 0.019 0.019 0.019	047 048 048 048	0.053 0.053 0.054 0.054	0.086 0.088 0.090 0.092	080 081 083 085	0.083 0.084 0.086 0.087	086 087 089 092
65	086	0.086	018	0.018	048	0.055	0.094	087	0.089	094
66 67 68 69	088 089 091 093	0.088 0.089 0.091 0.092	018 018 018 018	0.018 0.018 0.019 0.019	049 049 049 049	0.055 0.055 0.056 0.056	0.096 0.097 0.099 0.101	089 090 092 094	0.091 0.094 0.098 0.102	096 099 102 105
70	094	0.094	018	0.021	049	0.056	0.103	096	0.107	110

CHARGE TABLE J FT 155-AR-1
6W PART 1
FUZE CORRECTION FACTORS PROJ , HE , M795
FUZE , MTSQ , M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZLE RANGE VELOCITY WIND 1 M/S 1 KNOT			AI TEN 1 F	MP .	DEN	IR SITY PCT	PROJ WT OF 1 SQ (4 SQ STD)		
	DEC INC HEAD TAIL		DEC	INC	DEC	INC	DEC	INC		
70	094	0.094	018	0.021	049	0.056	0.103	096	0.107	110
71 72		0.096 0.098	019 022			0.056 0.055	0.105 0.109	098 100	0.114 0.128	

FT 155-AR-1 TABLE K CHARGE PART 1 6W

PROJ, HE, M795 FUZE SETTING

FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

FUZE SETTING FUZE M582		CORRECTIONS	
FUZE MID82		CORRECTIONS	
FROM	TO		
1.8	3.3	-0.1	
3.4	40.8	0.0	
40.9	72.8	0.1	

### FT 155-AR-1 PART 1

Part 1

Charge 7W

Projectile, HE, M795

Fuze, PD, M739A1

Muzzle Velocity – 544 M/S

Propelling Charge M4A2 – Base and Increments 4, 5, 6 and 7  $\,$ 

### FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A LINE NUMBER CHARGE 7W

### LINE NUMBER OF METEOROLOGICAL MESSAGE

THE HOMBER OF METEOR	OLOGIOAL MILOOA
QUADRANT ELEVATION MILS	LINE NUMBER
0.0- 88.7	0
88.8- 175.1 175.2- 269.7 269.8- 363.8 363.9- 445.2	1 2 3 4
445.3- 554.0	5
554.1- 685.1 685.2- 808.8 808.9- 932.4 932.5- 1138.5	6 7 8 9
1138.6- 1285.0	10

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET		UN - ME	TERS		
NO.	METERS	-400	-300	-200	-100	0	100	200	300	
	0					0				
	100 200 300 400					0 0 0 0	0 0 0	0 0 0 1	0 2 3 3	
	500					0	0	2	4	
	600 700 800 900					0 0 0 0	0 0 1 1	2 2 2 2	4 4 5 5	
	1000					0	1	2	5	
	1100 1200 1300 1400					0 0 0 0	1 1 1 1	3 3 3 3	5 5 6 6	
	1500					0	1	3	6	
0	1600 1700 1800 1900					0 0 0	1 1 1	3 3 3 3	6 6 7	
	2000					0	1	4	7	
	2100 2200 2300 2400				-1 -1	0 0 0 0	1 1 1 1	4 4 4 4	7 7 7 7	
	2500				-1	0	1	4	7	
	2600 2700 2800 2900				-1 -1 -2 -2	0 0 0 0	1 1 1 2	4 4 4 4	8 8 8 8	
	3000				-2	0	2	5	8	
	3100 3200 3300 3400			-2 -2 -3	-2 -2 -2 -2	0 0 0 0	2 2 2 2	5 5 5 5	8999	
	3500			-3	-2	0	2	5	9	
	0									

CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	ETERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
							0	
0 3 5 5	4 7 8	6 9 11	7 12 13	9 14 16	11 16 20	19 23	100 200 300 400	
6	9	12	16	19	23	27	500	
7 7 8 8	10 11 11 12	14 14 15 16	18 19 20 21	22 23 24 26	26 28 30 31	30 32 35 37	600 700 800 900	
8	12	16	21	27	32	38	1000	
8 9 9	12 13 13 13	17 18 18 18	22 23 23 24	28 28 29 30	34 35 35 36	40 41 42 43	1100 1200 1300 1400	
10	14	19	24	30	37	44	1500	
10 10 10 10	14 14 15 15	19 19 20 20	25 25 26 26	31 32 32 33	38 39 39 40	45 46 47 48	1600 1700 1800 1900	3
11	15	21	27	33	41	48	2000	
11 11 11 12	16 16 16 16	21 21 22 22	27 27 28 28	34 34 35 35	41 42 42 43	49 50 51 51	2100 2200 2300 2400	
12	17	22	29	36	43	52	2500	
12 12 12 13	17 17 18 18	23 23 23 24	29 29 30 30	36 37 37 38	44 45 45 46	53 53 54 54	2600 2700 2800 2900	
13	18	24	31	38	46	55	3000	
13 13 13 14	18 19 19 19	24 25 25 26	31 32 32 32	39 39 40 40	47 47 48 49	56 56 57 58	3100 3200 3300 3400	
14	20	26	33	41	49	58	3500	
		2				3		

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	3500			-3	-2	0	2	5	9
	3600 3700 3800 3900		-3 -4	-3 -3 -4 -4	-3 -3 -3 -3	0 0 0 0	2 2 2 2	5 5 5 6	9 10 10 10
	4000		-4	-4	-3	0	2	6	10
	4100 4200 4300 4400	-4 -5	-4 -5 -5 -5	-4 -4 -5 -5	-3 -3 -3 -3	0 0 0	2 2 2 2	6 6 6	10 10 11 11
	4500	-5	-6	-5	-3	0	2	6	11
0	4600 4700 4800 4900	-6 -6 -7 -7	-6 -6 -7 -7	-5 -5 -6 -6	-3 -4 -4 -4	0 0 0	2 3 3 3	7 7 7 7	11 12 12 12
	5000	-8	-7	-6	-4	0	3	7	12
	5100 5200 5300 5400	-8 -8 -9 -9	-7 -8 -8 -8	-6 -6 -6	-4 -4 -4	0 0 0	3 3 3 3 3	7 7 8 8	13 13 13 13
	5500	-10	-9	-7	-4	0	3	8	14
	5600 5700 5800 5900	-10 -11 -11 -11	-9 -9 -10 -10	-7 -7 -7 -8	-4 -4 -5 -5	0 0 0 0	3 3 3 4	8 8 9 9	14 14 14 15
	6000	-12	-10	-8	-5	0	4	9	15
	6100 6200 6300 6400	-12 -13 -13 -14	-11 -11 -11 -12	-8 -8 -9 -9	-5 -5 -5 -5	0 0 0 0	4 4 4 4	9 9 10 10	15 16 16 16
	6500	-14	-12	- <b>9</b>	-5	0	4	10	17
1	6600 6700 6800 6900	-15 -16 -16 -17	-13 -13 -13 -14	-9 -10 -10 -10	-6 -6 -6	0 0 0 0	4 4 5 5	10 11 11 11	17 18 18 18
	7000	-17	-14	-11	-6	0	5	11	19
	1							2	

CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
14	20	26	33	41	49	58	3500	
14 14 15 15	20 20 21 21	26 27 27 27	33 34 34 35	41 42 42 43	50 50 51 52	59 60 60 61	3600 3700 3800 3900	
15	21	28	35	43	52	62	4000	
16 16 16 16	22 22 22 23	28 29 29 30	36 36 37 37	44 45 45 46	53 54 54 55	63 63 64 65	4100 4200 4300 4400	
17	23	30	38	46	56	66	4500	
17 17 18 18	23 24 24 24	30 31 31 32	38 39 39 40	47 48 48 49	56 57 58 58	66 67 68 69	4600 4700 4800 4900	
18	25	32	41	49	59	70	5000	
19 19 19 20	25 26 26 27	33 33 34 34	41 42 42 43	50 51 51 52	60 61 61 62	70 71 72 73	5100 5200 5300 5400	3
20	27	35	44	53	63	74	5500	
20 21 21 22	28 28 28 29	35 36 37 37	44 45 45 46	54 54 55 56	64 65 65 66	75 76 76 77	5600 5700 5800 5900	
22	29	38	47	57	67	78	6000	
22 23 23 24	30 31 31 32	38 39 40 40	48 48 49 50	57 58 59 60	68 69 70 71	79 80 81 82	6100 6200 6300 6400	
24	32	41	51	61	72	84	6500	
25 25 26 26	33 33 34 35	42 42 43 44	51 52 53 54	62 63 64 65	73 74 75 76	85 86 87 88	6600 6700 6800 6900	
27	35	45	55	66	77	90	7000	
	2				3			

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	7000	-17	-14	-11	- <b>6</b>	0	5	11	19
1	7100 7200 7300 7400	-18 -19 -19 -20	-15 -15 -16 -16	-11 -11 -11 -12	-6 -6 -7 -7	0 0 0 0	5555 5	12 12 12 13	19 20 20 20
	7500	-20	-17	-12	-7	0	6	13	21
	7600 7700 7800 7900	-21 -22 -23 -23	-17 -18 -18 -19	-12 -13 -13 -13	-7 -7 -7 -8	0 0 0 0	6666	13 14 14 14	21 22 22 23
	8000	-24	-19	-14	-8	0	7	15	23
	8100 8200 8300 8400	-25 -25 -26 -27	-20 -20 -21 -21	-14 -15 -15 -15	-8 -8 -8	0 0 0	7 7 7 7	15 15 16 16	24 25 25 26
	8500	-28	-22	-16	-9	0	8	17	26
2	8600 8700 8800 8900	-29 -30 -30 -31	-23 -23 -24 -25	-16 -17 -17 -17	-9 -9 -9	0 0 0	8 8 8	17 17 18 18	27 28 28 29
	9000	-32	-25	-18	-10	0	9	19	30
	9100 9200 9300 9400	-33 -34 -35 -36	-26 -27 -27 -28	-18 -19 -19 -20	-10 -10 -10 -11	0 0 0 0	9 9 10	19 20 20 21	30 31 32 33
	9500	-37	-29	-20	-11	0	10	21	33
	9600 9700 9800 9900	-38 -39 -40 -41	-30 -30 -31 -32	-21 -21 -22 -22	-11 -11 -12 -12	0 0 0	10 10 11 11	22 22 23 23	34 35 36 37
	10000	-42	-33	-23	-12	0	11	24	38
3	10100 10200 10300 10400	-44 -45 -46 -47	-34 -35 -36 -37	-23 -24 -25 -25	-12 -13 -13 -13	0 0 0 0	12 12 12 13	25 25 26 27	39 40 41 42
	10500	-49	-38	-26	-14	0	13	28	43
					4				

CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
27	35	45	55	66	77	90	7000	
27 28 28 29	36 37 37 38	46 46 47 48	56 57 58 59	67 68 69 70	78 80 81 82	91 92 94 95	7100 7200 7300 7400	3
30	39	49	60	71	84	97	7500	
30 31 32 32	40 41 41 42	50 51 52 53	61 62 63 64	73 74 75 77	85 86 88 89	98 100 101 103	7600 7700 7800 7900	
33	43	54	66	78	91	105	8000	
34 34 35 36	44 45 46 47	55 56 57 58	67 68 69 71	79 81 82 84	92 94 96 98	106 108 110 112	8100 8200 8300 8400	
37	48	60	72	85	99	114	8500	
38 38 39 40	49 50 51 52	61 62 63 65	74 75 77 78	87 89 90 92	101 103 105 107	116 118 120 123	8600 8700 8800 8900	
41	53	66	80	94	109	125	9000	4
42 43 44 45	54 56 57 58	68 69 71 72	81 83 85 87	96 98 100 102	111 114 116 118	127 130 132 135	9100 9200 9300 9400	
46	59	74	89	104	121	138	9500	
47 48 49 51	61 62 64 65	75 77 79 81	91 93 95 97	107 109 111 114	123 126 129 131	141 144 147 150	9600 9700 9800 9900	
52	67	83	99	116	134	153	10000	
53 54 56 57	68 70 72 74	84 87 89 91	101 104 106 109	119 122 125 128	137 141 144 147	157 160 164 168	10100 10200 10300 10400	5
59	76	93	111	131	151	172	10500	
		4				5		

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI	GHT OF 1	ARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	10500	- <b>49</b>	-38	-26	-14	0	13	28	43
3	10600 10700 10800 10900	-50 -51 -53 -54	-39 -40 -41 -42	-27 -27 -28 -29	-14 -14 -15 -15	0 0 0 0	13 14 14 15	28 29 30 31	44 45 46 48
	11000	-56	-43	-30	-16	0	15	32	49
	11100	- <u>57</u>	-44	-30	-16	0	16	32	50
	11200 11300 11400	-59 -61 -63	-46 -47 -48	-31 -32 -33	-16 -17 -17	0 0 0	16 16 17	33 34 35	51 53 54
	11500	-64	-50	-34	-18	0	17	36	56
4	11600 11700 11800 11900	-66 -68 -70 -72	-51 -52 -54 -55	-35 -36 -37 -38	-18 -19 -19 -20	0 0 0	18 18 19 20	37 38 39 41	57 59 61 63
_	12000	-74	-57	-39	-20	0	20	42	65
	12100 12200 12300	-76 -79 -81	-59 -60 -62	-40 -41 -43	-21 -21 -22	0 0 0	21 22 22	43 45 46	67 69 72
	12400	-84	-65	-44	-23	0	23	48	74
	12500	-87	-67	-46	-24	0	24	50	77
_	12600 12700 12800 12900	-90 -93 -96 -100	-69 -72 -74 -77	-47 -49 -51 -52	-24 -25 -26 -27	0 0 0 0	25 26 27 28	51 53 55 57	79 82 85 88
5	13000	-103	- 79	-54	-28	0	29	59	91
	13100 13200 13300 13400	-107 -111 -115 -119	-82 -85 -88 -91	-56 -58 -60 -62	-29 -30 -31 -32	0 0 0	30 31 32 33	61 64 66 69	94 98 102 106
	13500	-123	-95	-65	-33	0	35	72	111
6	13600 13700 13800 13900	-128 -133 -138 -144	-98 -102 -107 -111	-67 -70 -73 -76	-35 -36 -38 -39	0 0 0 0	36 38 40 42	75 78 82 87	116 121 128 135
	14000	-151	-116	-80	-41	0	44	92	143
	6								7

CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
59	76	93	111	131	151	172	10500	
60 62 63 65	77 79 81 84	95 98 100 103	114 117 120 123	134 137 140 144	154 158 162 166	176 180 184 189	10600 10700 10800 10900	
67	86	105	126	148	170	194	11000	_
69 70 72 74	88 90 93 95	108 111 114 117	129 133 136 140	152 156 160 164	175 179 184 190	199 204 210 216	11100 11200 11300 11400	5
76	98	121	144	169	195	222	11500	
79 81 83 86	101 104 107 110	124 128 132 136	148 153 158 163	174 179 185 191	201 207 213 220	229 236 243 250	11600 11700 11800 11900	
89	114	140	168	197	227	258	12000	
92 95 98 101	118 122 126 130	145 150 154 160	173 179 185 191	203 210 217 224	234 242 250 258	267 276 285 294	12100 12200 12300 12400	
105	134	165	197	231	267	305	12500	6
108 112 116 120	139 144 149 154	171 177 183 190	204 212 219 228	240 248 257 267	277 287 298 309	316 328 340 354	12600 12700 12800 12900	
125	160	197	236	278	322	369	13000	
129 134 140	166 173 180	205 213 222	246 256 268	289 302 316	336 351 368	385 404 424	13100 13200 13300	
146	188	233	280	332	387	448	13400	
152	197	244	295	350	409	476	13500	_
159 168 177 187	206 217 230 245	257 271 288 310	311 330 354 388	370 396 430 501	436 471 531	511 567	13600 13700 13800 13900	1
201	266	344					14000	
				7				

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEIC		TARGET A		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	14000	-151	-116	-80	-41	0	44	92	143
6	14100 14200 14300 14400	-158 -166 -175 -185	-122 -128 -136 -144	-84 -89 -94 -100	-44 -46 -49 -53	0 0 0 0	47 50 54 63	98 106 118	154 169
8	14400 14300 14200	-398 -417 -434	-288 -303 -316	-184 -195 -205	-88 -94 -99	0 0 0	75 85 92	157 174	244
	14100	-451	-329	-213	-103	ŏ	97	186	266
	14000	-466	-341	-222	-108	0	102	196	283
	13900 13800 13700 13600	-482 -496 -511 -526	-353 -364 -375 -386	-230 -237 -245 -252	-112 -116 -120 -123	0 0 0 0	106 110 114 118	205 214 222 230	298 311 324 336
	13500	-540	-397	-260	-127	0	122	238	348
	13400 13300 13200 13100	-554 -568 -582 -596	-408 -418 -429 -439	-267 -274 -281 -288	-131 -134 -138 -141	0 0 0 0	125 129 133 136	245 252 259 267	359 370 381 392
9	13000	-610	-450	-295	-145	0	140	274	402
	12900 12800 12700 12600	-624 -638 -652 -666	-460 -471 -481 -492	-302 -309 -315 -322	-148 -152 -155 -159	0 0 0 0	143 146 150 153	281 287 294 301	413 423 433 444
	12500	-680	-502	-330	-162	0	157	308	454
	12400 12300 12200 12100	-695 -710 -724 -740	-513 -524 -535 -546	-337 -344 -351 -358	-166 -169 -173 -176	0 0 0 0	160 164 167 171	315 322 329 336	464 475 485 496
	12000	-755	-558	-366	-180	0	174	343	506
	11900 11800 11700 11600	-770 -786 -802 -819	-569 -581 -592 -605	-374 -381 -389 -397	-184 -188 -191 -195	0 0 0	178 182 185 189	350 357 365 372	517 527 538 549
10	11500	-836	-617	-405	-199	0	193	380	561
		1	0			9			

CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
201	266	344					14000	_
219 261	301	****	****	****	****	*****	14100 14200 14300 14400	
333	381						14400 14300 14200 14100	8
360	426	475					14000	
382 401 419 436	458 484 507 529	521 557 587 614	569 619 658 692	665 717 760	763 818	785 862	13900 13800 13700 13600	
452	549	640	723	798	864	920	13500	
467 482 497 511	569 588 606 624	664 688 710 732	753 781 807 834	833 866 898 928	906 945 981 1016	970 1015 1057 1097	13400 13300 13200 13100	
525	642	754	859	958	1050	1136	13000	
539 553 567 581	660 677 695 712	775 796 817 838	884 909 933 957	987 1015 1043 1071	1083 1116 1148 1179	1173 1210 1245 1280	12900 12800 12700 12600	
594	729	858	981	1099	1210	1315	12500	9
608 622 636 649	746 763 781 798	879 899 920 940	1005 1029 1053 1077	1126 1153 1181 1208	1241 1271 1302 1333	1349 1384 1417 1451	12400 12300 12200 12100	
663	815	961	1101	1235	1363	1485	12000	
677 692 706 721	832 850 868 886	982 1002 1024 1045	1125 1149 1173 1198	1262 1290 1317 1345	1394 1424 1455 1486	1519 1553 1587 1621	11900 11800 11700 11600	
735	904	1066	1223	1373	1517	1655	11500	
			9					

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

### LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEIG				UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	11500	-836	-617	-405	-199	0	193	380	561		
	11400 11300 11200 11100	-853 -870 -889 -907	-630 -642 -656 -669	-413 -422 -430 -439	-203 -207 -212 -216	0 0 0 0	197 201 205 209	387 395 403 411	572 583 595 607		
	11000	-926	-683	-448	-220	0	213	419	619		
	10900 10800 10700 10600	-946 -966 -987 -1008	-697 -712 -727 -742	-457 -466 -476 -486	-225 -229 -234 -239	0 0 0 0	217 222 226 231	428 436 445 454	631 643 656 669		
	10500	-1030	-758	- <b>496</b>	-244	0	235	463	682		
	10400 10300 10200 10100	-1054 -1078 -1103 -1129	-775 -792 -810 -828	-507 -518 -529 -541	-249 -254 -260 -265	0 0 0	240 245 250 255	472 481 491 501	696 710 724 738		
	10000	-1157	-848	-553	-271	0	261	512	754		
10	9900 9800 9700 9600	-1187 -1218 -1251 -1286	-868 -890 -912 -936	-566 -579 -593 -607	-277 -283 -290 -296	0 0 0	266 272 277 283	522 533 544 556	769 785 801 817		
	9500	-1324	-961	-623	-304	0	290	568	835		
	9400 9300 9200 9100	-1365	-988 -1017 -1048 -1081	-639 -656 -674 -694	-311 -319 -327 -336	0000	296 303 310 317	580 592 606 620	852 870 889 909		
	9000			-715	-345	0	325	634	929		
	8900 8800 8700 8600			-737 -761 -786	-355 -365 -376 -388	0 0 0	333 341 350 360	649 665 681 698	950 972 995 1019		
	8500				-401	0	370	716	1044		
	8400 8300 8200 8100				-415	0 0 0	380 391 403 415	735 755 776 798	1070 1097 1126 1156		
	8000					0	428	821	1187		
	10										

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CHARGE 7W

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
735	904	1066	1223	1373	1517	1655	11500	
750 765 780 796	922 941 959 978	1088 1110 1132 1155	1248 1273 1299 1324	1401 1430 1459 1488	1549 1581 1613 1645	1690 1725 1760 1796	11400 11300 11200 11100	9
811	998	1177	1351	1517	1678	1831	11000	
827 844 860 877	1017 1037 1058 1078	1201 1224 1248 1272	1377 1404 1432 1459	1547 1578 1608 1640	1711 1744 1778 1813	1868 1905 1942 1980	10900 10800 10700 10600	
895	1099	1297	1488	1671	1848	2018	10500	
912 930 949 967	1121 1143 1165 1188	1322 1348 1374 1401	1517 1546 1576 1607	1704 1737 1770 1804	1884 1920 1957 1995	2057 2096 2136 2177	10400 10300 10200 10100	
987	1212	1429	1638	1839	2033	2219	10000	
1007 1027 1048 1069	1236 1260 1286 1311	1457 1485 1515 1545	1670 1702 1735 1769	1875 1911 1948 1986	2072 2112 2152 2193	2261 2304 2348 2393	9900 9800 9700 9600	10
1091	1338	1576	1804	2024	2236	2439	9500	10
1114 1137 1161 1186	1365 1393 1422 1452	1607 1640 1673 1707	1840 1877 1914 1953	2064 2104 2146 2188	2279 2323 2368 2415	2485 2533 2582 2632	9400 9300 9200 9100	
1212	1483	1743	1993	2232	2462	2683	9000	
1238 1266 1294 1324	1514 1547 1581 1616	1779 1817 1855 1896	2033 2075 2119 2163	2277 2323 2371 2420	2511 2561 2613 2665	2736 2789 2844 2901	8900 8800 8700 8600	
1356	1653	1937	2210	2470	2720	2959	8500	
1388 1421 1457 1493	1691 1730 1771 1813	1980 2025 2071 2119	2257 2306 2357 2410	2522 2576 2631 2688	2776 2834 2893 2954	3019 3080 3144 3209	8400 8300 8200 8100	
1531	1858	2168	2465	2747	3018	3276	8000	
				10				-

CHARGE 7W

#### TABLE B

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPLEMENTARY RANGE LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIGHT OF TARGET ABOVE GUN - METERS									
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
10	8000					0	428	821	1187			
	7900 7800						443	846	1220			
	10											

CHARGE 7W

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
1531	1858	2168	2465	2747	3018	3276	8000	10
1571	1903	2220 2274	2521 2580	2808 2872	3083 3150	3345 3416	7900 7800	
				10				•

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### COMPONENTS OF A ONE KNOT WIND

		0.1.2.1.1.0 0.	ĺ	A ONE KNOT WIT		
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 7W

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-			-0.2+ -1.1+								
+200-			-0.5+ -2.1+								-0.7+ -2.9+
+300-			-0.7+ -3.1+								

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-12.3	-40.0
-30	-11.2	-34.4
-20	-10.0	-28.9
-10	-8.9	-23.3
0	-7.7	-17.8
10	-6.6	-12.2
20	-5.5	-6.7
30	-4.4	-1.1
40	-3.3	4.4
50	-2.2	10.0
60	-1.1	15.6
70	0.0	21.1
80	1.1	26.7
90	2.2	32.2
100	3.2	37.8
110	4.3	43.3
120	5.3	48.9
130	6.4	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	ш∟ш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAITT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
0	0.0			59	1	0.0	0.0	0.00
100 200 300 400	1.8 3.5 5.2 6.9			59 58 57 56	1 1 1 1	0.2 0.4 0.6 0.7	0.0 0.1 0.1 0.2	0.00 0.01 0.01 0.02
500	8.7			56	1	0.9	0.2	0.02
600 700 800 900	10.5 12.3 14.2 16.0			55 55 54 53	1 1 1 1	1.1 1.3 1.5 1.7	0.3 0.3 0.4 0.4	0.03 0.03 0.03 0.04
1000	17.9	1.9	1.07	53	1	1.9	0.5	0.04
1100 1200 1300 1400	19.8 21.7 23.7 25.7	2.1 2.3 2.5 2.7	0.97 0.89 0.82 0.75	52 52 51 50	1 1 1 1	2.1 2.3 2.5 2.7	0.5 0.6 0.6 0.7	0.05 0.05 0.06 0.06
1500	27.7	2.9	0.70	50	1	2.9	0.7	0.07
1600 1700 1800 1900	29.7 31.8 33.8 35.9	3.2 3.4 3.6 3.8	0.66 0.62 0.58 0.55	49 48 48 47	1 1 1 1	3.2 3.4 3.6 3.8	0.8 0.8 0.9 1.0	0.07 0.07 0.08 0.08
2000	38.1	4.0	0.52	47	1	4.0	1.0	0.09
2100 2200 2300 2400	40.2 42.4 44.6 46.9	4.2 4.5 4.7 4.9	0.49 0.47 0.45 0.43	46 46 45 44	1 1 1 1	4.2 4.5 4.7 4.9	1.1 1.1 1.2 1.3	0.09 0.10 0.10 0.11
2500	49.1	5.1	0.41	44	1	5.1	1.3	0.11
2600 2700 2800 2900	51.4 53.7 56.1 58.5	5.4 5.6 5.8 6.1	0.39 0.38 0.36 0.35	43 43 42 42	1 1 1	5.4 5.6 5.8 6.1	1.4 1.5 1.5 1.6	0.12 0.12 0.13 0.13
3000	60.9	6.3	0.33	41	1	6.3	1.6	0.14
3100 3200 3300 3400	63.4 65.8 68.4 70.9	6.5 6.8 7.0 7.3	0.32 0.31 0.30 0.29	41 40 39 39	1 1 1	6.5 6.8 7.0 7.3	1.7 1.8 1.9 1.9	0.14 0.15 0.15 0.16
3500	73.5	7.5	0.28	38	1	7.5	2.0	0.17

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE RANGE AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC INC HEAD TAIL DEC INC DEC INC DEC INC M M M M M M M M M М M 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0 0.0 -0.4 -0.7 -1.1 100 0 4 0.0 0.0 0.0 0.0 0.0 0.00.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 -2 -3 200 0.8 2 3 4 300 1.1 1.5 -1.4 0.1 -3 400 0.0 -0.1500 1.9 -1.8 0.0 0.0 0.0 0.0 -0.1 4 2.2 2.6 0.0 0.0 0.0 **0.1** 0.2 0.3 0.3 0.4 600 -2.1 -2.4 0.0 0.0 0.0 -0.2 -5 5 6 7 7 0.0 -0.3700 -0.1 -6 2.9  $-2.8 \\ -3.1$ 0.0 0.1 -0.1800 -0.3-6 -7 900 -0.5-0.11000 3.6 -3.40.1 -0.1 -**0.1** 0.1 -0.6 0.6 -8 8 0.1 0.2 0.2 0.2 -0.7 -0.8 1100 4.0 4.3 4.7 -3.8 -4.1 0.1  $-0.2 \\ -0.2$ 0.7 0.8 1.0  $^{-0.1}_{-0.1}$ -9 9 1200 -9 1300 -4.4 0.1 -0.1-0.2-0.910 -10 -1.1 -10 1400 5.0 0.1 -0.111 -0.31500 5.3 0.2 -0.30.3 -1.2 1.3 -11 -5.1-**0.1** 11 -1.4 -1.6 -1.8 -2.0 0.2 0.2 0.2 0.3 5.6 6.0 6.3 -5.4 -5.7 0.3 0.3 0.4 1600 -0.2-0.3 1.4 1.6 1.8 12 -12  $-0.2 \\ -0.2$ -0.4-0.413 13 14 -12 -13 1700 1800 **-6.0** 1900 6.6 -**6.3** -0.2-0.50.4 2.0 -13 2000 2.2 14 6.9 -6.60.3 -0.3-0.50.5 -2.2-14 7.2 7.5 7.8 8.1 -6.9 -7.2 -7.5 -7.8 2.5 2.7 3.0 3.2 0.3 0.3 0.5 0.6 -2.42100 -0.3-0.6 -14 15 -0.6-0.72200 -0.3-15 15 2300 2400 0.4 0.4 0.6 0.7 -2.916 16 -0.4-3.1-0.4-0.8-16 2500 8.4 -8.10.5 -0.4-0.8 0.7 -3.43.5 16 -16 0.5 0.5 0.8 3.8 4.1 2600 8.7 -8.3 -0.5 -0.9 -3.7-16 17 -8.6 -8.9 -9.2 2700 9.0 -0.5-**0.9 -4.0** -17 17 9.3 0.9 -4.3 -17 2800 0.6 -0.5-1.*0* 4.4 18 **-4.6** 4.7 -17 2900 9.6 0.6 -**0.6** -1.1 1.0 18 3000 9.9 -9.5 0.7 -4.9 -0.6 -1.21.0 5.0 -18 18 -1.2 -1.3 -1.4 1.1 1.2 1.3 1.3 5.3 5.7 6.0 6.4 10.2 10.4 10.7 -0.7 -0.7 -0.8 -5.2 -5.5 -5.9 -9.7 3100 0.7 -18 19 0.8 0.8 0.9 -18 -19 3200 3300 -10.0 19 19 -10.320 3400 11.0 -1.5 -6.2-19 -10.5-0.8

3500

11.2

-10.8

0.9

-0.9

-1.5

1.4

-6.6

6.8

-19

20

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	ш∟ш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	٧	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	73.5	7.5	0.28	38	1	7.5	2.0	0.17
3600 3700 3800 3900	76.1 78.8 81.5 84.2	7.8 8.1 8.3 8.6	0.27 0.26 0.26 0.25	38 37 37 36	1 1 1 1	7.8 8.1 8.3 8.6	2.1 2.1 2.2 2.3	0.17 0.18 0.18 0.19
4000	86.9	8.8	0.24	36	1	8.8	2.4	0.19
4100 4200 4300 4400	89.7 92.6 95.5 98.4	9.1 9.4 9.6 9.9	0.23 0.23 0.22 0.22	35 35 34 34	1 1 1 1	9.1 9.4 9.6 9.9	2.5 2.5 2.6 2.7	0.20 0.20 0.21 0.22
4500	101.4	10.2	0.21	34	1	10.2	2.8	0.22
4600 4700 4800 4900	104.4 107.4 110.5 113.6	10.5 10.8 11.0 11.3	0.21 0.20 0.19 0.19	33 33 32 32	1 1 1 1	10.5 10.8 11.0 11.3	2.9 3.0 3.0 3.1	0.23 0.23 0.24 0.24
5000	116.8	11.6	0.19	31	1	11.6	3.2	0.25
5100 5200 5300 5400	120.0 123.3 126.6 129.9	11.9 12.2 12.5 12.8	0.18 0.18 0.17 0.17	31 30 30 30	1 2 2 2	11.9 12.2 12.5 12.8	3.3 3.4 3.5 3.6	0.26 0.26 0.27 0.27
5500	133.3	13.1	0.16	29	2	13.1	3.7	0.28
5600 5700 5800 5900	136.7 140.2 143.8 147.3	13.4 13.7 14.0 14.3	0.16 0.16 0.15 0.15	29 29 28 28	2 2 2 2	13.4 13.7 14.0 14.3	3.8 3.9 4.0 4.1	0.29 0.29 0.30 0.30
6000	150.9	14.7	0.15	27	2	14.7	4.2	0.31
6100 6200 6300 6400	154.6 158.3 162.1 165.9	15.0 15.3 15.6 15.9	0.14 0.14 0.14 0.13	27 27 26 26	2 2 2 2	15.0 15.3 15.6 15.9	4.3 4.4 4.5 4.6	0.31 0.32 0.33 0.33
6500	169.7	16.3	0.13	26	2	16.3	4.7	0.34
6600 6700 6800 6900	173.6 177.5 181.5 185.5	16.6 16.9 17.2 17.6	0.13 0.13 0.12 0.12	26 25 25 25	2 2 2 2	16.6 16.9 17.2 17.6	4.8 5.0 5.1 5.2	0.34 0.35 0.35 0.36
7000	189.6	17.9	0.12	24	2	17.9	5.3	0.36

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE RANGE AIR TEMP PROJ WT AIR G **VELOCITY DENSITY** OF 1 SQ WIND 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC **HEAD** DEC INC DEC INC DEC INC TAIL INC M M M M M M M M M M M 11.2 0.9 -0.9 6.8 20 3500 -10.8 -1.5 1.4 -6.6 -19 1.5 1.5 1.6 1.7 7.2 7.5 7.9 3600 -1.6 -1.7 -1.8 11.5 -11.01.0 -0.9 -6.9 -19 20 -1.0 -1.0 -7.3 -7.7 11.8 12.0 -11.3 -11.5 20 21 -20 -20 3700 1.0 3800 1.1 1.2 -1.18.4 21 3900 12.3 -11.8 -8.1 20 4000 12.5 -12.0 1.2 -1.2 -2.01.8 -8.5 8.8 -20 21 -12.3 -12.5 -12.8 -13.0 -1.2 -1.3 -1.3 -1.4 4100 1.3 1.4  $-2.1 \\ -2.2$ 1.9 1.9 9.2 21 21 12.8 -8.9 -20 13.0 13.3 -9.3 -9.7 -204200 1.4 -2.3-2.42.0 21 21 10.1 -204300 -10.2 10.5 -214400 4500 13.8 -13.2 1.6 -1.5-2.52.1 *-10.6* 11.0 -21 22 2.2 2.3 2.3 2.3 4600 14.0 14.2 11.5 11.9 -13.5 -13.7 1.7 1.8 -2.6 -2.7-11.1 -11.5 -21 -21 22 22 -1.6 -1.6 4700 4800 14.5 -13.9 1.8 -1.7-2.7-12.012.4 -21 -12.4 1.9 -1.8 12.9 -21 22 5000 14.9 2.0 -1.9 -2.9-12.9 -21 -14.4 2.4 13.3 22 -1.9 -2.0 -2.1 -2.2 2.1 2.2 2.3 2.4 2.4 2.4 2.4 2.4 15.1 15.3 13.8 14.3 14.8 -21 -21 -21 5100 -14.6 -3.0 -13.422 -14.8 -15.0 -3.0 -3.1 -3.222 22 22 22 5200 -13.915.5 15.7 5400 -3.2-14.9-21 2.5 -15.45500 15.9 -15.4-2.3-3.32.4 15.7 -21 22 2.3 2.3 2.2 2.1 2.6 2.7 2.9 3.0 16.1 16.3 -2.4 -2.5 -21 -21 22 22 5600 -15.6 -3.4 -15.8 16.2 5700 -15.8 -3.4-16.316.6 16.5 16.7  $\begin{array}{c} -2.6 \\ -2.7 \end{array}$ 17.1 17.5 -21 -21 22 22 5800 -16.0 -3.4-16.8-17.35900 -16.2-3.56000 16.9 -16.4 3.1 -2.8-3.52.0 -17.818.0 -20 22 17.1 17.2 -16.6 -16.7 -16.9 3.2 3.4 3.5 22 22 2.0 6100 -2.9 -3.5-18.318.4 -20 1.8 6200 -3.0-3.4-18.818.9 -20 17.4 -3.4-20 22 21 6300 -3.2-19.319.3 -20 6400 17.6 -17.1 3.6 -3.3 -3.41.6 -19.819.8 6500 17.8 -17.3 21 3.8 -3.4-3.31.5 -20.320.2 -20 20.7 21.1 21.5 22.0 21 21 21 21 -17.4 -17.6 -17.8 3.9 4.1 4.2 -3.5 -3.7 -3.8 -3.2 -3.2 -3.1 1.3 1.2 1.0 -20.8 -21.2 -21.7 -20 -20 -20 6600 17.9 6700 18.1 18.2 6800 4.4 18.4 -17.9-3.00.8 -22.2-206900 -3.9

7000

18.6

-18.1

4.5

**-4.0** 

-2.8

0.6

-22.7

22.4

-19

21

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

						ı		
1	2	3	4	5	6	7	8	9
R A N	E L E V	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K		DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	189.6	17.9	0.12	24	2	17.9	5.3	0.36
7100 7200 7300 7400	193.7 197.9 202.1 206.3	18.2 18.6 18.9 19.3	0.12 0.11 0.11 0.11	24 24 24 23	2 2 3 3	18.2 18.6 18.9 19.3	5.4 5.5 5.7 5.8	0.37 0.37 0.38 0.38
7500	210.6	19.6	0.11	23	3	19.6	5.9	0.39
7600 7700 7800 7900	215.0 219.4 223.8 228.3	20.0 20.3 20.7 21.0	0.11 0.10 0.10 0.10	23 23 22 22	3333	20.0 20.3 20.7 21.0	6.0 6.2 6.3 6.4	0.39 0.40 0.40 0.41
8000	232.8	21.4	0.10	22	3	21.4	6.5	0.41
8100 8200 8300 8400	237.4 242.0 246.7 251.4	21.7 22.1 22.5 22.8	0.10 0.10 0.09 0.09	22 22 21 21	3333	21.7 22.1 22.5 22.8	6.7 6.8 7.0 7.1	0.42 0.42 0.43 0.43
8500	256.2	23.2	0.09	21	3	23.2	7.2	0.44
8600 8700 8800 8900	261.0 265.9 270.8 275.8	23.6 23.9 24.3 24.7	0.09 0.09 0.09 0.09	21 20 20 20	3334	23.6 23.9 24.3 24.7	7.4 7.5 7.7 7.8	0.44 0.45 0.45 0.46
9000	280.8	25.1	0.08	20	4	25.1	8.0	0.46
9100 9200 9300 9400	285.8 291.0 296.1 301.4	25.4 25.8 26.2 26.6	0.08 0.08 0.08 0.08	20 19 19 19	4 4 4	25.4 25.8 26.2 26.6	8.1 8.3 8.4 8.6	0.47 0.47 0.47 0.48
9500	306.6	27.0	0.08	19	4	27.0	8.8	0.48
9600 9700 9800 9900	312.0 317.4 322.8 328.3	27.4 27.8 28.2 28.6	0.08 0.08 0.08 0.07	19 18 18 18	4 4 4 4	27.4 27.8 28.2 28.6	8.9 9.1 9.3 9.4	0.49 0.49 0.50 0.50
10000	333.9	29.0	0.07	18	4	29.0	9.6	0.50
10100 10200 10300 10400	339.5 345.2 351.0 356.8	29.4 29.8 30.2 30.6	0.07 0.07 0.07 0.07	18 17 17 17	4 5 5 5	29.4 29.8 30.2 30.6	9.8 10.0 10.1 10.3	0.51 0.51 0.52 0.52
10500	362.7	31.1	0.07	17	5	31.1	10.5	0.53

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC TAIL INC M M M M M M M M M М M 7000 18.6 4.5 22.4 21 -18.1 4.0 -2.8 0.6 -22.7-19 0.5 0.3 0.0 22.8 23.2 23.7 -23.1 -23.6 -24.1 21 21 21 7100 18.7 4.7 -2.7-18.2-4.2 -19 4.9 5.0 5.2 -4.3 -4.5  $-\frac{2}{2}$ . 6 -2. 4 -18.4 -18.5 -18.7 7200 7300 18.9 -19 19.0 -19 -4.6  $-\frac{1}{2}.3$ 21 7400 19.1 0.2 24.5 -19 7500 19.3 -18.8 5.4 -4.7 -2.1-0.4 -25.0 24.5 -19 20 -1.9 -1.7 -1.5 -1.3 24.9 25.3 25.7 26.1 -19.0 5.6 5.7 5.9 6.1 -4.9 -5.0 -5.2 -5.3 7600 19.4 -0.6 -0.9 20 20 -25.4-19 -19.1 -19.2 19.6 19.7 -25.9-18 7700 -1.1 -1.4 -26.3-18 20 7800 -26.8-18 20 7900 19.8 8000 20.0 -19.5 6.3 -5.5-1.0-1.7 -27.226.5 -18 20 -1.9 -2.2 -2.5 -2.8 8100 20.1 20.2 -19.6 -19.8 6.5 6.7  $-0.8 \\ -0.5$ 26.9 27.3 27.7 -5.7 -5.8 -27.7-28.120 20 -18 -18 8200 20.3 -19.9 6.9 -6.0 -0.3-28.6-18 20 8300 -17 7.1 0.0 -29.028.1 19 6.1 8500 20.6 7.3 0.3 -29.4 -20.1-6.3 -3.1 28.5 -17 19 28.9 29.2 29.6 30.0 7.5 7.7 7.9 0.6 0.9 1.2 -3.4 -3.7 -4.0 8600 20.7 -20.3 -29.9-6.5 -17 19 20.8 20.9 -20.3 -20.4 -20.5-6.6 -6.8 -7.0 -30.3-30.7-17 -17 19 19 8700 8800 8900 -20.68.1 1.5 -4.4 -31.1-17 19 1.9 -31.5 9000 21.2 -20.78.3 -7.1 -4.730.4 -17 19 21.3 21.4 21.5 21.6 -7.3 -7.5 -7.7 -7.8 2.2 2.6 2.9 3.3 8.5 8.7 9100 -20.9-5.0-32.030.8 -16 19 9200 -21.0 -5.3 -32.431.2 -16 18 9.0 31.6 31.9 18 18 9300 -21.1 -5.7-32.8-21.29400 -6.0-33.2-16 9500 21.7 -21.3 9.4 3.7 -33.6 32.3 18 -8.0-6.4-16 -6.7 -7.0 -7.4 -7.7 9600 21.8 -21.4 9.6 -8.2 4.0 -34.032.7 -16 18 9700 22.0 -21.5 9.9 -8.4 4.4 -34.433.1 -15 18 22.1 10.1 33.5 -15 9800 -21.6 -8.*6* 4.8 -34.818 -21.8 33.9 -15 9900 22.2 10.3 -8.7 5.2 -35.217 10000 22.3 10.6 -21.9-8.9 5.6 -8.1 -35.634.3 -15 17 -9.1 -9.3 -9.5 22.4 22.5 22.6 -22.0 -8.4 34.7 10100 10.8 6.0 -36.0 -15 17 -22.1 -22.2 $-8.8 \\ -9.2$ 6.4 6.8 7.3 35.1 35.5 35.9 -36.4 -36.8 17 17 17 10200 11.1 11.3 -15 -14 10300 22.7 -9.7  $-9.\overline{5}$ -37.210400 -22.3-14 11.5 10500 22.8 -22.411.8 -9.9 7.7 -9.9 *-37.6* 36.4 -14 16

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A	E L E V	FS FOR GRAZE	DFS PER	DR PER	F O	TIME OF	AZ I	MUTH CTIONS
N G E	V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
10500	362.7	31.1	0.07	17	5	31.1	10.5	0.53
10600 10700 10800 10900	368.6 374.7 380.8 386.9	31.5 31.9 32.4 32.8	0.07 0.07 0.07 0.06	17 16 16 16	5 5 5 5	31.5 31.9 32.4 32.8	10.7 10.9 11.1 11.3	0.53 0.53 0.54 0.54
11000	393.2	33.2	0.06	16	5	33.2	11.5	0.55
11100 11200 11300 11400	399.5 405.9 412.5 419.0	33.7 34.1 34.6 35.0	0.06 0.06 0.06 0.06	16 15 15 15	5 6 6	33.7 34.1 34.6 35.0	11.7 11.9 12.2 12.4	0.55 0.55 0.56 0.56
11500	425.7	35.5	0.06	15	6	35.5	12.6	0.57
11600 11700 11800 11900	432.5 439.4 446.4 453.5	36.0 36.5 36.9 37.4	0.06 0.06 0.06 0.06	15 14 14 14	6666	36.0 36.5 36.9 37.4	12.9 13.1 13.3 13.6	0.57 0.58 0.58 0.58
12000	460.8	37.9	0.06	14	7	37.9	13.9	0.59
12100 12200 12300 12400	468.1 475.6 483.3 491.1	38.4 38.9 39.5 40.0	0.06 0.06 0.05 0.05	13 13 13 13	7 7 7 7	38.4 38.9 39.5 40.0	14.1 14.4 14.7 15.0	0.59 0.60 0.60 0.61
12500	499.1	40.5	0.05	12	8	40.5	15.3	0.61
12600 12700 12800 12900	507.2 515.6 524.2 533.0	41.1 41.6 42.2 42.8	0.05 0.05 0.05 0.05	12 12 12 11	8 8 8 9	41.1 41.6 42.2 42.8	15.6 15.9 16.2 16.6	0.61 0.62 0.62 0.63
13000	542.0	43.4	0.05	11	9	43.4	16.9	0.63
13100 13200 13300 13400	551.3 561.0 571.0 581.3	44.0 44.7 45.3 46.0	0.05 0.05 0.05 0.05	11 10 10 9	9 10 10 11	44.0 44.7 45.3 46.0	17.3 17.7 18.1 18.6	0.64 0.64 0.65 0.66
13500	592.1	46.7	0.05	9	11	46.7	19.1	0.66
13600 13700 13800 13900	603.5 615.4 628.0 641.6	47.4 48.2 49.0 49.9	0.05 0.05 0.04 0.04	9 8 8 7	12 13 14 15	47.4 48.2 49.0 49.9	19.6 20.1 20.7 21.4	0.67 0.67 0.68 0.69
14000	656.2	50.8	0.04	6	17	50.8	22.1	0.70

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY DENSITY** OF 1 SQ WIND 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC TAIL INC M M M M M M M M M М M 10500 22.8 -22.4 -9.9 7.7 -9.9 11.8 *-37.6* 36.4 -14 16 22.9 23.0 23.1 23.2 -22.5 -22.6 -22.7 36.8 37.2 37.6 10600 12.0 -10.2 -10.18.1 -38.0-14 16 12.3 12.5 8.5 -38.4 -38.8 -10.3 -10.5  $^{-10.6}_{-10.9}$ -14 -13 16 16 10700 10800 -13 9.4 -11.3 39.2 10900 -22.8 12.8 -10.638.1 16 11000 23.3 -22.913.1 -10.8 9.8 -11.6 -39.6 38.5 -13 16 10.3 10.7 23.4 23.5 -23.0 -23.1 13.3 13.6 13.8 -11.9 -12.3 38.9 39.4 39.9 15 15 15 15 11100 -11.0 **-40.0** -13-13 -11.2 -11.4 11200 -40.423.6 23.7 -23.211300 11.1 11.5 -12.6-40.8 -12 -13.041.2 -12 11400 11500 23.8 -23.414.4 -11.8 12.0 -13.3 -41.7 40.8 -12 15 24.0 24.1 11600 11700 14.6 14.9 41.4 41.9 -23.5-23.6 $^{-12.0}_{-12.2}$ 12.4 12.8 -13.6 -13.9  $^{-42.1}_{-42.5}$ 14 14 -12 -12 11800 24.2 -23.7 15.2 -12.513.2 -42.9 42.4 -11 14 -14.3 15.5 -11 13.6 14 11900 12000 24.4 15.7 14.0 -14.9 -43.8 -23.9-12.9 43.5 -11 14 16.0 16.3 16.6 14.4 14.8 15.1 12100 24.5 24.7 24.8 -24.0 -24.1 -24.2 -13.1 -15.1 -44.2 -44.7 -45.1 44.0 -11 14 12200 12300 44.5 45.1 -10 -10 13 13 -15.4 -15.7 -13.3 12400 24.9 16.8 -13.715.5 -16.0-45.6 45.6 -10 13 12500 25.0-24.417.1 -13.915.8 -16.2-46.146.2 -10 13 25.2 25.3 25.4 25.6 12 12 12 12 12600 -24.6 17.4 -14.1 16.1 -16.5 -46.5 46.8 -9 16.4 16.7 17.0 -47.0 -47.5 12700 -24.717.7 -14.3 -16.8 47.4 -9 -24.8 -24.9 -14.5 -14.7 48.0 48.6 12800 18.0 -9 -17.3-48.0 12900 18.4 -8 13000 25.7 -25.1 18.7 -14.9 17.2 -17.5 -48.5 49.2 11 -8 17.5 17.7 17.9 -17.8 13100 25.9 -25.219.0 -15.1 -**49**.0 49.8 13200 26.0 -25.319.4 -15.3 -18.0-49.5 50.5 -8 -7 51.2 13300 26.1 -25.4 19.8 -15.5-18.3-50.1-7 -25.652.0 13400 26.3 20.3 -15.818.1 -18.5-50.710 13500 -25.7 18.3 -51.2 26.4 -16.0-18.752.8 10 53.6 54.4 55.6 57.7 26.6 26.8 27.0 -25.8 -25.9 18.5 18.7 18.9 -51.9 -52.5 -53.1 -18.9 13600 -16.2 -7 10 10 9 9 13700 -16.4 -19.1-6 -26.1 13800 -16.6-6 27.2 -26.2-19.5-53.7 13900 -16.819.1 -6

14000

27.4

-26.4

-17. *0* 

19.2

-19.6

-54.3

9

-5

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	٧	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
14000	656.2	50.8	0.04	6	17	50.8	22.1	0.70
14100 14200 14300 14400	672.4 690.7 712.3 740.7	51.8 53.0 54.3 56.1	0.04 0.04 0.04 0.04	6 5 4	19 22 28	51.8 53.0 54.3 56.1	22.9 23.8 25.0 26.6	0.71 0.72 0.73 0.74
******	*****	******	*****	*******	****	******	******	******
14400 14300 14200 14100	857.9 885.4 905.9 922.9	62.9 64.4 65.4 66.3	0.04 0.04 0.04 0.04	4 5 6	30 23 20	62.9 64.4 65.4 66.3	34.4 36.6 38.4 39.9	0.87 0.89 0.91 0.92
14000	937.8	67.1	0.03	7	17	67.1	41.4	0.94
13900 13800 13700 13600	951.2 963.5 974.9 985.6	67.8 68.4 68.9 69.5	0.03 0.03 0.03 0.03	8 8 9 10	16 14 13 12	67.8 68.4 68.9 69.5	42.7 44.0 45.3 46.5	0.95 0.97 0.98 1.00
13500	995.6	69.9	0.03	10	12	69.9	47.7	1.01
13400 13300 13200 13100	1005.2 1014.3 1023.0 1031.4	70.4 70.8 71.2 71.6	0.03 0.03 0.03 0.03	11 11 12 12	11 10 10 9	70.4 70.8 71.2 71.6	48.9 50.0 51.2 52.3	1.02 1.04 1.05 1.07
13000	1039.5	72.0	0.03	13	9	72.0	53.5	1.08
12900 12800 12700 12600	1047.2 1054.8 1062.1 1069.2	72.3 72.7 73.0 73.3	0.03 0.03 0.03 0.03	13 13 14 14	9 8 8 8	72.3 72.7 73.0 73.3	54.6 55.8 56.9 58.1	1.09 1.11 1.12 1.13
12500	1076.1	73.6	0.03	15	8	73.6	59.2	1.15
12400 12300 12200 12100	1082.8 1089.4 1095.8 1102.1	73.9 74.2 74.4 74.7	0.03 0.03 0.03 0.03	15 15 16 16	7 7 7 7	73.9 74.2 74.4 74.7	60.4 61.6 62.8 64.0	1.16 1.18 1.19 1.21
12000	1108.2	75.0	0.03	17	6	75.0	65.2	1.22
11900 11800 11700 11600	1114.2 1120.1 1125.8 1131.5	75.2 75.4 75.7 75.9	0.03 0.03 0.03 0.03	17 17 18 18	6666	75.2 75.4 75.7 75.9	66.4 67.6 68.9 70.2	1.24 1.25 1.27 1.29
11500	1137.0	76.1	0.03	18	6	76.1	71.5	1.30

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC INC TAIL M M M M M M M M M М M 14000 27.4 -17. *0* 19.2 -19.6 9 -26.4-54.3 -5 19.2 19.2 18.4 27.5 -17.3 -17.5 -17.7 -55.0 14100 -26.5-19.8 -5 9 -19.9 -20.0 -55.6 -56.3 -5 -4 -26.7 -26.9 -27.1 14200 14300 28.1 8 14400 -20.1-56.9 8 -28.3 -28.1 -28.0 -27.9  $-20.3 \\ -20.2$ -64.6 14400 -17.6 -17.3 -17.1 6 6 5 5 17.8 16.8 -2 14300 -64.328.2 28.2 14200 -20.1-63.9 -3 16.4 63.5 14100 -20.0-19.9 5 14000 28.2 -27.816.0 -16.7 -63.2-2 13900 28.0 27.9 -19.8 -19.7 -27.6 -27.5 -27.3 15.7 15.4 -16.5 -16.3  $^{-62.8}_{-62.4}$ 58.3 59.0 -2 -2 5 13800 13700 27.8 -19.6 15.2 62.0 59.0  $-\overline{2}$ -16.1 -19.5 -15.9-2 4 13600 61.6 13500 27.5 14.7 -15.8 -61.2 -2 4 -27.0-19.4 58.7 27.3 27.2 27.0 13400 -26.8 21.0 21.1 21.1 -19.3 14.6 -15.6 -60.8 58.4 58.2 57.9 4 -2 -26.7 -26.5 -19.2 -19.1 14.4 14.2 -15.4 -15.3 -60.4 -59.9  $-\frac{2}{2}$ 13300 4 21.1 13100 26.9 -19.014.0 -15.1-59.557.5 -2 4 13000 4 26.7 -26.221.1 -18.813.9 -15.0 -59 1 57.2 -1 26.5 26.4 21.0 21.0 -**58.6** 12900 -26.0-18.7 13.7 -**14.8** 56.9 4 -25.8 -25.6 -25.4 -58.2 -57.7 56.5 56.2 55.8 12800 -18.6 13.5 -14.726.2 26.0 20.9 -14.5 -14.4 3 12700 13.4 13.2 -57.3-1 12600 -18.312500 25.9 -25.220.8 -18.213.1 -14.3 -56.8 55.4 3 - 1 25.7 25.5 25.3 20.8 20.7 55.0 54.6 54.2 3 12400 -25.0-18.1 13.0 -14.1 -56.4 -17.9 -17.8 12300 **-24.8** 12.8 *-14.0* -55.9 0 -24.6 -24.4 20.6 12.7 3 12200 -13.9-55.40 25.2 *-17.6* -55.0 53.8 12100 20.6 12.6 -13.70 12000 25.0 -24.2 20.5 12.4 -54.5 3 -17.5-13.6 53.4 0 53.0 52.5 52.1 51.7 24.8 24.6 24.4 -24.0 -23.8 -23.6 20.4 20.3 20.2 -17.3 -17.1 -17.0 12.3 12.2 12.0 -13.5 -54.1 11900 0 3 2 2 2 -53.6 -53.1 11800 11700 -13.4 -13.324.2 -23.420.2 -52.711600 -16.811.9 -13.11

11500

24.0

-23.2

20.1

-16.6

11.8

-13.0

-52.2

51.3

2

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	ЕГЕ	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	FOR	TIME OF FLIGHT	AZ I CORRE	MUTH
G E	V	FUZE M582	DEC HOB	D ELEV	K	FEIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
11500	1137.0	76.1	0.03	18	6	76.1	71.5	1.30
11400 11300 11200 11100	1142.4 1147.7 1153.0 1158.1	76.3 76.6 76.8 77.0	0.03 0.03 0.03 0.03	19 19 19 20	5555	76.3 76.6 76.8 77.0	72.8 74.2 75.5 77.0	1.32 1.34 1.35 1.37
11000	1163.2	77.2	0.03	20	5	77.2	78.4	1.39
10900 10800 10700 10600	1168.2 1173.1 1177.9 1182.6	77.3 77.5 77.7 77.9	0.03 0.03 0.03 0.03	20 21 21 21	5 5 5 4	77.3 77.5 77.7 77.9	79.9 81.4 82.9 84.5	1.41 1.43 1.45 1.47
10500	1187.3	78.1	0.03	22	4	78.1	86.2	1.49
10400 10300 10200 10100	1191.9 1196.4 1200.9 1205.3	78.2 78.4 78.6 78.7	0.03 0.03 0.03 0.03	22 22 23 23	4 4 4 4	78.2 78.4 78.6 78.7	87.9 89.6 91.4 93.3	1.51 1.54 1.56 1.58
10000	1209.6	78.9	0.03	23	4	78.9	95.2	1.61
9900 9800 9700 9600	1213.8 1218.0 1222.1 1226.2	79.1 79.2 79.4 79.5	0.03 0.03 0.03 0.03	24 24 24 25	4 4 3 3	79.1 79.2 79.4 79.5	97.2 99.2 101.4 103.6	1.64 1.66 1.69 1.72
9500	1230.2	79.7	0.03	25	3	79.7	105.9	1.75
9400 9300 9200 9100	1234.1 1238.0 1241.8 1245.5	79.8 80.0 80.1 80.3	0.03 0.03 0.03 0.03	26 26 26 27	3333	79.8 80.0 80.1 80.3	108.3 110.9 113.5 116.3	1.78 1.82 1.85 1.89
9000	1249.2	80.4	0.03	27	3	80.4	119.3	1.93
8900 8800 8700 8600	1252.8 1256.4 1259.9 1263.3	80.5 80.7 80.8 81.0	0.03 0.03 0.03 0.03	28 28 29 30		80.5 80.7 80.8 81.0	122.4 125.7 129.1 132.8	1.97 2.02 2.06 2.11
8500	1266.6	81.1	0.03	30		81.1	136.8	2.17
8400 8300 8200 8100	1269.9 1273.1 1276.2 1279.3	81.3 81.4 81.6 81.7	0.03 0.03 0.03 0.03	31 32 32 33		81.3 81.4 81.6 81.7	141.0 145.4 150.2 155.3	2.23
8000	1282.3	81.9	0.03			81.9	160.7	

FT 155-AR-1 TABLE F CHARGE 7W

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 PCT 1 M/S 1 KNOT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC INC TAIL M M M M M M M M M М M 11500 24.0 -23.2 20.1 51.3 2 -16.6 11.8 -13.0 -52.2 1 23.8 23.6 23.4 23.2 -51.7 -51.2 -50.7 11400 20.0 11.7 50.9 -23.0-16.4 -12.9 2 -22.8 -22.6 19.9 19.8 -12.8 -12.7 50.4 50.0 -16.2 -16.0 -15.8 11300 11.6 2 11200 11.5 11.3 -12.62 1 11100 19.7 50.3 49.5 11000 23.0 -22.2 19.6 -15.6 11.2 -12.5 -49.8 49.1 2 1 19.5 19.4 19.3 19.2 48.7 48.2 47.8 47.3 -15.3 -15.1 -14.8 -14.6 10900 22.8 22.6 22.4 -22.0 -21.8 -21.5 11.1 11.0 -12.4 -12.3 -**49.3** 2 3 3 3 -48.8 -48.3 10800 10.9 -12.210700 0 10.8 Ŏ 10600 10500 21.9 -21.1 19.1 -14.3 10.7 -12.0-47.2 46.8 4 0 10400 21.7 21.5 -20.9 -20.7 19.0 18.8 10.6 10.5 -11.9 -11.8 -46.7 -46.246.4 45.9 -14.0 -13.6 4 10300 10200 21.2 -20.4 18.7 10.4 -45.6 45.4 4 -11.8 10.3 -2 10100 18.6 -11.710000 20.8 18.5 10.3 44.5 5 -20.0-11.6 -44.6 -2 20.6 20.3 20.1 18.3 18.2 18.1 10.2 10.1 10.0 -11.5 -11.5 -11.4 9900 -19.8 -**44.0** 44.0 6 -2 -19.5 -19.3 43.5 43.0 -43.4 -42.9 9800 667 -3 9600 19.8 -19.117.9 10.0 -11.3 -42.342.5 -4 -41.7 7 9500 19.6 -18.817.8 9.9 -11.342.0 -4 9400 19.4 -18.6 17.6 9.9 -11.2 -41.2 41.4 8 -5 9300 19.1 -18.3 17.5 9.8 -11.1 **-40.6** 40.9 8 9200 9100 -18.1 -17.8 17.3 17.1 9.8 9.7 40.4 39.9 9 -6 -7 18.9 -40.018.6 -11.0 -39.49000 18.4 -17.6 16.9 9.7 -11.0 -38.739.3 10 -7 -8 -9 8900 18.1 -17.316.8 9.6 -10.938.8 11 17.9 17.6 38.3 37.7 8800 -17.*0* 16.6 9.6 *-10.9* 12 9.6 -10.98700 -16.816.4 13 -10 -10.98600 17.3 -16.516.1 9.6 37.2 14 -10 8500 17.1 15.9 9.5 -10.9 36.6 -11 -16.314 9.5 9.5 9.5 8400 16.8 -16.0 15.7 -**10.9** 36.0 15 -13 16.5 16.2 -15.7 -15.4 15.4 15.2 35.4 34.8 34.2 -14 -15 -10.9-10.98300 8200 16 17 15.9 9.5 14.9 -10.919 8100 -15.1-16

9.5

8000

15.6

14.6

-17

20

33.6

CHARGE TABLE F FT 155-AR-1
7W PART 1
BASIC DATA PROJ, HE, M795
FUZE, PD, M739 A1

1	2	3	4	5	6	7	8	9
R A	E L	FS FOR GRAZE	DFS PER	DR PER	F O	TIME OF		MUTH CTIONS
N G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
8000	1282.3	81.9	0.03			81.9	160.7	
7907	1285.0							

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE F CHARGE 7W CORRECTION FACTORS 17 18 19 10 11 12 13 14 15 16 RANGE CORRECTIONS FOR R A N G E MUZZLE VELOCITY 1 M/S RANGE WIND 1 KNOT PROJ WT OF 1 SQ (4 SQ STD) AIR TEMP 1 PCT AIR DENSITY 1 PCT DEC HEAD DEC INC TAIL DEC INC INC DEC INC M M M M M M M M M M M 8000 15.6 14.6 9.5 33.6 20 -17 7907

CHARGE 7W

TABLE G
SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R E		PROBABLE ERRORS					ANGLE	СОТ	TML	МО		SITE
A L N E				FUZE M582			OF FALL	ANGLE OF	VEL		ANGLE	OR OF SITE
G E	G V	R	D	НВ	ТВ	RB		FALL			+1 MIL SITE	-1 MIL   SITE
М	MIL	М	М	М	SEC	M	MIL		M/S	М	MIL	MIL
0	0.0	11	0				0		544	0	0.000	0.00
1000 2000	17.9 38.1	11 10	0	1	0.04	18	19 43	53.4 23.6	499 456	5 20	0.000 0.001	0.00
3000 4000	60.9 86.9	10	1 2	1 2	0.04	17	73 111	13.9	416 380	49 96	0.001	-0.001
5000	116.8	11	2	2		15	158	6.4	349	167	0.003	-0.004
6000	150.9	13		3		15	214	4.7	328	267	0.011	
7000 8000	189.6 232.8	14	3 4	4 5		15	276 343	3.6	314 305	403 580	0.019	
9000	280.8	18	4	6	0.04	16	413	2.3	300	804	0.047	-0.034
10000	333.9	19	5	8	0.05	17	487	1.9	298	1081	0.074	-0.055
11000 12000	393.2 460.8	21 23	6 7	9 12		18 19	563 645	1.6 1.4	297 299	1424 1852	0.119 0.204	-0.090 -0.151
13000	542.0 656.2	25 27	8 9	14	0.06	21 23	736 854	1.1	302 308	2413 3273	0.403	
	*****		•								*****	
14000	937.8	31	11	34	0.10	26	1103	0.5	324	5543		1.79
13000	1039.5 1108.2	29 27	11	40 44	0.11	25 23	1183 1238	0.4	327 330	6319 6802	-1.507 -1.290	1.39
11000	1163.2	24	11	47	0.12	22	1282	0.3	331	7154		1.16
10000	1209.6	22	10	49	0.13	20	1322	0.3	332	7424	-1.124	1.11
9000 8000	1249.2 1282.3	20	10 9	52	0.13	18	1359 1396	0.2 0.2	332 332	7632 7788	-1.081	1.07 1.04

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

### TABLE H ROTATION - RANGE

CHARGE 7W

### CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

	AZIMUTH OF TARGET - MILS									
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600	
1000 2000 3000 4000	0 0 0 0	-1+ -3+ -4+ -4+	-3+ -5+ -7+ -9+	-4+ -8+ -10+ -12+	-5+ -10+ -13+ -16+	-6+ -11+ -15+ -19+	-7+ -13+ -17+ -21+	-7+ -13+ -18+ -22+	-7+ -14+ -19+ -22+	
5000	0	-5+	-10+	-14+	-18+	-21+	-23+	-25+	-25+	
6000 7000 8000 9000	0 0 0 0	-5+ -6+ -6+ -7+	-11+ -11+ -12+ -13+	-15+ -17+ -18+ -19+	-20+ -21+ -23+ -24+	-23+ -25+ -27+ -29+	-26+ -28+ -30+ -32+	-27+ -29+ -32+ -34+	-28+ -30+ -32+ -34+	
10000	0	-7+	-14+	-20+	-26+	-30+	-34+	-36+	-37+	
11000 12000 13000 14000	0 0 0 0	-7+ -8+ -8+ -7+	- 15+ - 15+ - 15+ - 14+	-21+ -22+ -22+ -21+	-27+ -28+ -28+ -26+	-32+ -33+ -33+ -31+	-35+ -37+ -37+ -34+	-38+ -39+ -39+ -36+	-38+ -40+ -40+ -37+	
14000 13000 12000 11000	0 0 0 0 0	******* -2+ 0 +2- +4-	****** -5+ 0 +4- +8-	****** -7+ 0 +6- +12-	****** -9+ +1- +8- +15-	****** -10+ +1- +10- +18-	****** -12+ +1- +11- +20-	****** -12+ +1- +11- +21-	****** -13+ +1- +12- +21-	
10000	0	+6-	+12-	+17-	+22-	+26-	+29-	+31-	+31-	
9000 8000	0	+8- +12-	+17- +24-	+24- +35-	+31- +44-	+36- +52-	+40- +57-	+43- +61-	+44- +62-	
	3200 3400 3600 3800 4000 4200 4400 4600 4800 6400 6200 6000 5800 5600 5400 5200 5000 4800									
	AZIMUTH OF TARGET - MILS									

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	. 94	. 87	.77	. 64	. 50	. 34

TABLE I

ROTATION - AZIMUTH

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 0 DEGREES LATITUDE

		AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
8000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
9000	R0.2L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.2R	
10000	R0.2L	R0.2L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.2R	L0.2R	
11000	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R	
12000	R0.4L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.4R	
13000	R0.6L	R0.5L	R0.4L	R0.2L	0.0	L0.2R	L0.4R	L0.5R	L0.6R	
14000	R0.8L	R0.8L	R0.6L	R0.3L	0.0	L0.3R	L0.6R	L0.8R	L0.8R	
*****	******	*****	*****	*****	*****	******	******	******	:*****	
14000	R1.9L	R1.8L	R1.4L	R0.7L	0.0	L0.7R	L1.4R	L1.8R	L1.9R	
13000	R2.6L	R2.4L	R1.8L	R1.0L	0.0	L1.0R	L1.8R	L2.4R	L2.6R	
12000	R3.1L	R2.9L	R2.2L	R1.2L	0.0	L1.2R	L2.2R	L2.9R	L3.1R	
11000	R3.7L	R3.4L	R2.6L	R1.4L	0.0	L1.4R	L2.6R	L3.4R	L3.7R	
10000	R4.2L	R3.9L	R3.0L	R1.6L	0.0	L1.6R	L3.0R	L3.9R	L4.2R	
9000	R4.8L	R4.4L	R3.4L	R1.8L	0.0	L1.8R	L3.4R	L4.4R	L4.8R	
8000	R5.3L	R4.9L	R3.7L	R2.0L	0.0	L2.0R	L3.7R	L4.9R	L5.3R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZ I	MUTH OF	TARGE 1	r - MILS	;			

### 0 DEGREES LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7W

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 10 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS	<b>i</b>		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
5000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R
6000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
7000	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R
8000	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.4R
9000	L0.1R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R
10000	L0.1R	L0.1R	L0.2R	L0.3R	L0.3R	L0.4R	L0.5R	L0.5R	L0.5R
11000	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.5R	L0.6R	L0.7R	L0.7R
12000	0.0	L0.1R	L0.2R	L0.3R	L0.4R	L0.6R	L0.7R	L0.8R	L0.8R
13000	0.0	0.0	L0.1R	L0.3R	L0.5R	L0.7R	L0.9R	L1.0R	L1.1R
14000	R0.2L	R0.2L	0.0	L0.3R	L0.6R	L0.9R	L1.2R	L1.3R	L1.4R
*****	******	*****	*****	*****	*****	******	******	******	*****
14000	R1.1L	R1.0L	R0.6L	0.0	L0.8R	L1.5R	L2.1R	L2.5R	L2.7R
13000	R1.7L	R1.5L	R1.0L	R0.1L	L0.8R	L1.8R	L2.6R	L3.2R	L3.4R
12000	R2.2L	R2.0L	R1.3L	R0.3L	L0.9R	L2.1R	L3.1R	L3.7R	L4.0R
11000	R2.8L	R2.5L	R1.7L	R0.5L	L0.9R	L2.3R	L3.5R	L4.2R	L4.5R
10000	R3.3L	R3.0L	R2.1L	R0.7L	L0.9R	L2.5R	L3.8R	L4.8R	L5.1R
9000	R3.8L	R3.5L	R2.4L	R0.9L	L0.9R	L2.7R	L4.2R	L5.2R	L5.6R
8000	R4.3L	R3.9L	R2.8L	R1.1L	L0.9R	L2.9R	L4.6R	L5.7R	L6.1R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	· - MILS	1		

### 10 DEGREES SOUTH LATITUDE

TABLE I ROTATION - AZIMUTH FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 20 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS	<b>i</b>		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
5000	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
6000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R
7000	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R
8000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R
9000	L0.4R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R
10000	L0.5R	L0.5R	L0.5R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R
11000	L0.5R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L1.0R	L1.0R	L1.0R
12000	L0.5R	L0.5R	L0.6R	L0.7R	L0.9R	L1.0R	L1.1R	L1.2R	L1.2R
13000	L0.5R	L0.5R	L0.6R	L0.8R	L1.0R	L1.2R	L1.4R	L1.5R	L1.5R
14000	L0.4R	L0.4R	L0.6R	L0.9R	L1.2R	L1.5R	L1.7R	L1.9R	L1.9R
*****	******	*****	*****	*****	*****	******	******	******	*****
14000	R0.3L	R0.2L	L0.2R	L0.8R	L1.5R	L2.2R	L2.8R	L3.2R	L3.4R
13000	R0.8L	R0.6L	R0.1L	L0.7R	L1.6R	L2.6R	L3.4R	L3.9R	L4.1R
12000	R1.3L	R1.0L	R0.4L	L0.6R	L1.7R	L2.8R	L3.8R	L4.4R	L4.7R
11000	R1.7L	R1.5L	R0.7L	L0.4R	L1.7R	L3.1R	L4.2R	L4.9R	L5.2R
10000	R2.2L	R1.9L	R1.1L	L0.2R	L1.8R	L3.3R	L4.6R	L5.4R	L5.7R
9000	R2.7L	R2.4L	R1 . 4L	0.0	L1.8R	L3.5R	L4.9R	L5.9R	L6.3R
8000	R3.2L	R2.8L	R1 . 8L	R0.2L	L1.7R	L3.6R	L5.2R	L6.3R	L6.7R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	;		

### 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7W

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 30 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS	1		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
6000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
7000	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R
8000	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R
9000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R
10000	L0.8R	L0.8R	L0.8R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R
11000	L0.9R	L0.9R	L0.9R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R	L1.4R
12000	L0.9R	L0.9R	L1.0R	L1.1R	L1.3R	L1.4R	L1.5R	L1.6R	L1.6R
13000	L1.0R	L1.0R	L1.1R	L1.3R	L1.4R	L1.6R	L1.8R	L1.9R	L1.9R
14000	L1.0R	L1.0R	L1.2R	L1.4R	L1.7R	L2.0R	L2.2R	L2.4R	L2.4R
*****	******	*****	*****	*****	*****	******	*****	******	*****
14000	L0.6R	L0.7R	L1.1R	L1.6R	L2.2R	L2.9R	L3.4R	L3.8R	L3.9R
13000	L0.2R	L0.3R	L0.8R	L1.5R	L2.4R	L3.3R	L4.0R	L4.5R	L4.6R
12000	R0.2L	0.0	L0.6R	L1.4R	L2.5R	L3.5R	L4.4R	L5.0R	L5.2R
11000	R0.7L	R0.4L	L0.3R	L1.3R	L2.5R	L3.8R	L4.8R	L5.5R	L5.7R
10000	R1.1L	R0.8L	0.0	L1.2R	L2.6R	L4.0R	L5.2R	L6.0R	L6.2R
9000	R1.6L	R1.3L	R0.4L	L1.0R	L2.6R	L4.2R	L5.5R	L6.4R	L6.7R
8000	R2.0L	R1.7L	R0.7L	L0.8R	L2.5R	L4.3R	L5.8R	L6.8R	L7.1R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	· - MILS	1		

### 30 DEGREES SOUTH LATITUDE

TABLE I ROTATION - AZIMUTH FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 40 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
5000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
6000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R
7000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
8000	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R
9000	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R
10000	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.4R	L1.4R	L1.4R
11000	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.5R	L1.6R	L1.6R	L1.6R
12000	L1.3R	L1.3R	L1.4R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L1.9R
13000	L1.4R	L1.5R	L1.6R	L1.7R	L1.9R	L2.0R	L2.2R	L2.3R	L2.3R
14000	L1.5R	L1.6R	L1.7R	L1.9R	L2.2R	L2.4R	L2.6R	L2.8R	L2.8R
*****	******	*****	*****	*****	*****	******	******	*****	*****
14000	L1.4R	L1.5R	L1.8R	L2.3R	L2.9R	L3.5R	L3.9R	L4.3R	L4.4R
13000	L1.1R	L1.3R	L1.7R	L2.3R	L3.1R	L3.8R	L4.5R	L4.9R	L5.1R
12000	L0.8R	L1.0R	L1.5R	L2.3R	L3.2R	L4.1R	L4.9R	L5.4R	L5.6R
11000	L0.4R	L0.7R	L1.3R	L2.2R	L3.3R	L4.4R	L5.3R	L5.9R	L6.1R
10000	L0.1R	L0.3R	L1.0R	L2.1R	L3.3R	L4.5R	L5.6R	L6.3R	L6.6R
9000	R0.4L	R0.1L	L0.7R	L1.9R	L3.3R	L4.7R	L5.9R	L6.7R	L7.0R
8000	R0.8L	R0.5L	L0.4R	L1.7R	L3.3R	L4.8R	L6.1R	L7.0R	L7.3R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	· - MILS			

### 40 DEGREES SOUTH LATITUDE

TABLE I CHARGE 7W

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 50 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R
4000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
5000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
6000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
7000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R
8000	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R
9000	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R
10000	L1.3R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
11000	L1.5R	L1.5R	L1.6R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R
12000	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L2.0R	L2.1R	L2.2R	L2.2R
13000	L1.9R	L1.9R	L2.0R	L2.1R	L2.2R	L2.4R	L2.5R	L2.5R	L2.6R
14000	L2.1R	L2.1R	L2.2R	L2.4R	L2.6R	L2.8R	L3.0R	L3.1R	L3.1R
*****	*****	*****	*****	*****	*****	*****	******	******	*****
14000	L2.2R	L2.3R	L2.6R	L3.0R	L3.4R	L3.9R	L4.3R	L4.6R	L4.7R
13000	L2.0R	L2.1R	L2.5R	L3.0R	L3.7R	L4.3R	L4.9R	L5.2R	L5.3R
12000	L1.8R	L1.9R	L2.4R	L3.0R	L3.8R	L4.6R	L5.2R	L5.7R	L5.8R
11000	L1.5R	L1.7R	L2.2R	L3.0R	L3.9R	L4.8R	L5.6R	L6.1R	L6.3R
10000	L1.2R	L1.4R	L2.0R	L2.9R	L3.9R	L5.0R	L5.9R	L6.5R	L6.7R
9000	L0.9R	L1.1R	L1.8R	L2.8R	L3.9R	L5.1R	L6.1R	L6.8R	L7.0R
8000	L0.5R	L0.8R	L1.5R	L2.6R	L3.9R	L5.2R	L6.3R	L7.0R	L7.3R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	;		

### 50 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 60 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
3000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
4000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
5000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
6000	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
7000	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R
8000	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R
9000	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R
10000	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R
11000	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.0R	L2.1R	L2.1R
12000	L2.0R	L2.0R	L2.0R	L2.1R	L2.2R	L2.3R	L2.3R	L2.4R	L2.4R
13000	L2.2R	L2.3R	L2.3R	L2.4R	L2.5R	L2.6R	L2.7R	L2.8R	L2.8R
14000	L2.5R	L2.6R	L2.6R	L2.8R	L2.9R	L3.1R	L3.2R	L3.3R	L3.4R
******* 14000 13000 12000 11000	******** L2.9R L2.9R L2.7R L2.6R	L3.0R L3.0R L2.9R L2.7R	L3.2R L3.2R L3.2R L3.2R L3.1R	L3.5R L3.7R L3.7R L3.7R L3.7R	L3.9R L4.2R L4.3R L4.4R	L4.3R L4.7R L4.9R L5.1R	L4.6R L5.1R L5.4R L5.7R	L4.8R L5.4R L5.8R L6.1R	L4.9R L5.5R L5.9R L6.3R
10000	L2.3R	L2.5R	L3.0R	L3.6R	L4.5R	L5.3R	L6.0R	L6.4R	L6.6R
9000	L2.1R	L2.2R	L2.8R	L3.5R	L4.5R	L5.4R	L6.1R	L6.7R	L6.8R
8000	L1.8R	L2.0R	L2.5R	L3.4R	L4.4R	L5.4R	L6.3R	L6.8R	L7.0R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	;		

### 60 DEGREES SOUTH LATITUDE

TABLE I CHARGE 7W

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 70 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS	<b>i</b>		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
3000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
4000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
5000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
6000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R
7000	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R
8000	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R
9000	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.6R	L1.6R	L1.6R
10000	L1.7R	L1.8R	L1.8R	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R
11000	L2.0R	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.2R
12000	L2.2R	L2.3R	L2.3R	L2.3R	L2.4R	L2.4R	L2.5R	L2.5R	L2.5R
13000	L2.5R	L2.5R	L2.6R	L2.7R	L2.7R	L2.8R	L2.9R	L2.9R	L2.9R
14000	L2.9R	L2.9R	L3.0R	L3.1R	L3.2R	L3.3R	L3.4R	L3.5R	L3.5R
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14000	L3.5R	L3.6R	L3.7R	L4.0R	L4.2R	L4.5R	L4.7R	L4.8R	L4.9R
13000	L3.6R	L3.7R	L3.9R	L4.2R	L4.5R	L4.8R	L5.1R	L5.3R	L5.4R
12000	L3.6R	L3.7R	L3.9R	L4.3R	L4.7R	L5.1R	L5.4R	L5.7R	L5.8R
11000	L3.5R	L3.6R	L3.9R	L4.3R	L4.8R	L5.3R	L5.7R	L5.9R	L6.0R
10000	L3.4R	L3.5R	L3.8R	L4.3R	L4.8R	L5.4R	L5.9R	L6.2R	L6.3R
9000	L3.2R	L3.3R	L3.7R	L4.2R	L4.8R	L5.5R	L6.0R	L6.3R	L6.5R
8000	L3.0R	L3.1R	L3.5R	L4.1R	L4.8R	L5.5R	L6.1R	L6.4R	L6.6R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	;		

### 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J
7W
FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	: I TY		IGE ND (NOT	AI TEN 1 F		DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	004 005 007	0.004 0.005 0.007	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.001 0.001	0.000 001 001	0.008 0.012 0.016	008 012 016
5	009	0.009	0.000	0.000	0.000	0.000	0.002	002	0.019	019
6 7 8 9	010 012 014 015	0.010 0.012 0.014 0.015	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001	001 001 001 001	0.003 0.004 0.005 0.006	003 003 004 006	0.022 0.025 0.028 0.030	022 025 028 031
10	017	0.017	0.000	0.000	0.002	002	0.007	007	0.032	033
11 12 13 14	018 020 021 023	0.018 0.020 0.021 0.023	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.002 0.003 0.004 0.005	003 004 005 006	0.008 0.010 0.012 0.014	008 010 012 014	0.034 0.036 0.037 0.039	035 037 038 040
15	024	0.024	0.000	0.000	0.006	006	0.017	016	0.040	041
16 17 18 19	026 027 028 029	0.025 0.027 0.028 0.029	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.001	0.008 0.009 0.010 0.010	007 008 008 008	0.019 0.021 0.024 0.026	019 021 023 025	0.040 0.041 0.042 0.042	042 043 044 044
20	031	0.031	001	0.001	0.011	009	0.029	027	0.043	045
21 22 23 24	032 033 034 035	0.032 0.033 0.034 0.035	001 001 001 001	0.001 0.001 0.001 0.002	0.012 0.012 0.012 0.013	009 008 008 008	0.031 0.033 0.036 0.038	029 031 033 035	0.043 0.043 0.044 0.044	045 046 046 047
25	036	0.036	001	0.002	0.013	007	0.040	037	0.044	<b>047</b>
26 27 28 29	037 038 039 040	0.037 0.038 0.039 0.040	002 002 002 003	0.002 0.003 0.003 0.003	0.012 0.012 0.012 0.011	007 006 005 004	0.042 0.044 0.046 0.048	039 040 042 044	0.045 0.045 0.045 0.046	048 048 049 049
30	041	0.041	003	0.004	0.010	002	0.050	045	0.046	050
31 32 33 34	042 043 044 045	0.042 0.043 0.044 0.044	003 004 004 004	0.004 0.005 0.005 0.006		001 0.000 0.002 0.003	0.052 0.054 0.056 0.057	047 048 050 051	0.047 0.047 0.048 0.048	050 051 051 052
35	045	0.045	005	0.006	0.005	0.005	0.059	052	0.048	052

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

> 0.063 0.064 0.066

0.067

0.069

0.075

0.077 0.078 0.080

0.081

0.082

0.070 0.071 0.071 0.073

**074** 0.074

064

065

066

068

. 069

075

078

079

080

082

-.015

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-.015

-.015

-.015

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## TABLE J FUZE CORRECTION FACTORS

CHARGE

7W

### 1 3 4 5 7 8 9 10 11 FS **FUZE CORRECTIONS FOR RANGE** MUZZLE AIR AIR PROJ WT **VELOCITY** WIND **TEMP DENSITY** OF 1 SQ 1 PCT (4 SQ STD) 1 M/S 1 KNOT PCT DEC INC HEAD TAIL DEC INC DEC INC DEC INC 35 045 0.045 -.005 0.006 0.005 0.005 0.059 . 052 0.048 052 0.046 047 0.047 0.048 0.048 0.049 0.006 0.008 0.010 0.011 -.005 0.006 0.004 0.061 054 0.049 053 0.007 0.008 0.008 0.049 37 .006 0.002 0.062 055 . 053 0.064 0.065 38 006 0.001 056 0.050 054 054 0.050 39 . 007 .001 057 40 049 0.049 -.*007* 0.009 002 0.013 0.067 059 0.051 055 0.050 0.051 0.052 0.009 0.010 0.010 0.015 0.016 0.017 0.068 0.070 0.071 0.052 0.052 41 42 056 057 050 -.008 004 060 - 008 .006 051 062 0.053 . 057 43 -.009 052 063 0.019 44 *053* 0.052 0.011 . 009 -.009 0.073 0.053 . 065 . 058 45 054 0.053 -. 010 0.011 010 0.020 0.074 066 0.054 059 0.054 0.055 0.056 0.012 0.012 0.013 .012 0.022 0.023 0.024 46 054 055 -. **010** 0.076 068 0.054 059 .013 47 -. *011* -. *011* 0.077 -.069 -.071 0.055 060 48 061056 0.057 -.011 0.013 0.026 0.081 0.056 49 057 .016 .072 . 062 50 058 0.058 -.012 0.013 017 0.027 0.083 -.074 0.057 062 51 059 0.058 -.012 0.014 . 018 0.028 0.084 -. **076** 0.058 063 0.059 0.060 0.061 0.020 0.029 0.030 0.030 0.058 0.059 0.014 0.015 0.015 0.086 0.088 -.013 . 019 -.077 52 53 060 064 . 021 -. 079 - 081 . 065 -.013 061 -.014 54 . 022 0.090 . 081 0.060 . 066 55 063 0.062 -. *014* 0.015 022 0.031 0.092 083 0.061 067

0.030 0.030 0.030 0.030

0.030

0.030 0.030 0.030

0.029

0.029

0.029 0.029 0.029 0.029

0.029

0.094

0.096

0.099

0.102

0.105

0.108

0.111

0.113

0.116

0.119

0.121

0.124

0.126

0.129

0.131

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CHARGE TABLE J FT 155-AR-1
7W FUZE CORRECTION FACTORS PROJ, HE, M795
FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11	
FS		FUZE CORRECTIONS FOR									
	MUZZLE VELOCITY 1 M/S		ELOCITY WIND TEMP		MP .	DEN	IR SITY PCT		WT SQ STD)		
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC	
70	082	0.082	017	0.017	018	0.029	0.131	120	0.078	082	
72 73	085 086	0.084 0.085 0.087 0.088	017 017 017 017	0.017 0.017	018 018 017 017	0.028	0.136 0.139	122 124 126 129	0.079 0.081 0.083 0.084	085 087	
75	089	0.089	017	0.017	017	0.028	0.143	131	0.086	093	
77	092 094	0.091 0.092 0.094 0.095	017 017 017 018	0.018 0.019	017 016 016 015	0.027	0.148 0.150	133 135 137 140	0.089 0.093 0.098 0.104	100 104	
80	097	0.097	019		015	0.026	0.155	142	0.113	118	
81 82	099 103	0.100 0.103	022 027		013 010		0.159	145 150	0.130 0.165		

 FT 155-AR-1
 TABLE K
 CHARGE

 PART 1
 7W

 PROJ, HE, M795
 FUZE SETTING

FUZE, MTSQ, M582

## CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 $\label{eq:formula} \text{FOR FUZE, MTSQ, M564}$

	ETTING M582	CORRECTIONS
FROM	TO	
1.9	12.2	0.0
12.3	23.2	0.1
23.3	34.6	0.2
34.7	45.3	0.3
45.4	56.1	0.4
56.2	67.8	0.5
67.9	79.4	0.6
79.5	81.9	0.7

## FT 155-AR-1 PART 1

Part 1

Charge 7R

Projectile, HE, M795

Fuze, PD, M739A1

 $Muzzle\ Velocity-659\ M/S$ 

Propelling Charge M119A2 - Base Section 7

## FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A LINE NUMBER CHARGE 7R

## LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADF ELEVA MIL	TION	LINE NUMBER
0.0-	73.4	0
73.5- 145.4- 224.3- 303.0-	302.9	1 2 3 4
371.3-	463.1	5
463.2- 573.9- 676.6- 774.8-	676.5 774.7	6 7 8 9
920.0-	1130.7	10
1130.8-	1270.0	11

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	0					0						
	100 200 300 400					0 0 0 0	0 0 0	0 0 1 1	0 1 2 2			
	500					0	0	1	3			
	600 700 800 900					0 0 0 0	0 1 1 1	2 2 2 2	4 4 4 4			
	1000					0	1	2	5			
	1100 1200 1300 1400					0 0 0	1 1 1	3 3 3 3	5 5 5 5			
	1500					0	1	3	5			
0	1600 1700 1800 1900					0 0 0	1 1 1	3 3 3 3	5 6 6 6			
	2000					0	1	3	6			
	2100 2200 2300 2400					0 0 0 0	1 1 1	3 3 3 3	6 6 7			
	2500					0	1	4	7			
	2600 2700 2800 2900				-1 -1	0 0 0	1 1 1 1	4 4 4 4	7 7 7 7			
	3000				-1	0	1	4	7			
	3100 3200 3300 3400				-2 -2 -2 -2	0 0 0 0	1 1 1 1	4 4 4 4	7 7 7 7			
	3500				-2	0	1	4	8			
			0					1				

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT			GUN - N	ETERS	MEGGAGE	RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
							0	
0 2 4 4	3 6 7	4 8 9	6 10 11	7 12 14	8 14 16	16 19	100 200 300 400	
5	8	11	14	17	20	23	500	
6 7 7 7	9 10 10 10	12 13 13 14	15 17 17 18	19 21 22 23	22 25 26 27	26 29 30 32	600 700 800 900	
7	11	15	19	24	29	34	1000	
8 8 8	11 11 12 12	15 15 16 16	20 20 21 21	24 25 26 26	30 30 31 32	35 36 37 38	1100 1200 1300 1400	
9	12	17	21	27	32	39	1500	
9 9 9	13 13 13 13	17 17 18 18	22 22 23 23	27 28 28 28	33 34 34 35	39 40 41 41	1600 1700 1800 1900	3
9	13	18	23	29	35	42	2000	
10 10 10 10	14 14 14 14	18 19 19 19	24 24 24 24	29 30 30 30	36 36 36 37	42 43 43 44	2100 2200 2300 2400	
10	15	19	25	31	37	44	2500	
10 11 11 11	15 15 15 15	20 20 20 20	25 25 26 26	31 31 32 32	37 38 38 39	45 45 45 46	2600 2700 2800 2900	
11	15	20	26	32	39	46	3000	
11 11 11 11	15 16 16 16	21 21 21 21	26 27 27 27	32 33 33 33	39 40 40 40	47 47 47 48	3100 3200 3300 3400	
12	16	21	27	34	40	48	3500	
		2				3		

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TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI				UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	3500				-2	0	1	4	8		
	3600 3700 3800 3900			-3	-2 -2 -2 -2	0 0 0 0	1 1 1 1	4 4 4 4	8 8 8 8		
	4000			-3	-2	0	1	4	8		
	4100 4200 4300 4400			-3 -3 -3	-2 -3 -3 -3	0 0 0 0	1 1 1 1	4 4 4 4	8 8 8 8		
	4500			-4	-3	0	1	4	8		
	4600 4700 4800 4900		-3 -4 -4 -4	-4 -4 -4	-3 -3 -3	0 0 0	1 1 1 1	5555	8 8 8 8		
	5000		-4	-4	-3	0	1	5	9		
0	5100 5200 5300 5400	-4 -4 -5	-5 -5 -5	-4 -5 -5 -5	-3 -3 -3	0 0 0	1 1 1 1	5 5 5 5 5	9 9 9		
	5500	-5	-5	-5	-3	0	1	5	9		
	5600 5700 5800 5900	-5 -5 -6 -6	-5 -6 -6 -6	-5 -5 -5 -5	-4 -4 -4 -4	0 0 0 0	1 1 1 1	5555 5	9 9 9		
	6000	-6	-6	-5	-4	0	2	5	9		
	6100 6200 6300 6400	-6 -6 -7 -7	-6 -6 -6 -7	-5 -5 -5	-4 -4 -4 -4	0 0 0 0	2 2 2 2 2	5 5 5 5 5	9 9 9 9		
	6500	-7	-7	-6	-4	0	2	5	9		
	6600 6700 6800	-7 -7 -8	-7 -7 -7	-6 -6 -6	-4 -4 -4	0 0 0	2 2 2 2	5 <u>5</u> 55	9 10 10		
	6900	-8	-7	-6	-4	0			10		
	7000 -8			-7 -6 -4 0 2							
	0				1				2		

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
12	16	21	27	34	40	48	3500	
12 12 12 12	16 16 17 17	21 22 22 22 22	27 27 28 28	34 34 34 34	41 41 41 41	48 49 49 49	3600 3700 3800 3900	
12	17	22	28	35	42	49	4000	
12 12 12 12	17 17 17 17	22 22 23 23	28 28 29 29	35 35 35 35	42 42 42 43	50 50 50 50	4100 4200 4300 4400	
13	17	23	29	36	43	51	4500	
13 13 13 13	18 18 18 18	23 23 23 23	29 29 29 30	36 36 36 36	43 43 43 44	51 51 51 52	4600 4700 4800 4900	
13	18	23	30	36	44	52	5000	
13 13 13 13	18 18 18 18	24 24 24 24	30 30 30 30	37 37 37 37	44 44 44 45	52 52 53 53	5100 5200 5300 5400	3
13	18	24	30	37	45	53	5500	
13 14 14 14	19 19 19	24 24 24 25	31 31 31 31	37 38 38 38	45 45 45 46	53 53 54 54	5600 5700 5800 5900	
14	19	25	31	38	46	54	6000	
14 14 14 14	19 19 19 19	25 25 25 25	31 31 32 32	38 38 39 39	46 46 46 47	54 54 55 55	6100 6200 6300 6400	
14	19	25	32	39	47	55	6500	
14 14 14 14	20 20 20 20	25 26 26 26	32 32 32 32	39 39 40 40	47 47 47 48	55 56 56 56	6600 6700 6800 6900	
15	20	26	33	40	48	56	7000	
	2					3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	7000	-8	-7	-6	-4	0	2	5	10
0	7100 7200 7300	-8 -8 -8	-7 -7 -7	-6 -6 -6	-4 -4 -4	0 0 0	2 2 2 2	6 6 6	10 10 10
	7400	-8	-8	-6	-4	0		6	10
	7500	-9	-8	-6	-4	0	2	6	10
	7600 7700 7800 7900	-9 -9 -9	-8 -8 -8	-6 -6 -6	-4 -4 -4 -4	0 0 0 0	2 2 2 2	6 6 6 6	10 10 10 10
	8000	- <b>9</b>	-8	-6	-4	0	2	6	11
1	8100 8200 8300 8400	-9 -10 -10 -10	-8 -8 -9	-7 -7 -7 -7	-4 -4 -4	0 0 0	2 2 2 2	6 6 6 6	11 11 11 11
	8500	-10	-9	-7	-4	0	2	6	11
	8600 8700 8800 8900	-10 -10 -11 -11	-9 -9 -9 -9	-7 -7 -7 -7	-4 -5 -5 -5	0 0 0	2 2 2 2	6 7 7 7	11 11 12 12
	9000	-11	-10	-8	-5	0	2	7	12
	9100 9200 9300 9400	-12 -12 -12 -13	-10 -10 -10 -11	-8 -8 -8	-5 -5 -5 -5	0 0 0	2 3 3 3	7 7 7 8	12 13 13
	9500	-13	-11	-8	-5	0	3	8	13
	9600 9700 9800 9900	-13 -14 -14 -15	-11 -12 -12 -12	-9 -9 -9	-5 -6 -6 -6	0 0 0	3 3 3 3	8 8 8 9	14 14 14 14
2	10000	-15	-13	-10	-6	0	3	9	15
	10100 10200 10300 10400	-16 -16 -17 -17	-13 -13 -14 -14	-10 -10 -10 -10	-6 -6 -6	0 0 0 0	3 4 4 4	9 9 9 10	15 15 16 16
	10500	-18	-14	-11	-6	0	4	10	17
		2						3	

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
15	20	26	33	40	48	56	7000	
15 15 15 15	20 20 20 20	26 26 26 27	33 33 33 33	40 40 41 41	48 48 49 49	57 57 57 58	7100 7200 7300 7400	
15	21	27	34	41	49	58	7500	
15 15 15 16	21 21 21 21	27 27 27 28	34 34 34 35	41 42 42 42	50 50 50 51	58 59 59 59	7600 7700 7800 7900	
16	21	28	35	43	51	60	8000	
16 16 16 16	22 22 22 22 22	28 28 29 29	35 36 36 36	43 43 44 44	51 52 52 53	60 61 61 62	8100 8200 8300 8400	3
17	23	29	37	45	53	62	8500	
17 17 17 18	23 23 24 24	30 30 30 31	37 37 38 38	45 45 46 46	53 54 55 55	63 63 64 64	8600 8700 8800 8900	
18	24	31	39	47	56	65	9000	
18 18 19 19	25 25 25 26	32 32 33 33	39 40 40 41	47 48 49 49	56 57 58 58	66 66 67 68	9100 9200 9300 9400	
19	26	34	41	50	59	69	9500	
20 20 21 21	27 27 28 28	34 35 35 36	42 43 43 44	51 51 52 53	60 61 61 62	70 70 71 72	9600 9700 9800 9900	
21	29	36	45	54	63	73	10000	4
22 22 23 23	29 30 30 31	37 38 38 39	45 46 47 48	54 55 56 57	64 65 66 67	74 75 76 77	10100 10200 10300 10400	
24	31	40	48	58	68	79	10500	
	3				•	4		-

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# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	10500	-18	-14	-11	- <b>6</b>	0	4	10	17
2	10600 10700 10800 10900	-18 -19 -19 -20	-15 -15 -16 -16	-11 -11 -11 -12	-6 -7 -7 -7	0 0 0 0	4 4 4 5	10 10 11 11	17 17 18 18
	11000	-20	-16	-12	-7	0	5	11	19
	11100 11200 11300 11400	-21 -21 -22 -23	-17 -17 -18 -18	-12 -12 -13 -13	-7 -7 -7 -7	0 0 0	5 5 5 5	12 12 12 13	19 19 20 20
	11500	-23	-18	-13	-8	0	5	13	21
	11600 11700 11800 11900	-24 -24 -25 -26	-19 -19 -20 -20	-14 -14 -14 -15	-8 -8 -8	0 0 0	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	13 14 14 14	21 22 22 23
3	12000	-26	-21	-15	-8	0	6	15	23
	12100 12200 12300 12400	-27 -28 -29 -30	-22 -22 -23 -23	-15 -16 -16 -17	-9 -9 -9	0 0 0	7 7 7 7	15 15 16 16	24 25 25 26
	12500	-30	-24	-17	-9	0	7	17	26
	12600 12700 12800 12900	-31 -32 -33 -34	-25 -25 -26 -27	-17 -18 -18 -19	-10 -10 -10 -10	0 0 0	8 8 8 8	17 18 18 19	27 28 29 29
	13000	-35	-27	-19	-10	0	9	19	30
	13100 13200 13300 13400	-36 -37 -38 -39	-28 -29 -29 -30	-20 -20 -21 -21	-11 -11 -11 -11	0 0 0	9 9 9 10	20 20 21 21	31 32 32 33
4	13500	-40	-31	-22	-12	0	10	22	34
	13600 13700 13800 13900	-41 -42 -43 -44	-32 -33 -33 -34	-22 -23 -23 -24	-12 -12 -12 -13	0 0 0 0	10 11 11 11	22 23 24 24	35 36 37 38
	14000	-45	-35	-24	-13	0	12	25	39
	4					5	· '		

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
24	31	40	48	58	68	79	10500	
24 25 25 26	32 33 33 34	40 41 42 43	49 50 51 52	59 60 61 62	69 70 71 73	80 81 82 84	10600 10700 10800 10900	
26	35	43	53	63	74	85	11000	4
27 27 28 29	35 36 37 38	44 45 46 47	54 55 56 57	64 65 67 68	75 76 78 79	87 88 90 91	11100 11200 11300 11400	<b>-</b>
29	38	48	58	69	81	93	11500	
30 31 31 32	39 40 41 42	49 50 51 52	59 61 62 63	71 72 73 75	82 84 85 87	94 96 98 100	11600 11700 11800 11900	
33	43	53	65	76	89	102	12000	
34 34 35 36	44 45 46 47	55 56 57 58	66 67 69 70	78 80 81 83	91 92 94 96	104 106 108 110	12100 12200 12300 12400	
37	48	60	72	85	98	112	12500	
38 39 40 41	49 50 51 53	61 62 64 65	73 75 77 78	86 88 90 92	100 102 104 107	114 117 119 122	12600 12700 12800 12900	5
42	54	67	80	94	109	124	13000	
43 44 45 46	55 56 58 59	68 70 71 73	82 84 86 88	96 98 101 103	111 114 116 119	127 129 132 135	13100 13200 13300 13400	
47	61	75	90	105	121	138	13500	
48 49 51 52	62 64 65 67	77 78 80 82	92 94 96 98	108 110 113 115	124 127 130 133	141 144 148 151	13600 13700 13800 13900	6
53	68	84	101	118	136	154	14000	
		5				6		

## TABLE B

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPLEMENTARY RANGE LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
4	14000	-45	-35	-24	-13	0	12	25	39
	14100 14200 14300 14400	-47 -48 -49 -51	-36 -37 -38 -39	-25 -26 -26 -27	-13 -14 -14 -14	0 0 0 0	12 12 13 13	26 26 27 28	40 41 42 43
	14500	-52	-40	-28	-15	0	13	28	44
5	14600 14700 14800 14900	-53 -55 -56 -58	-41 -42 -43 -44	-28 -29 -30 -31	-15 -15 -16 -16	0 0 0 0	14 14 15 15	29 30 31 32	45 46 48 49
	15000	- <b>59</b>	-46	-31	-16	0	15	32	50
	15100 15200 15300 15400	-61 -63 -65 -66	-47 -48 -50 -51	-32 -33 -34 -35	-17 -17 -18 -18	0 0 0	16 16 17 17	33 34 35 36	52 53 55 56
	15500	-68	-52	-36	-19	0	18	37	58
	15600 15700 15800 15900	-70 -72 -74 -76	-54 -55 -57 -59	-37 -38 -39 -40	-19 -20 -20 -21	0 0 0	19 19 20 20	39 40 41 42	59 61 63 65
	16000	- <b>79</b>	-60	-41	-21	0	21	43	67
6	16100 16200 16300 16400	-81 -83 -86 -88	-62 -64 -66 -68	-42 -43 -45 -46	-22 -22 -23 -24	0 0 0 0	22 22 23 24	45 46 48 50	69 71 74 77
	16500	- <b>91</b>	-70	-48	-25	0	25	52	80
	16600 16700 16800 16900	-95 -98 -102 -106	-73 -76 -79 -82	-50 -52 -54 -56	-26 -27 -28 -29	0 0 0 0	26 27 28 29	54 56 58 61	83 86 90 94
	17000	-110	-85	-58	-30	0	31	63	98
7	17100 17200 17300 17400	-115 -120 -125 -130	-88 -92 -96 -100	-60 -63 -66 -69	-31 -32 -34 -36	0 0 0 0	32 34 36 38	66 70 74 79	102 109 115 123
	17500	-136	-106	-73	-38	0	40	84	132
		7					8		

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
53	68	84	101	118	136	154	14000	
55 56 57 59	70 72 74 75	86 88 91 93	103 106 108 111	121 124 126 130	139 142 146 149	158 162 165 169	14100 14200 14300 14400	
60	77	95	114	133	153	174	14500	
62 64 65 67	79 81 84 86	97 100 103 105	116 119 122 126	136 140 143 147	157 161 165 169	178 182 187 192	14600 14700 14800 14900	6
69	88	108	129	151	173	196	15000	
71 73 75 77	90 93 95 98	111 114 117 120	132 136 140 143	155 159 163 167	178 182 187 192	202 207 213 219	15100 15200 15300 15400	
79	101	124	147	172	198	225	15500	
81 83 86 88	104 107 110 113	127 131 135 139	152 156 161 166	177 182 188 194	204 210 217 224	232 239 247 255	15600 15700 15800 15900	
91	117	144	172	201	232	264	16000	/
94 98 101 105	121 125 130 135	149 154 160 166	178 185 191 199	208 216 224 233	240 249 259 269	274 284 295 307	16100 16200 16300 16400	
109	140	173	207	242	280	320	16500	
114 118 123 128	146 152 158 165	179 187 195 204	215 224 234 246	252 263 276 292	292 306 322 341	334 351 371 394	16600 16700 16800 16900	8
134	173	215	261	310	363	421	17000	
141 150 160 171	183 195 208 224	229 244 261 284	277 296 321 356	330 355 389	389 422 480	454 504	17100 17200 17300 17400	9
185	247	325					17500	
				9				

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	DANCE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS											
LINE	-							-					
NO.	METERS	-400	-300	-200	-100	0	100	200	300				
7	17500	-136	-106	- <b>73</b>	-38	0	40	84	132				
'	17600	-144	-112	-78	-40	0	43	91	144				
8	17700 17800	-154 -163	-119 -127	-83 -89	-43 -47	0 0	47 53	101	168				
	*****	*****	*****	*****	*****	*****	*****	*****	*****				
9	17800	-358	-258	-165	- <b>79</b>	0	68						
	17700	-376	-273	-176	-85	0	77	143	194				
	17600	-392	-286	-185	-90	0	83	158	223				
	17500	-407	-298	-194	-94	0	88	170	244				
	17400 17300	-422 -437	-309 -320	-201 -209	-98 -102	0	93 97	179 188	260 273				
	17200	-451	-331	-216	-105	0	101	196	286				
	17100	-464	-341	-223	-109	0	104	203	298				
	17000	-477	-351	-230	-113	0	108	211	308				
	16900 16800	-490 -503	-361 -370	-236 -243	-116 -119	0	111 115	218 225	319 329				
	16700	-515	-380	-249	-122	0	118	231	340				
	16600	-528	-390	-255	-125	0	121	237	349				
	16500	-540	-399	-262	-129	0	124	244	359				
10	16400	-553	-408	-268	-132	0	127	250	368				
	16300 16200	-565 -577	-417 -426	$-274 \\ -280$	-135 -138	0 0	130 134	256 262	377 387				
	16100	-589	-435	-286	-141	0	136	269	396				
	16000	-602	-445	-292	-144	0	140	275	405				
	15900	-614	-454	-298	-147	0	142	281	414				
	15800 15700	-627 -639	-463 -473	-304 -311	-150 -153	0	146 148	287 293	423 432				
	15600	-651	-482	-317	-156	0	152	298	441				
	15500	-664	- <b>491</b>	-323	-159	0	155	305	450				
	15400	-677	-500	-329	-162	0	158	311	459				
	15300 15200	-689 -702	-510 -520	-335 -342	-165 -168	0	161 164	317 323	468 477				
	15100	-715	-529	-348	-172	Ŏ	167	329	486				
	15000	- <b>729</b>	-539	-354	-175	0	170	335	495				
				1	0								
					•								

CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
185	247	325					17500	
207	*****	*****	*****	*****	*****	*****	17600 17700 17800 ******	
277							17800 17700 17600	9
308	361	395					17500	
332 352 370 386	396 424 447 469	448 486 517 545	487 538 579 613	578 630 674	671 724	694 765	17400 17300 17200 17100	
401	488	569	644	711	771	820	17000	
415 429 443 456	507 524 542 558	592 614 635 655	672 698 723 747	745 776 806 834	811 848 882 915	869 912 952 989	16900 16800 16700 16600	
469	575	675	771	861	946	1025	16500	
482 494 506 519	591 606 622 637	695 713 732 750	793 816 838 859	887 913 938 963	976 1005 1034 1062	1059 1092 1124 1156	16400 16300 16200 16100	10
531	652	769	881	988	1090	1187	16000	IU
543 555 567 579	667 682 697 712	787 805 823 841	902 923 944 964	1012 1036 1060 1083	1117 1144 1171 1198	1217 1248 1278 1307	15900 15800 15700 15600	
591	727	858	985	1107	1224	1337	15500	
603 615 627 639	742 757 772 787	876 894 912 930	1006 1026 1047 1068	1131 1154 1178 1201	1251 1277 1304 1330	1366 1395 1424 1454	15400 15300 15200 15100	
651	802	948	1089	1225	1356	1483	15000	
				10				

## TABLE B

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPLEMENTARY RANGE LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
40	15000	-729	-539	-354	-175	0	170	335	495			
10	14900 14800 14700 14600	-742 -756 -770 -784	-549 -559 -569 -580	-361 -368 -374 -381	-178 -181 -185 -188	0 0 0	173 176 179 183	341 348 354 360	505 514 523 533			
	14500	-798	-590	-388	-191	0	186	367	542			
	14400 14300 14200 14100	-812 -827 -842 -858	-601 -612 -623 -634	-395 -402 -409 -416	-195 -198 -202 -205	0 0 0	189 193 196 200	373 380 387 394	552 562 572 582			
	14000	-873	-646	-424	-209	0	203	401	592			
	13900 13800 13700 13600	-889 -906 -923 -940	-657 -669 -682 -694	-432 -439 -448 -456	-213 -216 -220 -224	0 0 0	207 210 214 218	407 415 422 429	603 613 624 634			
	13500	-958	- <i>707</i>	-464	-228	0	222	437	645			
4 4	13400 13300 13200 13100	-977 -996 -1015 -1035	-720 -734 -748 -762	-472 -481 -490 -499	-232 -237 -241 -245	0 0 0	226 230 234 238	445 452 460 468	657 668 680 692			
	13000	-1056	-778	-509	-250	0	242	477	704			
	12900 12800 12700 12600	-1078 -1101 -1125 -1149	-793 -809 -826 -843	-519 -529 -540 -551	-255 -260 -265 -270	0 0 0	247 251 256 261	485 494 503 512	716 729 742 755			
	12500	-1174	-8 <b>61</b>	-562	-275	0	265	522	769			
	12400 12300 12200 12100	-1201 -1229 -1258 -1288	-880 -899 -919 -940	-573 -586 -599 -611	-281 -287 -293 -298	0 0 0	271 276 281 287	531 541 552 562	783 798 812 827			
	12000	-1321	-962	-625	-305	0	293	573	843			
	11900 11800 11700 11600	-1355	-986 -1010 -1035 -1062	-640 -654 -669 -685	-312 -319 -325 -333	0 0 0 0	299 305 311 318	585 596 608 621	859 876 893 911			
	11500			-702	-340	0	325	634	929			
					11							

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CHARGE 7R

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HEIGHT		ET ABOVE				RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
651	802	948	1089	1225	1356	1483	15000	
663 676 688 700	817 832 848 863	966 984 1002 1021	1110 1130 1152 1173	1249 1272 1296 1320	1383 1409 1436 1463	1512 1542 1571 1601	14900 14800 14700 14600	10
713	878	1039	1194	1345	1490	1630	14500	
726 739 752	894 910 926	1058 1076 1096	1216 1238 1260	1369 1394 1419	1517 1544 1572	1660 1690 1721	14400 14300 14200	
765	942	1115	1282	1444	1600	1751	14100	
778 792 806 820 834	959 976 993 1010 1027	1134 1154 1174 1194 1215	1304 1327 1350 1373 1397	1469 1494 1520 1546 1573	1628 1657 1685 1714 1743	1782 1813 1845 1877 1909	14000 13900 13800 13700 13600	
848	1045	1236	1420	1600	1773	1941	13500	
863 878 893 908	1063 1081 1100 1118	1257 1278 1300 1322	1445 1469 1494 1520	1627 1654 1682 1711	1803 1834 1865 1896	1974 2007 2041 2075	13400 13300 13200 13100	
924	1138	1345	1545	1740	1928	2110	13000	
940 957 974 991	1157 1177 1198 1219	1368 1391 1415 1439	1572 1598 1625 1653	1769 1799 1829 1860	1960 1993 2026 2060	2145 2181 2217 2254	12900 12800 12700 12600	11
1008	1240	1464	1681	1892	2095	2292	12500	
1026 1045 1064 1083	1262 1284 1307 1330	1490 1516 1542 1570	1710 1740 1770 1801	1924 1956 1990 2024	2130 2166 2203 2240	2330 2369 2409 2449	12400 12300 12200 12100	
1103	1355	1597	1832	2059	2278	2490	12000	
1124 1145 1167 1189	1380 1405 1431 1458	1626 1655 1685 1716	1864 1897 1931 1966	2095 2131 2168 2206	2317 2357 2397 2439	2532 2575 2619 2663	11900 11800 11700 11600	
1213	1485	1748	2001	2246	2482	2709	11500	
				11				

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CHARGE 7R

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIO	HT OF	TARGET	ABOVE G	UN - ME	TERS			
NO.	METERS	-400	-300	-200	-100	0	100	200	300		
	11500			-702	-340	0	325	634	929		
	11400 11300 11200 11100			-721 -740 -760	-349 -357 -366 -375	0 0 0 0	332 339 347 355	647 660 675 689	948 967 987 1008		
11	11000				-386	0	363	705	1029		
	10900 10800 10700 10600				-396	0 0 0 0	372 381 391 401	720 737 755 773	1051 1075 1099 1124		
	10500					0	411	792	1149		
	10400 10300				·		423	812	1176		
	11										

CHARGE 7R

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HE I GHT	OF TARG	ET ABOVE	GUN - N	METERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
1213	1485	1748	2001	2246	2482	2709	11500	
1236 1261 1286 1312	1514 1543 1573 1604	1780 1814 1848 1883	2038 2075 2113 2153	2286 2327 2369 2412	2525 2570 2615 2662	2756 2804 2853 2903	11400 11300 11200 11100	
1339	1635	1920	2193	2456	2710	2954	11000	11
1367 1395 1425 1456	1668 1702 1737 1773	1957 1995 2035 2076	2234 2277 2321 2366	2501 2548 2596 2645	2759 2809 2860 2913	3006 3060 3115 3171	10900 10800 10700 10600	
1488	1811	2118	2413	2696	2968	3229	10500	
1521	1849	2162 2207	2461 2511	2748 2801	3023 3081	3288 3349	10400 10300	
				11				-

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPONENTS OF A ONE KNOT WIND

	COMPONENTS OF A ONE KNOT WIND								
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND			
MIL	KNOT	KNOT		MIL	KNOT	KNOT			
0	0	H1.00		3200	0	T1.00			
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96			
400	R. 38	H. 92		3600	L.38	T.92			
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77			
800	R. 71	H. 71		4000	L.71	T. 71			
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47			
1200	R.92	H. 38		4400	L.92	T. 38			
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10			
1600	R1.00	0		4800	L1.00	0			
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29			
2000	R. 92	T. 38		5200	L.92	H. 38			
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63			
2400	R. 71	T. 71		5600	L.71	H. 71			
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88			
2800	R. 38	T.92		6000	L.38	H. 92			
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99			
3200	0	T1.00		6400	0	H1.00			

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 7R

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-											-0.4+ -1.9+
+200-	DT DD	-0.5+ -2.0+	-0.5+ -2.1+	-0.5+ -2.2+	-0.6+ -2.3+	-0.6+ -2.4+	-0.6+ -2.5+	-0.6+ -2.6+	-0.7+ -2.7+	-0.7+ -2.8+	-0.7+ -2.9+
+300-											-0.9+ -3.9+

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE	EFFECT	TEMPERATURE
OF	ON	OF
PROPELLANT	VELOCITY	PROPELLANT
DEGREES F	M/S	DEGREES C
-40	-19.7	-40.0
-30	-18.0	-34.4
-20	-16.3	-28.9
-10	-14.5	-23.3
0	-12.8	-17.8
10	-11.0	-12.2
20	-9.2	-6.7
30	-7.4	-1.1
40	-5.6	4.4
50	-3.8	10.0
60	-1.9	15.6
70	0.0	21.1
80	1.9	26.7
90	3.8	32.2
100	5.8	37.8
110	7.8	43.3
120	9.7	48.9
130	11.8	54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
N	1	2	3	4	5	6	7	8	9	
E         FUZE M582         HOB         M         MIL SEC         MIL MIL MIL           0         0.0         86         1         0.0         0.0         0.00           100         1.2         86         1         0.2         0.0         0.00           200         2.4         86         1         0.2         0.0         0.01           300         3.5         86         1         0.5         0.1         0.01           400         4.7         88         1         0.5         0.1         0.01           500         5.9         83         1         0.8         0.2         0.02           600         7.1         82         1         0.9         0.2         0.02           700         8.3         8         82         1         0.9         0.2         0.02           800         9.6         8         80         1         1.3         0.3         0.02           900         10.8         7         1         1.9         0.4         0.3         0.03           1100         12.1         7         1         1.9         0.4         0.3         0.03	Α	E L F	GRAZE	PER	PER	0	OF			
0         0.0         86         1         0.0         0.0         0.00           100         1.2         86         1         0.2         0.0         0.00           200         2.4         86         1         0.3         0.1         0.01           300         3.5         86         1         0.5         0.1         0.01           400         4.7         84         1         0.6         0.1         0.01           500         5.9         83         1         0.8         0.2         0.02           600         7.1         82         1         0.9         0.2         0.02           700         8.3         82         1         1.1         0.2         0.02           800         9.6         80         1         1.4         0.3         0.03           900         10.8         80         1         1.4         0.3         0.03           1000         12.1         79         1         1.6         0.3         0.03           1100         13.4         1.9         1.08         78         1         1.7         0.4         0.04           1200	G	v	FUZE	DEC			T E T GITT	( CORR	OF	
100	М	MIL			М	MIL	SEC	MIL	MIL	
200	0	0.0			86	1	0.0	0.0	0.00	
600         7.1         8.3         82         1         0.9         0.2         0.02           800         9.6         80         1         1.1         0.2         0.02           900         10.8         80         1         1.3         0.3         0.02           900         10.8         78         1         1.6         0.3         0.03           1000         12.1         79         1         1.6         0.3         0.03           1100         13.4         1.9         1.08         77         1         1.9         0.4         0.04           1200         14.7         1.9         1.08         77         1         1.9         0.4         0.04           1300         16.0         2.1         0.99         76         1         2.1         0.5         0.04           1500         18.6         2.4         0.85         75         1         2.4         0.5         0.05           1600         19.9         2.6         0.80         74         1         2.6         0.6         0.05           1700         21.3         2.8         0.75         73         1         2.8 <td>200 300</td> <td>2.4 3.5</td> <td></td> <td></td> <td>86 85</td> <td>1</td> <td>0.3 0.5</td> <td>0.1 0.1</td> <td>0.01 0.01</td>	200 300	2.4 3.5			86 85	1	0.3 0.5	0.1 0.1	0.01 0.01	
700         8.3         8.6         800         9.6         80         1         1.3         0.3         0.02           900         10.8         80         1         1.3         0.3         0.03           1000         12.1         79         1         1.6         0.3         0.03           1100         13.4         1.9         1.08         77         1         1.9         0.4         0.03           1200         14.7         1.9         1.08         77         1         1.9         0.4         0.04           1300         16.0         2.1         0.99         76         1         2.1         0.9         0.01         1.05         0.04           1400         17.3         2.2         0.92         76         1         2.2         0.5         0.04           1500         18.6         2.4         0.85         75         1         2.4         0.5         0.05           1600         19.9         2.6         0.80         74         1         2.6         0.6         0.05           1700         21.3         2.8         0.75         73         1         2.8         0.6 <td< td=""><td>500</td><td>5.9</td><td></td><td></td><td>83</td><td>1</td><td>0.8</td><td>0.2</td><td>0.02</td></td<>	500	5.9			83	1	0.8	0.2	0.02	
1100         13.4         1.9         1.08         78         1         1.7         0.4         0.03           1200         14.7         1.9         1.08         77         1         1.9         0.4         0.04           1300         16.0         2.1         0.99         76         1         2.1         0.5         0.04           1400         17.3         2.2         0.92         76         1         2.1         0.5         0.04           1500         18.6         2.4         0.85         75         1         2.4         0.5         0.05           1600         19.9         2.6         0.80         74         1         2.6         0.6         0.05           1700         21.3         2.8         0.75         73         1         2.8         0.6         0.05           1800         22.7         2.9         0.71         72         1         2.9         0.7         0.06           1900         24.1         3.1         0.67         72         1         3.1         0.7         0.06           2000         25.5         3.3         0.63         71         1         3.5	700 800	8.3 9.6			82 80	1 1	1.1 1.3	0.2 0.3	0.02 0.02	
1200         14.7         1.9         1.08         77         1         1.9         0.4         0.04           1300         16.0         2.1         0.99         76         1         2.1         0.5         0.04           1400         17.3         2.2         0.92         76         1         2.2         0.5         0.04           1500         18.6         2.4         0.85         75         1         2.4         0.5         0.05           1600         19.9         2.6         0.80         74         1         2.6         0.6         0.05           1700         21.3         2.8         0.75         73         1         2.8         0.6         0.05           1800         22.7         2.9         0.71         72         1         2.9         0.7         0.06           1900         24.1         3.1         0.67         72         1         3.1         0.7         0.06           2000         25.5         3.3         0.63         71         1         3.3         0.7         0.06           2100         26.9         3.5         0.60         70         1         3.5	1000	12.1			79	1	1.6	0.3	0.03	
1600         19.9         2.6         0.80         74         1         2.6         0.6         0.05           1700         21.3         2.8         0.75         73         1         2.8         0.6         0.05           1800         22.7         2.9         0.71         72         1         2.9         0.7         0.06           1900         24.1         3.1         0.67         72         1         3.1         0.7         0.06           2000         25.5         3.3         0.63         71         1         3.3         0.7         0.06           2100         26.9         3.5         0.60         70         1         3.5         0.8         0.07           2200         28.3         3.6         0.57         69         1         3.6         0.8         0.07           2300         29.8         3.8         0.55         69         1         3.8         0.9         0.07           2400         31.2         4.0         0.52         68         1         4.0         0.9         0.08           2500         32.7         4.2         0.50         67         1         4.2	1200 1300	14.7 16.0	2.1	0.99	77 76	1	1.9 2.1	0.4 0.5	0.04 0.04	
1900         24.1         3.1         0.67         72         1         3.1         0.7         0.06           2000         25.5         3.3         0.63         71         1         3.3         0.7         0.06           2100         26.9         3.5         0.60         70         1         3.5         0.8         0.07           2200         28.3         3.6         0.57         69         1         3.6         0.8         0.07           2300         29.8         3.8         0.55         69         1         3.6         0.8         0.07           2400         31.2         4.0         0.52         68         1         4.0         0.9         0.08           2500         32.7         4.2         0.50         67         1         4.2         1.0         0.08           2600         34.2         4.4         0.48         66         1         4.4         1.0         0.08           2800         37.2         4.7         0.44         65         1         4.7         1.1         0.09           2800         37.2         4.7         0.44         65         1         4.7	1500	18.6	2.4	0.85	75	1	2.4	0.5	0.05	
2100         26.9         3.5         0.60         70         1         3.5         0.8         0.07           2200         28.3         3.6         0.57         69         1         3.6         0.8         0.07           2300         29.8         3.8         0.55         69         1         3.8         0.9         0.07           2400         31.2         4.0         0.52         68         1         4.0         0.9         0.08           2500         32.7         4.2         0.50         67         1         4.2         1.0         0.08           2600         34.2         4.4         0.48         66         1         4.4         1.0         0.08           2700         35.7         4.6         0.46         66         1         4.6         1.0         0.09           2800         37.2         4.7         0.44         65         1         4.7         1.1         0.09           2900         38.8         4.9         0.43         64         1         4.9         1.1         0.09           3000         40.3         5.1         0.41         64         1         5.3	1700 1800	21.3 22.7	2.8 2.9	0.75 0.71	73 72	1 1	2.6 2.8 2.9 3.1	0.6 0.7	0.05 0.06	
2200         28.3         3.6         0.57         69         1         3.6         0.8         0.07           2300         29.8         3.8         0.55         69         1         3.8         0.9         0.07           2400         31.2         4.0         0.52         68         1         4.0         0.9         0.08           2500         32.7         4.2         0.50         67         1         4.2         1.0         0.08           2600         34.2         4.4         0.48         66         1         4.4         1.0         0.08           2700         35.7         4.6         0.46         66         1         4.6         1.0         0.09           2800         37.2         4.7         0.44         65         1         4.7         1.1         0.09           2900         38.8         4.9         0.43         64         1         5.1         0.09           3000         40.3         5.1         0.41         64         1         5.1         1.2         0.10           3100         41.9         5.3         0.40         63         1         5.5         1.3	2000	25.5	3.3	0.63	71	1	3.3	0.7	0.06	
2600     34.2     4.4     0.48     66     1     4.4     1.0     0.08       2700     35.7     4.6     0.46     66     1     4.6     1.0     0.09       2800     37.2     4.7     0.44     65     1     4.7     1.1     0.09       2900     38.8     4.9     0.43     64     1     4.9     1.1     0.09       3000     40.3     5.1     0.41     64     1     5.1     1.2     0.10       3100     41.9     5.3     0.40     63     1     5.3     1.2     0.10       3200     43.5     5.5     0.38     62     1     5.5     1.3     0.11       3300     45.1     5.7     0.37     61     1     5.7     1.3     0.11       3400     46.8     5.9     0.36     61     1     5.9     1.4     0.11	2200 2300	28.3	3.6 3.8	0.57 0.55	69 69	1 1	3.6 3.8	0.8 0.9	0.07 0.07	
2700         35.7         4.6         0.46         66         1         4.6         1.0         0.09           2800         37.2         4.7         0.44         65         1         4.7         1.1         0.09           2900         38.8         4.9         0.43         64         1         4.9         1.1         0.09           3000         40.3         5.1         0.41         64         1         5.1         1.2         0.10           3100         41.9         5.3         0.40         63         1         5.3         1.2         0.10           3200         43.5         5.5         0.38         62         1         5.5         1.3         0.11           3300         45.1         5.7         0.37         61         1         5.7         1.3         0.11           3400         46.8         5.9         0.36         61         1         5.9         1.4         0.11	2500	32.7	4.2	0.50	67	1	4.2	1.0	0.08	
3100     41.9     5.3     0.40     63     1     5.3     1.2     0.10       3200     43.5     5.5     0.38     62     1     5.5     1.3     0.11       3300     45.1     5.7     0.37     61     1     5.7     1.3     0.11       3400     46.8     5.9     0.36     61     1     5.9     1.4     0.11	2700 2800	35.7 37.2	4.6 4.7	0.46 0.44	66 65	1 1	4.6 4.7	1.0 1.1	0.09 0.09	
3200     43.5     5.5     0.38     62     1     5.5     1.3     0.11       3300     45.1     5.7     0.37     61     1     5.7     1.3     0.11       3400     46.8     5.9     0.36     61     1     5.9     1.4     0.11	3000	40.3	5.1	0.41	64	1	5.1	1.2	0.10	
3500 48.4 6.1 0.35 60 1 6.1 1.4 0.12	3200 3300	43.5 45.1	5.5 5.7	0.38 0.37	62 61	1	5.5 5.7	1.3 1.3	0.11 0.11	
	3500	48.4	6.1	0.35	60	1	6.1	1.4	0.12	

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 7R TABLE F

CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R	10	!!	12	-		TIONS F	-	17	10	19
A N G E	MUZ VELO 1		RANGE WIND 1 KNOT		A	AIR TEMP 1 PCT		R SITY CT	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	M	M	M	M	M	M	M	М	М
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.3 0.6 0.9 1.2	-0.3 -0.6 -0.9 -1.2	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.1	-1 -1 -2 -3	1 1 2 3
500	1.5	-1.5	0.0	0.0	0.0	0.0	-0.1	0.1	-3	3
600 700 800 900	1.8 2.1 2.4 2.7	-1.8 -2.0 -2.3 -2.6	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 -0.1 -0.1 -0.1	0.0 0.0 0.1 0.1	-0.1 -0.2 -0.3 -0.4	0.2 0.3 0.3 0.4	-4 -4 -5 -5	4 4 5 6
1000	3.0	-2.9	0.0	0.0	-0.1	0.1	-0.5	0.5	-6	6
1100 1200 1300 1400	3.3 3.6 3.9 4.1	-3.2 -3.4 -3.7 -4.0	0.1 0.1 0.1 0.1	-0.1 -0.1 -0.1 -0.1	-0.1 -0.2 -0.2 -0.2	0.1 0.1 0.2 0.2	-0.6 -0.7 -0.8 -0.9	0.6 0.7 0.8 0.9	-7 -7 -7 -8	7 7 8 8
1500	4.4	-4.2	0.1	-0.1	-0.3	0.2	-1.1	1.1	-8	9
1600 1700 1800 1900	4.7 5.0 5.2 5.5	-4.5 -4.8 -5.0 -5.3	0.1 0.1 0.2 0.2	-0.1 -0.1 -0.2 -0.2	-0.3 -0.3 -0.4 -0.4	0.3 0.3 0.3 0.4	-1.2 -1.4 -1.6 -1.7	1.2 1.4 1.6 1.8	-9 -9 -10 -10	9 9 10 10
2000	5.8	-5.5	0.2	-0.2	-0.5	0.4	-1.9	1.9	-10	11
2100 2200 2300 2400	6.0 6.3 6.5 6.8	-5.8 -6.0 -6.3 -6.5	0.2 0.2 0.3 0.3	-0.2 -0.2 -0.3 -0.3	-0.5 -0.6 -0.6 -0.7	0.5 0.5 0.6	-2.1 -2.3 -2.5 -2.8	2.1 2.4 2.6 2.8	-11 -11 -11 -12	11 11 12 12
2500	7.1	-6.8	0.3	-0.3	-0.7	0.6	-3.0	3.0	-12	12
2600 2700 2800 2900	7.3 7.6 7.8 8.0	-7.0 -7.3 -7.5 -7.8	0.3 0.4 0.4 0.4	-0.3 -0.4 -0.4 -0.4	-0.8 -0.8 -0.9 -1.0	0.7 0.7 0.8 0.9	-3.2 -3.5 -3.7 -4.0	3.3 3.5 3.8 4.1	-12 -13 -13 -13	13 13 13 14
3000	8.3	-8.0	0.5	-0.5	-1.0	0.9	-4.3	4.4	-13	14
3100 3200 3300 3400	8.5 8.8 9.0 9.2	-8.2 -8.5 -8.7 -8.9	0.5 0.5 0.6 0.6	-0.5 -0.5 -0.6 -0.6	-1.1 -1.2 -1.2 -1.3	1.0 1.0 1.1 1.2	-4.6 -4.8 -5.1 -5.5	4.7 5.0 5.3 5.6	-14 -14 -14 -14	14 14 14 15
3500	9.5	-9.1	0.7	-0.6	-1.4	1.2	-5.8	5.9	-14	15

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

				_		_		
1 R	2 E	3 FS FOR	4 DFS	5 DR	6 F	7 TIME	8	9 MUTH
A N	E L E V	GRAZE BURST	PER 10 M	PER 1 MIL	O R	OF FLIGHT		CTIONS
Ğ E	V	FUZE M582	DEC HOB	D ELEV	K		DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	48.4	6.1	0.35	60	1	6.1	1.4	0.12
3600 3700 3800 3900	50.1 51.8 53.5 55.2	6.3 6.5 6.7 6.9	0.34 0.33 0.32 0.31	59 59 58 57	1 1 1	6.3 6.5 6.7 6.9	1.5 1.5 1.6 1.6	0.12 0.12 0.13 0.13
4000	57.0	7.1	0.30	57	1	7.1	1.7	0.14
4100 4200 4300 4400	58.8 60.6 62.4 64.2	7.3 7.6 7.8 8.0	0.29 0.28 0.27 0.27	56 55 55 54	1 1 1	7.3 7.6 7.8 8.0	1.8 1.8 1.9 1.9	0.14 0.14 0.15 0.15
4500	66.1	8.2	0.26	53	1	8.2	2.0	0.16
4600 4700 4800 4900	68.0 69.9 71.8 73.7	8.4 8.6 8.9 9.1	0.25 0.25 0.24 0.24	53 52 52 51	1 1 1	8.4 8.6 8.9 9.1	2.0 2.1 2.2 2.2	0.16 0.16 0.17 0.17
5000	75.7	9.3	0.23	50	1	9.3	2.3	0.18
5100 5200 5300 5400	77.7 79.7 81.8 83.9	9.5 9.8 10.0 10.2	0.23 0.22 0.22 0.21	50 49 49 48	1 2 2 2	9.5 9.8 10.0 10.2	2.3 2.4 2.5 2.5	0.18 0.19 0.19 0.19
5500	85.9	10.5	0.21	47	2	10.5	2.6	0.20
5600 5700 5800 5900	88.1 90.2 92.4 94.6	10.7 11.0 11.2 11.5	0.20 0.20 0.19 0.19	47 46 46 45	2 2 2 2	10.7 11.0 11.2 11.5	2.7 2.7 2.8 2.9	0.20 0.21 0.21 0.22
6000	96.8	11.7	0.19	45	2	11.7	3.0	0.22
6100 6200 6300 6400	99.1 101.4 103.7 106.1	11.9 12.2 12.5 12.7	0.18 0.18 0.18 0.17	44 43 43 42	2 2 2 2	11.9 12.2 12.5 12.7	3.0 3.1 3.2 3.3	0.22 0.23 0.23 0.24
6500	108.4	13.0	0.17	42	2	13.0	3.3	0.24
6600 6700 6800 6900	110.8 113.3 115.8 118.3	13.2 13.5 13.8 14.0	0.17 0.16 0.16 0.16	41 41 40 40	2 2 2 2	13.2 13.5 13.8 14.0	3.4 3.5 3.6 3.6	0.25 0.25 0.26 0.26
7000	120.8	14.3	0.15	39	2	14.3	3.7	0.27

CHARGE 7R TABLE F

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RA WI 1 K		T	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	M	М	M	М	М	М	М	М	М
3500	9.5	-9.1	0.7	-0.6	-1.4	1.2	-5.8	5.9	-14	15
3600 3700 3800 3900	9.7 9.9 10.2 10.4	-9.4 -9.6 -9.8 -10.0	0.7 0.7 0.8 0.8	-0.7 -0.7 -0.7 -0.8	-1.5 -1.5 -1.6 -1.7	1.3 1.4 1.5 1.6	-6.1 -6.4 -6.8 -7.1	6.3 6.6 7.0 7.4	-14 -15 -15 -15	15 15 15 15
4000	10.6	-10.2	0.9	-0.8	-1.8	1.6	-7.5	7.7	-15	15
4100 4200 4300 4400	10.8 11.0 11.2 11.5	-10.4 -10.7 -10.9 -11.1	0.9 1.0 1.0 1.1	-0.9 -0.9 -1.0 -1.0	-1.9 -2.0 -2.1 -2.2	1.7 1.8 1.9 2.0	-7.8 -8.2 -8.6 -9.0	8.1 8.5 8.9 9.3	-15 -15 -15 -15	15 16 16 16
4500	11.7	-11.3	1.1	-1.1	-2.3	2.0	-9.4	9.7	-15	16
4600 4700 4800 4900	11.9 12.1 12.3 12.5	-11.5 -11.7 -11.9 -12.1	1.2 1.2 1.3 1.3	-1.1 -1.2 -1.2 -1.3	-2.4 -2.5 -2.6 -2.7	2.1 2.2 2.3 2.4	-9.8 -10.2 -10.6 -11.1	10.2 10.6 11.1 11.5	-15 -15 -15 -15	16 16 16 16
5000	12.7	-12.3	1.4	-1.3	-2.8	2.5	-11.5	12.0	-15	16
5100 5200 5300 5400	12.9 13.1 13.3 13.5	-12.5 -12.7 -12.9 -13.1	1.5 1.5 1.6 1.6	-1.4 -1.4 -1.5 -1.5	-2.9 -3.0 -3.1 -3.2	2.6 2.7 2.8 2.9	-12.0 -12.4 -12.9 -13.3	12.5 12.9 13.4 13.9	-15 -15 -15 -15	16 16 16 15
5500	13.7	-13.2	1.7	-1.6	-3.3	3.0	-13.8	14.4	-15	15
5600 5700 5800 5900	13.9 14.1 14.2 14.4	-13.4 -13.6 -13.8 -14.0	1.8 1.9 1.9 2.0	-1.7 -1.7 -1.8 -1.9	-3.4 -3.6 -3.7 -3.8	3.1 3.2 3.3 3.5	-14.3 -14.8 -15.3 -15.8	15.0 15.5 16.0 16.6	-14 -14 -14 -14	15 15 15 15
6000	14.6	-14.2	2.1	-1.9	-3.9	3.6	-16.3	17.1	-14	15
6100 6200 6300 6400	14.8 15.0 15.1 15.3	-14.3 -14.5 -14.7 -14.9	2.2 2.2 2.3 2.4	-2.0 -2.1 -2.1 -2.2	-4.0 -4.2 -4.3 -4.4	3.7 3.8 3.9 4.0	-16.8 -17.4 -17.9 -18.4	17.7 18.2 18.8 19.4	-14 -13 -13 -13	15 14 14 14
6500	15.5	-15.0	2.5	-2.3	-4.5	4.1	-19.0	20.0	-13	14
6600 6700 6800 6900	15.7 15.8 16.0 16.2	-15.2 -15.4 -15.6 -15.7	2.6 2.6 2.7 2.8	-2.4 -2.4 -2.5 -2.6	-4.7 -4.8 -4.9 -5.1	4.3 4.4 4.5 4.6	-19.5 -20.1 -20.7 -21.3	20.6 21.2 21.8 22.4	-12 -12 -12 -12	14 13 13 13
7000	16.4	-15.9	2.9	-2.7	-5.2	4.7	-21.8	23.0	-11	13

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
7000	120.8	14.3	0.15	39	2	14.3	3.7	0.27
7100 7200 7300 7400	123.4 126.0 128.6 131.3	14.6 14.9 15.1 15.4	0.15 0.15 0.15 0.14	39 38 38 37	2 2 2 2	14.6 14.9 15.1 15.4	3.8 3.9 4.0 4.1	0.27 0.28 0.28 0.29
7500	134.0	15.7	0.14	37	3	15.7	4.2	0.29
7600 7700 7800 7900	136.7 139.5 142.3 145.2	16.0 16.3 16.6 16.9	0.14 0.14 0.13 0.13	36 36 35 35	3 3 3 3	16.0 16.3 16.6 16.9	4.3 4.3 4.4 4.5	0.30 0.30 0.31 0.31
8000	148.1	17.2	0.13	34	3	17.2	4.6	0.32
8100 8200 8300 8400	151.0 154.0 157.0 160.1	17.5 17.8 18.1 18.4	0.13 0.12 0.12 0.12	34 33 33 33	3 3 3	17.5 17.8 18.1 18.4	4.7 4.8 4.9 5.0	0.32 0.33 0.33 0.34
8500	163.1	18.7	0.12	32	3	18.7	5.1	0.34
8600 8700 8800 8900	166.3 169.4 172.6 175.9	19.0 19.3 19.6 19.9	0.12 0.11 0.11 0.11	32 31 31 31	3 3 3	19.0 19.3 19.6 19.9	5.2 5.3 5.4 5.5	0.35 0.35 0.36 0.36
9000	179.2	20.3	0.11	30	4	20.3	5.7	0.37
9100 9200 9300 9400	182.5 185.9 189.3 192.7	20.6 20.9 21.2 21.6	0.11 0.11 0.10 0.10	30 30 29 29	4 4 4 4	20.6 20.9 21.2 21.6	5.8 5.9 6.0 6.1	0.37 0.38 0.38 0.39
9500	196.2	21.9	0.10	28	4	21.9	6.2	0.39
9600 9700 9800 9900	199.7 203.3 206.9 210.6	22.2 22.6 22.9 23.2	0.10 0.10 0.10 0.09	28 28 28 27	4 4 4 4	22.2 22.6 22.9 23.2	6.3 6.5 6.6 6.7	0.40 0.40 0.41 0.41
10000	214.3	23.6	0.09	27	4	23.6	6.8	0.42
10100 10200 10300 10400	218.0 221.8 225.6 229.5	23.9 24.3 24.6 25.0	0.09 0.09 0.09 0.09	27 26 26 26	4 4 5 5	23.9 24.3 24.6 25.0	7.0 7.1 7.2 7.3	0.42 0.43 0.43 0.44
10500	233.4	25.3	0.09	25	5	25.3	7.5	0.44

FT 155-AR-1 TABLE F CHARGE 7R

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 PCT 1 M/S 1 KNOT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC INC TAIL М M M M M M M M M М M 7000 16.4 -15.9 2.9 23.0 13 -2.7-5.24.7 -21.8 -11 16.5 16.7 23.6 24.2 24.9 -2.7 -2.8 -2.9-22.4 -23.0 -23.6 12 12 12 7100 3.0 -5.3 4.8 -16.0-11 3.1 3.2 3.3 -5.5 -5.6 5.0 5.1 5.2 -16.2 -16.4 7200 7300 -11 16.8 -10 -10 -3.0-5.8 $\frac{24.2}{24.2}$ 25.5 12 7400 17.0 -16.57500 17.2 -16.7 3.4 -3.1 -5.9 5.3 -24.9 26.1 -10 11 26.8 27.4 28.1 28.7 -16.8 -17.0 -17.2 -17.3 3.5 3.6 3.7 3.8 -3.2 -3.3 -3.4 -3.5 5.4 5.5 5.5 5.6 17.3 17.5 -25.5 7600 -9 -6.011 -26.1-9 7700 -6.211 -26.717.6 -6.3 -9 7800 10 17.8 -6.5 -27.4-8 10 7900 8000 17.9 -17.5 4.0 **-3.6** -6.6 5.7 **-28.0** 29.3 -8 10 8100 18.1 18.2 -17.6 -17.8 -17.9 4.1 4.2 -6.7 -6.9 29.9 30.6 -3.7 -3.8 5.7 5.8  $^{-28.6}_{-29.3}$ 9 -8 -7 8200 -7.0 -7.1 8300 18.4 4.3 -3.95.8 -30.031.2 8400 4.4 5.9 31.8 8 18.5 -30.6-6 8500 18.7 4.6 -7.2-31.3 -18.2 5.9 32.4 8 -4.1 -6 -7.3 -7.4 -7.5 -7.6 4.7 4.8 5.0 5.1 5.9 5.9 5.9 8600 18.8 -18.3 -31.9 33.0 33.6 34.2 7 -4.2-6 -5 -5 18.9 19.1 -18.5 -18.6 -4.3 -4.4 -4.5 -32.6 -33.2 7 7 8700 8800 34.8 8900 19.2 5.9 -33.9-5 6 -34.56 9000 19.3 -18.95.2 -4.6-7.75.8 35.4 -4 -7.7 -7.8 -7.8 -7.9 5.4 5.5 5.7 5.8 9100 19.5 -19.0 -4.7 5.8 -35.236.0 6 19.6 19.7 5.8 5.7 5.6 9200 -19.1 -4.9 -35.9 36.6 -3 -5.0 -5.1 -36.5-37.237.1 37.7 5 9300 -19.3 -3 -19.4 19.9 9400 -3 9500 20.0 -19.5 6.0 -5.2-7.9 5.6 -37.838.3 -2 4 -7.9 -7.9 -7.9 -7.9 20.1 20.2 6.1 6.3 5.5 5.4 9600 -19.7 -5.4 -38.538.9 4 -39.1-39.79700 -19.8 -5.5 39.4 -1 4 5.3 5.2 20.3 40.0 3 3 9800 -19.9 6.4 **-5.6** -1 6.6 -5.7 -40.440.5 -1 9900 20.5 -20.010000 20.6 -7.8 41.1 2 -20.26.8 -5.9 5.0 -41.00 20.7 20.8 20.9 6.9 7.1 7.3 7.4 -7.8 -7.7 -7.7 4.9 4.8 4.6 41.6 42.1 42.7 -41.6 10100 -20.3-**6.0** 2 1 -6.2 -6.3 10200 10300  $^{-20.4}_{-20.5}$ -42.3 -42.90

-7.6

-7.5

-6.4

-6.6

7.6

10400

10500

21.0

21.1

-20.6

-20.8

4.5

4.3

-43.5

-44.1

43.2

43.7

1

1

1

1

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	πГш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
10500	233.4	25.3	0.09	25	5	25.3	7.5	0.44
10600 10700 10800 10900	237.3 241.3 245.4 249.4	25.7 26.0 26.4 26.7	0.08 0.08 0.08 0.08	25 25 25 24	5 5 5 5	25.7 26.0 26.4 26.7	7.6 7.7 7.9 8.0	0.45 0.45 0.46 0.46
11000	253.6	27.1	0.08	24	5	27.1	8.1	0.47
11100 11200 11300 11400	257.7 261.9 266.2 270.5	27.5 27.8 28.2 28.6	0.08 0.08 0.08 0.08	24 24 23 23	5 5 5 5	27.5 27.8 28.2 28.6	8.3 8.4 8.6 8.7	0.47 0.48 0.48 0.49
11500	274.8	28.9	0.07	23	6	28.9	8.9	0.49
11600 11700 11800 11900	279.2 283.7 288.2 292.7	29.3 29.7 30.1 30.5	0.07 0.07 0.07 0.07	23 22 22 22	6 6 6	29.3 29.7 30.1 30.5	9.0 9.2 9.3 9.5	0.49 0.50 0.50 0.51
12000	297.3	30.8	0.07	22	6	30.8	9.6	0.51
12100 12200 12300 12400	301.9 306.6 311.3 316.1	31.2 31.6 32.0 32.4	0.07 0.07 0.07 0.07	21 21 21 21	6666	31.2 31.6 32.0 32.4	9.8 9.9 10.1 10.3	0.52 0.52 0.53 0.53
12500	320.9	32.8	0.07	21	7	32.8	10.4	0.53
12600 12700 12800 12900	325.8 330.7 335.7 340.7	33.2 33.6 34.0 34.4	0.07 0.06 0.06 0.06	20 20 20 20	7 7 7 7	33.2 33.6 34.0 34.4	10.6 10.8 11.0 11.1	0.54 0.54 0.55 0.55
13000	345.8	34.8	0.06	20	7	34.8	11.3	0.56
13100 13200 13300 13400	351.0 356.2 361.5 366.8	35.2 35.7 36.1 36.5	0.06 0.06 0.06 0.06	19 19 19 19	7 7 8 8	35.2 35.7 36.1 36.5	11.5 11.7 11.9 12.1	0.56 0.56 0.57 0.57
13500	372.2	36.9	0.06	18	8	36.9	12.3	0.58
13600 13700 13800 13900	377.6 383.1 388.7 394.4	37.4 37.8 38.2 38.7	0.06 0.06 0.06 0.06	18 18 18 18	8 8 8	37.4 37.8 38.2 38.7	12.5 12.7 12.9 13.1	0.58 0.59 0.59 0.59
14000	400.1	39.1	0.06	17	8	39.1	13.3	0.60

FT 155-AR-1 TABLE F CHARGE 7R

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC INC TAIL М M M M M M M M M М M 10500 21.1 7.6 -7.5 4.3 43.7 1 -20.86.6 44.1 1 21.3 21.4 21.5 -6.7 -6.9 -7.0 -7.2 -7.4 -7.3 -7.2 -7.1 4.2 4.0 3.8 3.6 7.8 10600 -44.7 44.3 -20.90 2 3 8.0 -45.3 -45.9 44.8 45.3 -21.0 -21.1 10700 0 10800 21.6 8.4 45.8 ž 10900 -21.2 46.5 -1 11000 21.7 -21.3 8.5 -7.3 3.4 -47.1 46.3 3 -1 -7.5 -7.6 -7.8 -7.9 3.2 3.0 2.8 2.5 11100 21.8 21.9 -21.4 -21.6 -21.7 8.7 46.8 47.3 47.8 -47.74 -6.88.9 4 -6.6 -6.5 -48.3 11200 -2 9.1 9.3 22.0 11300 -48.9 4  $-\overline{2}$  $-\overline{2}$ -6.349.5 11400 5 11500 22.2 -21.9 9.5 -8.1 -6.1 2.3 -**50.0** 48.8 -3 9.7 9.9 11600 11700 22.3 22.4 -22.0 -22.1 -8.3 -8.4 -5.9 -5.7 2.1 1.8 -50.6 -51.2 49.3 49.8 5 6 -3 11800 22.5 -22.2 10.1 -8.6 -5.5 1.6 -51.8 50.3 6 10.3 -8.7 1.3 50.8 6 -4 11900 12000 22.7 10.6 -5.0 -52.9 51.2 7 -22.4-8.9 1.0 -4 22.8 22.9 23.0 10.8 11.0 11.2 0.8 0.5 0.2 51.7 52.2 52.7 12100 -22.5 -9.1 -53.4 -4.8 7 7 7 12200 12300 -22.6 -22.7-9.2 -9.4 -9.6 -4.5 -4.3 -54.0 -54.5 11.4 12400 23.1 **-4.0** -0.1 -55.18 -5 12500 23.2 -9.8 -55.6 -22.911.6 -3.7-0.453.6 8 -6 23.3 23.4 23.5 23.6 -56.1 -56.7 -57.2 12600 -23.011.9 -9.9 -3.4 -0.754.1 8 -6 12.1 12.3 12.6 12700 -23.1-10.1 -3.1 **-1.0** 54.6 -6 -23.2 -23.3 $-2.8 \\ -2.5$ 55.0 55.5 -6 -7 12800 -10.39 -1.6 -57.712900 -10.513000 23.7 -23.412.8 -10.6 -2.2-1.9 -58.356.0 10 -7 -2.2 -2.5 -2.9 -3.2 23.8 23.9 13100 -23.513.0 -10.8 -1.8 -58.8 56.4 13200 -23.513.3 *-11.0* -1.5-59.3 56.9 10 -8 24.0 -59.8 57.4 13300 -23.6 13.5 -11.2 *-1.1* 11 -8 -23.7-60.3 57.8 13400 24.1 13.8 -11.4 **-0.8** 11 -8 13500 24.2 14.0 -23.8-11.5 -0.4-3.560.8 58.3 11 -8 -3.9 -4.2 -4.6 -4.9 24.3 24.4 24.5 14.3 14.5 14.8 -11.7 -11.9 -12.1  $0.0 \\ 0.3 \\ 0.7$ 58.8 59.2 59.7 12 12 12 -23.9 13600 -61.3 -9

-24.0 -24.1

-24.2

-24.3

-12.3

-12.5

1.1

1.6

-5.3

15.1

15.3

24.6

24.7

13700

13800

13900

14000

- Q -9

-9

-10

12

13

 $^{-61.8}_{-62.3}$ 

-62.8

-63.3

60.1

60.6

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

	2	,	4	E	c	7		9
R A	2 E L E V	FS FOR GRAZE	DFS PER	DR PER	6 F O	TIME OF		MUTH CTIONS
N G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
14000	400.1	39.1	0.06	17	8	39.1	13.3	0.60
14100 14200 14300 14400	405.9 411.7 417.6 423.7	39.6 40.0 40.5 40.9	0.05 0.05 0.05 0.05	17 17 17 17	9999	39.6 40.0 40.5 40.9	13.5 13.7 13.9 14.2	0.60 0.61 0.61 0.62
14500	429.7	41.4	0.05	16	9	41.4	14.4	0.62
14600 14700 14800 14900	435.9 442.2 448.5 455.0	41.9 42.4 42.8 43.3	0.05 0.05 0.05 0.05	16 16 16 15	9 10 10 10	41.9 42.4 42.8 43.3	14.6 14.9 15.1 15.4	0.62 0.63 0.63 0.64
15000	461.5	43.8	0.05	15	10	43.8	15.6	0.64
15100 15200 15300 15400	468.2 474.9 481.8 488.7	44.3 44.8 45.4 45.9	0.05 0.05 0.05 0.05	15 15 14 14	10 11 11 11	44.3 44.8 45.4 45.9	15.9 16.2 16.4 16.7	0.65 0.65 0.65 0.66
15500	495.8	46.4	0.05	14	11	46.4	17.0	0.66
15600 15700 15800 15900	503.0 510.4 517.9 525.6	46.9 47.5 48.0 48.6	0.05 0.05 0.05 0.05	14 13 13 13	12 12 12 12	46.9 47.5 48.0 48.6	17.3 17.6 17.9 18.2	0.67 0.67 0.68 0.68
16000	533.4	49.2	0.05	13	13	49.2	18.6	0.69
16100 16200 16300 16400	541.4 549.6 557.9 566.6	49.8 50.4 51.0 51.6	0.04 0.04 0.04 0.04	12 12 12 11	13 13 14 14	49.8 50.4 51.0 51.6	18.9 19.2 19.6 20.0	0.69 0.70 0.70 0.70
16500	575.4	52.2	0.04	11	15	52.2	20.4	0.71
16600 16700 16800 16900	584.6 594.1 603.9 614.2	52.9 53.6 54.3 55.0	0.04 0.04 0.04 0.04	11 10 10 10	15 16 17 18	52.9 53.6 54.3 55.0	20.8 21.2 21.7 22.2	0.71 0.72 0.73 0.73
17000	624.9	55.8	0.04	9	19	55.8	22.7	0.74
17100 17200 17300 17400	636.1 648.0 660.6 674.3	56.6 57.4 58.3 59.3	0.04 0.04 0.04 0.04	9 8 8 7	20 21 23 25	56.6 57.4 58.3 59.3	23.3 23.9 24.5 25.2	0.74 0.75 0.76 0.76
17500	689.4	60.3	0.04	6	28	60.3	26.1	0.77

FT 155-AR-1 TABLE F CHARGE 7R

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC TAIL INC M M M M M M M M M М M 14000 15.3 60.6 24.7 -24.3-12.51.6 -5.3 63.3 13 -10 2.0 2.4 2.8 -12.7 -12.9 -13.1 14100 24.8 15.6 -5.7 61.1 -24.4 -63.813 -10 24.9 25.0 -24.4 -24.5 -24.6 15.9 16.1 -64.3 -64.8 61.5 62.0 13 14 14200 14300 -10 -11 -**6.0** -6.43.3 6.8 65.314 14400 25.0 16.4 -13.362.5 -11 14500 25.1 -24.7 16.7 -13.5 3.7 -7.1 -65.7 63.0 14 -11 17.0 17.3 17.6 17.9 -24.8 -24.9 -25.0 -25.1 63.5 63.9 64.4 65.0 25.2 25.3 4.2 4.6 -7.5 -7.9 -66.2 -66.7 -67.2 15 15 14600 -13.7 -11 -13.9 14700 -12 5.1 5.6 -8.3 -8.6 14800 25.4 -14.1 15 -12 67.6 16 -12 14900 15000 25.6 -25.218.2 -14.5 6.1 -**9.0** -68.1 65.5 16 -13 -9.4 -9.8 15100 25.7 25.8 -25.2 -25.3 18.5 18.8 6.6 7.1 66.0 66.5 -68.6 -69.0 -13 -13 -14.7 -14.9 16 16 15200 15300 25.9 -25.4 19.1 -15.1 7.6 -10.1 69.5 67.1 17 -13 19.4 67.7 8.1 -70.0 17 -10.5-14 15500 26.0 19.8 8.6 -70.4 -25.6 -15.5 -10.9 68.3 17 -14 -25.7 -25.8 -25.9 20.1 20.4 20.8 9.1 9.6 10.1 -70.9 -71.4 -71.8 15600 26.1 26.2 26.3 -15.8 -11.3 18 -14 68.9 69.5 70.1 -16.0 -16.2 -11.6 -12.0 18 15700 -1515800 18 21.1 -72.3 70.8 15900 26.4 -16.410.7 -12.318 -15 11.2 21.5 71.5 -15 16000 26.5 -26.0-16.6-12.7-72.819 21.8 22.2 22.6 23.0 26.6 26.8 -73.2 -73.7 16100 -26.1 -16.9 11.7 -13.0 72.2 19 -16 72.9 73.7 74.6 16200 -26.2-17.1 12.2 -13.4 19 -16 26.9 27.0 -17.3 -17.5 12.8 13.2 -74.2 -74.6 20 20 16300 -26.3-26.4-16 16400 -14.016500 27.1 23.5 -17.8 13.7 -14.3 -75.1 75.5 21 -17 -26.521 22 22 22 27.3 27.4 27.5 14.2 14.6 76.5 77.5 78.5 -26.6 16600 24.1 -18.0 -14.6 -75.6 -17 16700 -26.7-18.2-14.8 -76.1 -18 -76.6 -77.0 16800 -**26.**8 -18.515.1 -15.1-18 -26.916900 27.6 -18.7 15.5 -15.3 79.5 -19 17000 27.8 15.9 -15.6 -77.5 23 -19 -27.1-18.9 80.9 28.0 28.2 28.4 16.2 16.5 -15.8 -15.9 -78.0 -78.6 -79.1 23 24 24 -27.2 -19.2 17100 -19 -19.4 -19.6 -27.3 -27.417200 17300  $-20 \\ -20$ 16.6 -16.125 17400 28.6 -27.6-19.9 -79.6 -2116.7 -16.2

17500

28.9

-27.7

-20.1

16.7

-16.2

-80.2

-21

26

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	ELE	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	V	FUZE M582	DEC HOB	D ELEV	K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
17500	689.4	60.3	0.04	6	28	60.3	26.1	0.77
17600 17700 17800	706.5 726.7 752.8	61.5 62.9 64.7	0.04 0.04 0.04	5 4 ******	33 41	61.5 62.9 64.7	27.0 28.2 29.8	0.78 0.79 0.80
17800 17700 17600	870.6 894.6 912.4	72.4 74.0 75.1	0.03 0.03 0.03	5 6	41 32	72.4 74.0 75.1	38.5 40.6 42.2	0.95 0.96 0.98
17500	927.3	76.0	0.03	7	27	76.0	43.7	0.99
17400 17300 17200 17100	940.3 952.1 962.9 972.9	76.8 77.5 78.1 78.7	0.03 0.03 0.03 0.03	8 9 10 10	24 22 20 19	76.8 77.5 78.1 78.7	45.0 46.3 47.5 48.6	1.00 1.02 1.03 1.04
17000	982.2	79.2	0.03	11	17	79.2	49.7	1.06
16900 16800 16700 16600	991.1 999.5 1007.5 1015.1	79.7 80.2 80.6 81.1	0.03 0.03 0.03 0.03	12 12 13 13	16 16 15 14	79.7 80.2 80.6 81.1	50.8 51.9 52.9 54.0	1.07 1.08 1.09 1.10
16500	1022.5	81.5	0.03	14	14	81.5	55.0	1.11
16400 16300 16200 16100	1029.6 1036.4 1043.0 1049.5	81.8 82.2 82.6 82.9	0.03 0.03 0.03 0.03	14 15 15 16	13 13 12 12	81.8 82.2 82.6 82.9	56.0 57.0 58.1 59.1	1.13 1.14 1.15 1.16
16000	1055.7	83.2	0.03	16	11	83.2	60.1	1.17
15900 15800 15700 15600	1061.8 1067.7 1073.4 1079.0	83.6 83.9 84.2 84.4	0.03 0.03 0.03 0.03	17 17 18 18	11 11 10 10	83.6 83.9 84.2 84.4	61.1 62.1 63.1 64.1	1.19 1.20 1.21 1.22
15500	1084.5	84.7	0.03	18	10	84.7	65.2	1.23
15400 15300 15200 15100	1089.9 1095.1 1100.3 1105.3	85.0 85.3 85.5 85.8	0.03 0.03 0.03 0.03	19 19 20 20	თ თ თ თ	85.0 85.3 85.5 85.8	66.2 67.2 68.3 69.3	1.25 1.26 1.27 1.28
15000	1110.3	86.0	0.03	20	8	86.0	70.4	1.30

FT 155-AR-1 TABLE F CHARGE 7R

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT PCT (4 SQ STD) DEC INC HEAD DEC INC DEC INC DEC INC TAIL M M M M M M M M M М M 17500 28.9 -27.7 -20.1 16.7 -80.2 26 21 -16.2 26 27 28 17600 29.3 -**27.**8 -20.416.5 -16.3 -80.8-22 -22 -23 -16.5 -16.6 -28.1-28.3 $-20.6 \\ -20.9$ 17700 16.2 -81.4 17800 -82.0-30.2 -30.2-24.9 -24.9 -24.8 -13.4 -12.9 -12.6 28 29 29 -95.5-95.2-26 -26 17800 15.2 17700 14.5 -26 17600 29.4 -30.2-94.9 17500 29.6 30 -26 -30.1-24.713.6 -12.217400 -30.0 30 29.8 -24.6 12.5 -11.9 -94.2 -26 29.9 29.9 29.9 -29.9 -29.8 -29.8 -24.6 -24.5 -24.4 17300 11.6 -11.6 -93.8 30 -26 -93.417200 17100 30 30 11.1 10.6 -11.3 -11.1 -26  $-\frac{56}{6}$ 17000 29.9 -**29.6** 10.3 -10.9 **-92.6** 30 -26 -24.384.2 -92.2 -26 16900 29.8 -29.5 -24.2 9.9 -10.7 85.2 30 -29.429.8 29.7 -10.5-91.7 30 -26 16800 -24.1 9.6 85.6 -29.3-29.29.3 -91.3 85.7 85.7 -24.0 30 -26 -10.316700 29.6 25.4 -23.99.0 -90.830 16600 -10.1-26 25.7 -26 16500 29.5 -29.1-23.88.8 -9.9-90.385.6 30 -23.7 -23.6 -9.8 -9.6 -9.5 16400 16300 29.4 29.3 -28.9 -28.8 -28.7 25.8 25.8 25.7 8.5 8.3 85.5 85.3 30 30 - 80 Q -26 -89.4 -26 16200 29.2 -23.58.1 88.9 85.1 30 -26 16100 29.1 25.7 7.8 -9.3-88.5 84.8 **-26** 16000 25.7 7.6 **-9.2** 30 -26 29.0 -28.4 -23.3 -88.0 84.5 25.7 7.5 7.3 7.1 7.0 -9.1 15900 28.8 -28.2-23.2 87.5 84.2 30 -26 -28.1 -27.925.6 25.6 -23.1 -23.0 83.8 83.5 30 30 -8.9 -8.8 -87.0 -86.5 15800 28.7 -26 28.6 25.5 15600 28.4 -27.8-22.9-8.7-86.083.1 30 -26 30 15500 28.3 25.5 6.8 -8.*6* -85.4 82.7 -26 -27.6 -22.715400 28.2 -27.5 25.4 -22.6 6.7 -8.4 84.9 82.3 30 -26 28.0 27.9 -27.3 -27.1-22.5 -22.3-8.3 -8.2 15300 25.4 6.5 84.4 81.9 30 -26 25.3 25.3 30 30 -83.9 15200 6.4 81.5 -26 27.7 -**27.0** -22.2 6.2 -25 15100 -8.*1* -83.4 81.1

15000

27.6

**-26.8** 

25.2

-22.1

6.1

-8.0

-82.8

80.6

-25

30

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	πГш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	FOR	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAIT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
15000	1110.3	86.0	0.03	20	8	86.0	70.4	1.30
14900 14800 14700 14600	1115.1 1119.9 1124.6 1129.2	86.2 86.5 86.7 86.9	0.03 0.03 0.03 0.03	21 21 22 22	8888	86.2 86.5 86.7 86.9	71.5 72.6 73.7 74.8	1.31 1.32 1.34 1.35
14500	1133.7	87.1	0.03	22	8	87.1	76.0	1.36
14400 14300 14200 14100	1138.1 1142.5 1146.8 1151.0	87.3 87.6 87.8 88.0	0.03 0.03 0.03 0.03	23 23 23 24	7 7 7 7	87.3 87.6 87.8 88.0	77.1 78.3 79.5 80.7	1.38 1.39 1.41 1.42
14000	1155.2	88.2	0.03	24	7	88.2	81.9	1.44
13900 13800 13700 13600	1159.3 1163.3 1167.3 1171.2	88.3 88.5 88.7 88.9	0.03 0.03 0.03 0.03	25 25 25 26	7 6 6 6	88.3 88.5 88.7 88.9	83.2 84.5 85.8 87.1	1.45 1.47 1.48 1.50
13500	1175.1	89.1	0.03	26	6	89.1	88.5	1.52
13400 13300 13200 13100	1178.9 1182.6 1186.3 1190.0	89.2 89.4 89.6 89.7	0.03 0.03 0.03 0.03	26 27 27 28	6665	89.2 89.4 89.6 89.7	89.9 91.3 92.8 94.3	1.53 1.55 1.57 1.59
13000	1193.6	89.9	0.03	28	5	89.9	95.9	1.61
12900 12800 12700 12600	1197.1 1200.6 1204.1 1207.5	90.1 90.2 90.4 90.5	0.03 0.03 0.03 0.03	28 29 29 30	5555	90.1 90.2 90.4 90.5	97.5 99.2 100.9 102.6	1.63 1.65 1.67 1.69
12500	1210.8	90.7	0.03	30	5	90.7	104.5	1.71
12400 12300 12200 12100	1214.1 1217.4 1220.6 1223.7	90.8 91.0 91.1 91.3	0.03 0.03 0.03 0.03	31 31 31 32	5 5 4 4	90.8 91.0 91.1 91.3	106.4 108.3 110.3 112.4	1.74 1.76 1.79 1.81
12000	1226.8	91.4	0.03	32	4	91.4	114.6	1.84
11900 11800 11700 11600	1229.9 1232.9 1235.9 1238.8	91.6 91.7 91.9 92.0	0.03 0.03 0.03 0.03	33 33 34 34	4	91.6 91.7 91.9 92.0	116.9 119.3 121.8 124.3	1.87 1.90 1.93 1.96
11500	1241.7	92.2	0.03	35		92.2	127.0	1.99

FT 155-AR-1 TABLE F CHARGE 7R

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CORRECTION FACTORS 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC INC TAIL М M M M M M M M M М M 15000 27.6 25.2 80.6 30 -25 **-26.8** -22.1 6.1 -8.0 82.8 25.1 25.1 25.0 -7.9 -7.8 -7.7 -7.6 27.4 27.2 27.1 -82.3 -81.7 -81.2 -25 -25 -25 14900 6.0 -26.6-21.9 80.2 30 -21.7 -21.6 30 30 -26.5-26.35.9 5.7 79.8 79.3 14800 14700 24.9 5.6 78.8 30 14600 26.9 -26.1 80.6 26 14500 26.8 -25.9 24.9 -21.2 5.5 -7.5 -80.1 78.4 30 -26 -25.8 -25.6 -25.4 -25.2 5.4 5.3 5.2 5.1 -7.4 -7.3 -7.3 -7.2 77.9 77.4 76.9 76.5 24.8 24.7 30 30 -26 14400 26.6 -21.1 -79.5 26.4 -20.9-79.0 14300 -26 -78.4 -77.8 26.3 26.1 14200 24.6 -20.730 -26 24.6 -20.5-2614100 30 14000 25.9 -25.024.5 -20.35.0 -7.1 -77.3 76.0 -26 24.4 24.3 13900 25.7 25.5 4.9 4.8 -7.0 -6.9 30 30 -24.9 -24.7  $^{-20.1}_{-19.8}$ -76.7 -76.1 75.5 75.0 -26 -26 13800 13700 25.4 -24.5 24.2 -19.6 4.7 -6.9 -75.5 74.5 30 -26 -19.4 4.6 73.9 -26 13600 6.8 13500 25.0 24.1 -19.1 **-6.7** -74.3 30 -24.14.6 73.4 -26 -73.7 -73.1 -72.5 -71.9 4.5 4.4 4.3 4.2 24.0 23.9 23.8 30 31 31 13400 -23.9-18.8 72.9 -27 24.8 -6.6 -23.7 -23.524.6 24.4 72.4 71.9 71.3 13300 -18.6 -18.3 -6.6 -6.5 23.7 13100 24.2 -18.0 -6.431 -27 13000 24.0 -23.123.6 -17.74.2 -6.4-71.370.8 31 -27 23.8 23.6 23.4 23.2 23.5 23.3 23.2 23.1 31 32 32 32 70.2 69.7 12900 -22.9-17.34.1 -6.3 -70.7 -27 12800 -22.7-17.04.0 -6.2-70.1 -28 -22.5-22.369.1 68.6 -28 -28 12700 4.0 -6.2-69.4 3.9 -68.8 12600 -6.1 12500 23.0 -22.123.0 3.8 -68.1 68.0 32 -29 -6.122.9 22.7 3.8 3.7 33 33 12400 22.8 -21.9 -6.0 67.5 67.5 -29 -21.7 -21.5 12300 22.6 -**6.0** -66.8 66.9 -29 22.6 33 12200 22.3 3.6 -5.9 -66.166.3 -30-21.3 -5.9 34 12100 22.1 22.5 3.6 -65.465.7 -30 12000 21.9 22.3 34 -31 -21.03.5 -5.864.7 65.1 3.5 3.4 3.4 3.4 64.5 63.9 63.3 62.7 21.7 21.4 21.2 22.2 22.0 21.9 -5.8 -5.8 -5.8 35 35 36 11900 -**20.8 -64.0** -31 11800 11700  $^{-20.6}_{-20.3}$ -32 -32

21.0

20.7

11600 11500 -20.1

-19.9

21.7

21.5

-33

-33

36

37

62.1

-5.7

-5.7

3.4

CHARGE 7R

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	
R A	ЕL	FS FOR GRAZE	DFS PER	DR PER	F O	TIME OF		IMUTH ECTIONS	
N G E	E V	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT	
М	MIL			М	MIL	SEC	MIL	MIL	
11500	1241.7	92.2	0.03	35		92.2	127.0	1.99	
11400 11300 11200 11100	1244.5 1247.3 1250.1 1252.8	92.3 92.4 92.6 92.7	0.03 0.03 0.03 0.03	36 36 37 37		92.3 92.4 92.6 92.7	129.9 132.8 135.9 139.2	2.03 2.06 2.10 2.14	
11000	1255.4	92.9	0.03	38		92.9	142.6	2.18	
10900 10800 10700 10600	1258.0 1260.6 1263.1 1265.5	93.0 93.2 93.3 93.5	0.03 0.03 0.03 0.03	39 40 40 41		93.0 93.2 93.3 93.5	146.2 149.9 153.8 158.0	2.23	
10500	1267.9	93.6	0.03			93.6	162.3		
10412	1270.0								

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 7R TABLE F

CORRECTION FACTORS

, .	<del></del>	<b>V</b> / ( )								
1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE DCITY M/S	WI	NGE ND NOT	AIR TEMP 1 PCT		DENS	AIR DENSITY 1 PCT		WT SQ STD)
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	М	M	M	М	М	М	М	М	M
11500	20.7	-19.9	21.5		3.4	-5.7		62.1	37	-33
11400 11300 11200 11100	20.5 20.3 20.0 19.8	-19.6 -19.4 -19.1 -18.9	21.4 21.2 21.0 20.8		3.3 3.3 3.3 3.3	-5.7 -5.7 -5.8 -5.8		61.5 60.9 60.2 59.6	38 38 39 40	-34 -35 -36 -36
11000	19.5	-18.6	20.6		3.3	-5.8		58.9	40	-37
10900 10800 10700 10600	19.2 18.9 18.7 18.4	-18.4 -18.1 -17.8 -17.5	20.4 20.1 19.9 19.6		3.3 3.3 3.3 3.3	-5.9 -5.9 -5.9 -5.9		58.2 57.5 56.8 56.1	41 42 43 44	-38 -39 -40 -41
10500	18.1		19.4		3.4	-5.9		55.4	45	-42

CHARGE 7R

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R	E		PROB	ABLE	ERRO	RS	ANGLE	COT	TML	МО		SITE
A N G	L E V			F	UZE M	582	OF FALL	ANGLE OF FALL	VEL		ANGLE	OR OF SITE ∣-1 MIL
E	V	R	D	НВ	ТВ	RB		FALL			SITE	SITE
М	MIL	М	М	М	SEC	М	MIL		M/S	M	MIL	MIL
0	0.0	16	0				0		659	0	0.000	0.00
1000 2000 3000 4000	12.1 25.5 40.3 57.0	16 16 16 17	0 1 1 2	1 1 2	0.04 0.04 0.04	23 22 21	13 28 48 71	79.5 35.8 21.4 14.3	611 566 523 482	3 13 32 62	0.000 0.000 0.001 0.002	0.00 0.00 -0.001 -0.001
5000	75.7	18	2	2	0.04	20	99	10.2	443	106	0.003	-0.001
6000 7000 8000 9000	96.8 120.8 148.1 179.2	20 22 24 27	3 3 4 4	3 3 4 5	0.04 0.04 0.04 0.04	20 20 20 21	134 177 229 288	7.5 5.7 4.4 3.4	408 375 348 330	167 251 362 508	0.004 0.007 0.010 0.015	-0.003
10000	214.3	29	5	7	0.04	22	352	2.8	318	694	0.022	-0.011
11000 12000 13000 14000	253.6 297.3 345.8 400.1	31 33 35 37	5 6 7 7	8 10 12 15		23 24 25 26	421 491 563 637	2.3 1.9 1.6 1.4	311 308 307 308	926 1212 1558 1977	0.033 0.049 0.075 0.115	-0.019 -0.031 -0.051 -0.081
15000	461.5	39	8	18	0.06	27	713	1.2	311	2486	0.183	-0.131
16000 17000	533.4 624.9	40 42	9	22 27	0.07	29 31	793 884	1.0	315 321	3124 3990	0.789	-0.433
17000 16000	982.2 1055.7	48 46	14 14	55 62	0.13	37 36	1175 1229	0.4 0.4	339 341	7629 8335	-1.893 -1.420	******* 1.56 1.33
15000	1110.3	43	14	66	0.15	35	1269	0.3	342	8826	-1.266	1.22
14000 13000 12000 11000	1155.2 1193.6 1226.8 1255.4	41 38 34	13 13 12 12	70 74 77 80	0.16 0.17 0.18 0.18	33 31 28 26	1302 1333 1361 1389	0.3 0.3 0.2 0.2	343 344 344 344	9202 9500 9739 9929	-1.183 -1.130 -1.091 -1.062	1.15 1.11 1.08 1.05

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H CHARGE 7R ROTATION - RANGE

## CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

			A	ZIMUTH (	OF TARG	ET - MI	LS		
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600
1000 2000 3000 4000	0 0 0 0	-2+ -3+ -5+ -6+	-4+ -6+ -9+ -11+	-5+ -9+ -13+ -16+	-7+ -12+ -17+ -20+	-8+ -14+ -19+ -24+	-8+ -16+ -22+ -26+	-9+ -17+ -23+ -28+	-9+ -17+ -23+ -29+
5000	0	-6+	-13+	-18+	-23+	-27+	-30+	-32+	-33+
6000 7000 8000 9000	0 0 0 0	-7+ -7+ -8+ -8+	-14+ -15+ -15+ -16+	-20+ -21+ -22+ -23+	-25+ -27+ -28+ -29+	-30+ -32+ -33+ -34+	-33+ -35+ -36+ -38+	-35+ -37+ -39+ -40+	-36+ -38+ -39+ -41+
10000	0	-8+	-16+	-23+	-30+	-35+	-39+	-41+	-42+
11000 12000 13000 14000	0 0 0	-8+ -9+ -9+ -9+	-17+ -17+ -18+ -18+	-24+ -25+ -26+ -27+	-31+ -32+ -33+ -34+	-36+ -37+ -39+ -40+	-40+ -41+ -43+ -44+	-42+ -44+ -46+ -47+	- 43+ - 45+ - 46+ - 48+
15000	0	-10+	-19+	-27+	-35+	-41+	-46+	-49+	-49+
16000 17000	0	-10+ -10+	- 19+ - 19+	-28+ -27+	-36+ -35+	-42+ -41+	-47+ -46+	-49+ -48+	-50+ -49+
*****	****	******	*****	*****	*****	*****	*****	*****	******
17000 16000	0	-2+ +1-	-4+ +1-	-6+ +2-	-8+ +3-	-9+ +3-	-10+ +4-	-11+ +4-	-11+ +4-
15000	0	+3-	+6-	+9-	+12-	+14-	+15-	+16-	+16-
14000 13000 12000 11000	0 0 0 0	+5 <sup>-</sup> +8 <sup>-</sup> +11 <sup>-</sup> +14 <sup>-</sup>	+11- +16- +21- +28-	+16- +23- +30- +41-	+20- +29- +39- +52-	+23 <sup>-</sup> +34 <sup>-</sup> +46 <sup>-</sup> +61 <sup>-</sup>	+26 <sup>-</sup> +37 <sup>-</sup> +51 <sup>-</sup> +68 <sup>-</sup>	+28 <sup>-</sup> +40 <sup>-</sup> +54 <sup>-</sup> +72 <sup>-</sup>	+28- +41- +55- +73-
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800
			A	ZIMUTH	OF TARG	ET - MI	LS		

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70
MULTIPLY BY	.98	.94	. 87	.77	. 64	. 50	. 34

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 0 DEGREES LATITUDE

		AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8000	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R	
9000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
10000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
11000	R0.1L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.1R	
12000	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R	
13000	R0.3L	R0.2L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.2R	L0.3R	
14000	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R	
15000	R0.4L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.4R	
16000	R0.6L	R0.5L	R0.4L	R0.2L	0.0	L0.2R	L0.4R	L0.5R	L0.6R	
17000	R0.8L	R0.8L	R0.6L	R0.3L	0.0	L0.3R	L0.6R	L0.8R	L0.8R	
*****	*****	*****	*****	*****	*****	*****	******	******	*****	
17000	R2.4L	R2.2L	R1.7L	R0.9L	0.0	L0.9R	L1.7R	L2.2R	L2.4R	
16000	R3.0L	R2.8L	R2.1L	R1.1L	0.0	L1.1R	L2.1R	L2.8R	L3.0R	
15000	R3.5L	R3.2L	R2.5L	R1.3L	0.0	L1.3R	L2.5R	L3.2R	L3.5R	
14000	R4.0L	R3.7L	R2.8L	R1.5L	0.0	L1.5R	L2.8R	L3.7R	L4.0R	
13000	R4.5L	R4.1L	R3.2L	R1.7L	0.0	L1.7R	L3.2R	L4.1R	L4.5R	
12000	R5.0L	R4.6L	R3.5L	R1.9L	0.0	L1.9R	L3.5R	L4.6R	L5.0R	
11000	R5.4L	R5.0L	R3.8L	R2.1L	0.0	L2.1R	L3.8R	L5.0R	L5.4R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZI	MUTH OF	TARGET	Γ - MILS	i			

## 0 DEGREES LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7R

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 10 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
ME TERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
5000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
6000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	
7000	L0.1R	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
8000	L0.1R	L0.1R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	
9000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	
10000	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	
11000	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	
12000	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.4R	L0.5R	L0.5R	L0.5R	
13000	L0.1R	L0.2R	L0.2R	L0.3R	L0.4R	L0.5R	L0.6R	L0.6R	L0.6R	
14000	L0.1R	L0.1R	L0.2R	L0.3R	L0.4R	L0.6R	L0.7R	L0.7R	L0.8R	
15000	L0.1R	L0.1R	L0.2R	L0.3R	L0.5R	L0.7R	L0.8R	L0.9R	L0.9R	
16000	0.0	0.0	L0.1R	L0.3R	L0.5R	L0.8R	L1.0R	L1.1R	L1.1R	
17000	R0.2L	R0.1L	L0.1R	L0.3R	L0.6R	L0.9R	L1.2R	L1.4R	L1.4R	
*****	*****	*****	*****	*****	*****	******	******	******	*****	
17000	R1.5L	R1.3L	R0.8L	0.0	L0.9R	L1.8R	L2.6R	L3.1R	L3.3R	
16000	R2.0L	R1.8L	R1.2L	R0.2L	L0.9R	L2.1R	L3.0R	L3.7R	L3.9R	
15000	R2.5L	R2.2L	R1.5L	R0.4L	L1.0R	L2.3R	L3.4R	L4.2R	L4.4R	
14000	R3.0L	R2.7L	R1.8L	R0.5L	L1.0R	L2.5R	L3.8R	L4.6R	L4.9R	
13000	R3.4L	R3.1L	R2.1L	R0.7L	L1.0R	L2.7R	L4.1R	L5.1R	L5.4R	
12000	R3.9L	R3.5L	R2.5L	R0.9L	L1.0R	L2.9R	L4.4R	L5.5R	L5.9R	
11000	R4.3L	R3.9L	R2.8L	R1.0L	L1.0R	L3.0R	L4.7R	L5.9R	L6.3R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZ I	MUTH OF	TARGET	- MILS	i			

## 10 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

#### 20 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
4000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
5000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
6000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
7000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R
8000	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
9000	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
10000	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R
11000	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R
12000	L0.5R	L0.5R	L0.5R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.9R
13000	L0.5R	L0.5R	L0.6R	L0.7R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R
14000	L0.5R	L0.6R	L0.6R	L0.7R	L0.9R	L1.0R	L1.1R	L1.1R	L1.2R
15000	L0.5R	L0.6R	L0.7R	L0.8R	L1.0R	L1.1R	L1.2R	L1.3R	L1.4R
16000	L0.5R	L0.6R	L0.7R	L0.9R	L1.1R	L1.3R	L1.5R	L1.6R	L1.6R
17000	L0.5R	L0.5R	L0.7R	L0.9R	L1.2R	L1.5R	L1.8R	L1.9R	L2.0R
*****	*****	*****	*****	*****	*****	******	******	******	*****
17000	R0.5L	R0.3L	L0.1R	L0.9R	L1.8R	L2.6R	L3.4R	L3.9R	L4.0R
16000	R1.0L	R0.8L	R0.1L	L0.8R	L1.8R	L2.9R	L3.8R	L4.4R	L4.7R
15000	R1.4L	R1.1L	R0.4L	L0.6R	L1.9R	L3.2R	L4.2R	L4.9R	L5.2R
14000	R1.8L	R1.5L	R0.7L	L0.5R	L1.9R	L3.4R	L4.6R	L5.4R	L5.7R
13000	R2.3L	R1.9L	R1.0L	L0.3R	L2.0R	L3.6R	L4.9R	L5.8R	L6.2R
12000	R2.7L	R2.3L	R1.3L	L0.2R	L2.0R	L3.7R	L5.3R	L6.3R	L6.6R
11000	R3.1L	R2.7L	R1.6L	0.0	L2.0R	L3.9R	L5.5R	L6.6R	L7.0R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

## 20 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7R ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 30 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
6000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
7000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
8000	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
9000	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
10000	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R
11000	L0.7R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R
12000	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.1R	L1.1R	L1.1R	L1.2R
13000	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.2R	L1.3R	L1.3R	L1.3R
14000	L1.0R	L1.0R	L1.0R	L1.1R	L1.3R	L1.4R	L1.5R	L1.5R	L1.5R
15000	L1.0R	L1.1R	L1.1R	L1.3R	L1.4R	L1.5R	L1.7R	L1.8R	L1.8R
16000	L1.1R	L1.1R	L1.2R	L1.4R	L1.6R	L1.8R	L1.9R	L2.0R	L2.1R
17000	L1.1R	L1.1R	L1.3R	L1.5R	L1.8R	L2.1R	L2.3R	L2.4R	L2.5R
*****	******	*****	*****	*****	*****	******	******	******	*****
17000	L0.5R	L0.6R	L1.1R	L1.8R	L2.6R	L3.4R	L4.1R	L4.5R	L4.7R
16000	L0.1R	L0.3R	L0.9R	L1.7R	L2.7R	L3.7R	L4.5R	L5.1R	L5.3R
15000	R0.3L	0.0	L0.6R	L1.6R	L2.8R	L3.9R	L4.9R	L5.6R	L5.8R
14000	R0.6L	R0.4L	L0.4R	L1.5R	L2.8R	L4.2R	L5.3R	L6.0R	L6.3R
13000	R1.0L	R0.7L	L0.1R	L1.4R	L2.9R	L4.3R	L5.6R	L6.4R	L6.7R
12000	R1.4L	R1.1L	R0.2L	L1.2R	L2.9R	L4.5R	L5.9R	L6.8R	L7.2R
11000	R1.8L	R1.5L	R0.4L	L1.1R	L2.9R	L4.6R	L6.2R	L7.2R	L7.5R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	;		

## 30 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

#### 40 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
6000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
7000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
8000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R
9000	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
10000	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R
11000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R
12000	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R
13000	L1.2R	L1.3R	L1.3R	L1.4R	L1.4R	L1.5R	L1.6R	L1.6R	L1.6R
14000	L1.4R	L1.4R	L1.4R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R
15000	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L2.0R	L2.1R	L2.1R
16000	L1.6R	L1.6R	L1.7R	L1.9R	L2.0R	L2.2R	L2.3R	L2.4R	L2.5R
17000	L1.7R	L1.7R	L1.9R	L2.1R	L2.3R	L2.5R	L2.8R	L2.9R	L2.9R
*****	******	*****	*****	*****	******	******	******	******	*****
17000	L1.4R	L1.6R	L2.0R	L2.6R	L3.3R	L4.0R	L4.6R	L5.0R	L5.2R
16000	L1.2R	L1.3R	L1.8R	L2.6R	L3.5R	L4.3R	L5.1R	L5.6R	L5.8R
15000	L0.9R	L1.1R	L1.7R	L2.5R	L3.6R	L4.6R	L5.5R	L6.1R	L6.3R
14000	L0.6R	L0.8R	L1.5R	L2.5R	L3.6R	L4.8R	L5.8R	L6.5R	L6.7R
13000	L0.2R	L0.5R	L1.2R	L2.4R	L3.7R	L5.0R	L6.1R	L6.8R	L7.1R
12000	R0.1L	L0.2R	L1.0R	L2.2R	L3.7R	L5.1R	L6.4R	L7.2R	L7.5R
11000	R0.5L	R0.1L	L0.7R	L2.1R	L3.7R	L5.2R	L6.6R	L7.5R	L7.8R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

## 40 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7R ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

#### 50 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS	1		
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
5000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
6000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
7000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R
8000	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
9000	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R
10000	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
11000	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R
12000	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R	L1.6R
13000	L1.5R	L1.6R	L1.6R	L1.6R	L1.7R	L1.8R	L1.8R	L1.9R	L1.9R
14000	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L2.0R	L2.1R	L2.1R	L2.1R
15000	L1.9R	L1.9R	L2.0R	L2.0R	L2.1R	L2.3R	L2.3R	L2.4R	L2.4R
16000	L2.0R	L2.1R	L2.2R	L2.3R	L2.4R	L2.6R	L2.7R	L2.8R	L2.8R
17000	L2.2R	L2.3R	L2.4R	L2.6R	L2.8R	L3.0R	L3.1R	L3.2R	L3.3R
*****	******	*****	*****	*****	*****	*****	*****	*****	*****
17000	L2.4R	L2.5R	L2.8R	L3.3R	L3.9R	L4.5R	L5.0R	L5.4R	L5.5R
16000	L2.2R	L2.4R	L2.8R	L3.4R	L4.1R	L4.9R	L5.5R	L5.9R	L6.1R
15000	L2.0R	L2.2R	L2.7R	L3.4R	L4.3R	L5.1R	L5.9R	L6.3R	L6.5R
14000	L1.8R	L2.0R	L2.5R	L3.3R	L4.3R	L5.3R	L6.2R	L6.7R	L6.9R
13000	L1.5R	L1.7R	L2.3R	L3.3R	L4.4R	L5.5R	L6.4R	L7.0R	L7.3R
12000	L1.2R	L1.4R	L2.1R	L3.2R	L4.4R	L5.6R	L6.6R	L7.3R	L7.6R
11000	L0.9R	L1.2R	L1.9R	L3.0R	L4.4R	L5.7R	L6.8R	L7.6R	L7.8R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	i		

## 50 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

#### 60 DEGREES NORTH LATITUDE

			AZ I	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
5000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
6000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
7000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R
8000	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R
9000	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
10000	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R
11000	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
12000	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R
13000	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.0R	L2.0R	L2.1R
14000	L2.0R	L2.0R	L2.0R	L2.1R	L2.2R	L2.2R	L2.3R	L2.3R	L2.3R
15000	L2.2R	L2.2R	L2.3R	L2.3R	L2.4R	L2.5R	L2.6R	L2.6R	L2.6R
16000	L2.4R	L2.5R	L2.5R	L2.6R	L2.7R	L2.8R	L2.9R	L3.0R	L3.0R
17000	L2.7R	L2.7R	L2.8R	L3.0R	L3.1R	L3.3R	L3.4R	L3.5R	L3.5R
*****	******	*****	*****	*****	*****	*****	******	*****	*****
17000	L3.2R	L3.3R	L3.6R	L4.0R	L4.5R	L4.9R	L5.3R	L5.6R	L5.7R
16000	L3.2R	L3.3R	L3.6R	L4.1R	L4.7R	L5.2R	L5.7R	L6.1R	L6.2R
15000	L3.1R	L3.2R	L3.6R	L4.1R	L4.8R	L5.5R	L6.1R	L6.4R	L6.6R
14000	L2.9R	L3.0R	L3.5R	L4.1R	L4.9R	L5.7R	L6.3R	L6.7R	L6.9R
13000	L2.7R	L2.9R	L3.4R	L4.1R	L4.9R	L5.8R	L6.5R	L7.0R	L7.2R
12000	L2.5R	L2.7R	L3.2R	L4.0R	L5.0R	L5.9R	L6.7R	L7.3R	L7.4R
11000	L2.2R	L2.5R	L3.0R	L3.9R	L4.9R	L6.0R	L6.8R	L7.4R	L7.6R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	· - MILS	i		

## 60 DEGREES SOUTH LATITUDE

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 7R ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 70 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
5000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
6000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
7000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
8000	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R
9000	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.3R
10000	L1.4R	L1.4R	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R
11000	L1.6R	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R
12000	L1.8R	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R	L1.9R	L1.9R
13000	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.1R	L2.2R	L2.2R	L2.2R
14000	L2.2R	L2.2R	L2.3R	L2.3R	L2.3R	L2.4R	L2.4R	L2.5R	L2.5R
15000	L2.5R	L2.5R	L2.5R	L2.6R	L2.6R	L2.7R	L2.7R	L2.8R	L2.8R
16000	L2.8R	L2.8R	L2.8R	L2.9R	L3.0R	L3.0R	L3.1R	L3.1R	L3.2R
17000	L3.1R	L3.1R	L3.2R	L3.3R	L3.4R	L3.5R	L3.6R	L3.6R	L3.7R
*****	*****	*****	*****	*****	*****	*****	******	******	*****
17000	L4.0R	L4.1R	L4.3R	L4.5R	L4.8R	L5.2R	L5.4R	L5.6R	L5.7R
16000	L4.0R	L4.1R	L4.3R	L4.7R	L5.1R	L5.5R	L5.8R	L6.0R	L6.1R
15000	L4.0R	L4.1R	L4.4R	L4.8R	L5.2R	L5.7R	L6.1R	L6.3R	L6.4R
14000	L3.9R	L4.1R	L4.3R	L4.8R	L5.3R	L5.8R	L6.3R	L6.6R	L6.7R
13000	L3.8R	L4.0R	L4.3R	L4.8R	L5.4R	L6.0R	L6.5R	L6.8R	L6.9R
12000	L3.7R	L3.8R	L4.2R	L4.7R	L5.4R	L6.0R	L6.6R	L7.0R	L7.1R
11000	L3.5R	L3.7R	L4.1R	L4.7R	L5.4R	L6.1R	L6.7R	L7.1R	L7.2R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	i		

## 70 DEGREES SOUTH LATITUDE

CHARGE TABLE J
7R
FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS		FUZE CORRECTIONS FOR								
	MUZZ VELOC 1 M/	I TY	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
0										
1 2 3 4	003 004 006	0.003 0.004 0.006	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.001 0.001	0.000 001 001	0.006 0.009 0.012	006 009 012
5	007	0.007	0.000	0.000	0.000	0.000	0.002	002	0.014	014
6 7 8 9	009 010 011 012	0.009 0.010 0.011 0.012	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001	001 001 001 001	0.003 0.004 0.005 0.006	003 004 005 006	0.016 0.018 0.020 0.021	016 018 020 022
10	014	0.014	0.000	0.000	0.002	002	0.007	007	0.022	023
11 12 13 14	015 016 017 018	0.015 0.016 0.017 0.018	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.002 0.002 0.003 0.003	002 002 003 003	0.009 0.010 0.012 0.013	008 010 011 013	0.024 0.025 0.025 0.026	024 025 026 027
15	020	0.019	001	0.001	0.004	004	0.015	015	0.027	028
16 17 18 19	021 022 023 024	0.021 0.022 0.023 0.024	001 001 001 001	0.001 0.001 0.001 0.001	0.004 0.005 0.006 0.008	005 006 007 009	0.017 0.020 0.022 0.025	017 020 022 025	0.027 0.027 0.026 0.025	028 028 028 027
20	025	0.025	001	0.001	0.009	010	0.028	028	0.024	027
21 22 23 24	026 027 029 030	0.026 0.027 0.028 0.029	001 001 001 001	0.001 0.001 0.001 0.001	0.011 0.013 0.014 0.016	011 012 014 015	0.031 0.035 0.038 0.041	031 034 037 040	0.024 0.022 0.021 0.020	026 025 024 023
25	031	0.030	<i>001</i>	0.001	0.017	015	0.045	043	0.019	022
26 27 28 29	032 033 033 034	0.031 0.032 0.033 0.034	001 001 001 001	0.001 0.001 0.001 0.001	0.018 0.020 0.021 0.022	016 017 018 018	0.048 0.051 0.054 0.058	045 048 051 054	0.018 0.017 0.015 0.014	021 020 019 018
30	035	0.035	001	0.001	0.023	018	0.061	057	0.013	017
31 32 33 34	036 037 038 039	0.036 0.037 0.038 0.039	001 001 002 002	0.002 0.002 0.002 0.002	0.024 0.024 0.025 0.025	019 019 019 019	0.064 0.067 0.070 0.073	059 062 064 067	0.012 0.011 0.010 0.009	016 015 014 013
35	040	0.040	002	0.002	0.026	019	0.076	069	0.008	012

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

## TABLE J CHARGE 7R

FUZE CORRECTION FACTORS

1	2	3	4	5	6	7	8	9	10	11
FS		FUZE CORRECTIONS FOR								
	MUZZLE VELOCITY 1 M/S		W	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		IR SITY PCT	PROJ OF 1 (4 SQ	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	040	0.040	002	0.002	0.026	<i>019</i>	0.076	069	0.008	012
36 37 38 39	041 042 042 043	0.041 0.041 0.042 0.043	002 002 003 003	0.003 0.003 0.003 0.003	0.026 0.027 0.027 0.027	019 018 018 017	0.079 0.082 0.085 0.088	072 074 076 079	0.007 0.006 0.006 0.005	011 010 009 009
40	044	0.044	003	0.004	0.027	017	0.091	081	0.004	008
41 42 43 44	045 046 047 047	0.045 0.046 0.046 0.047	003 004 004 004	0.004 0.004 0.005 0.005	0.027 0.027 0.027 0.026	016 016 015 014	0.094 0.096 0.099 0.102	083 085 088 090	0.003 0.003 0.002 0.001	008 007 007 006
45	048	0.048	004	0.005	0.026	013	0.104	092	0.001	006
46 47 48 49	049 050 051 052	0.049 0.050 0.051 0.052	005 005 005 006	0.006 0.006 0.006 0.007	0.025 0.025 0.024 0.024	013 012 011 010	0.107 0.109 0.111 0.114	094 096 098 100	0.000 0.000 001 002	005 005 004 004
50	053	0.052	006	0.007	0.023	<i>009</i>	0.116	102	002	003
51 52 53 54	053 054 055 056	0.053 0.054 0.055 0.056	006 007 007 008	0.007 0.008 0.008 0.009	0.023 0.022 0.021 0.020	008 007 006 005	0.118 0.121 0.123 0.125	104 106 108 110	002 002 002 003	003 003 003 003
55	057	0.057	008	0.009	0.020	004	0.127	112	003	003
56 57 58 59	057 058 059 060	0.057 0.058 0.059 0.060	008 009 009 009	0.009 0.010 0.010 0.011	0.019 0.018 0.017 0.016	004 003 002 001	0.129 0.132 0.134 0.136		003 003 003 003	003 002 002 003
60	061	0.061	010	0.011	0.015	0.000	0.138	121	003	003
61 62 63 64	062 063 064 064	0.062 0.063 0.064 0.064	010 011 011 012	0.012 0.012 0.012 0.013	0.014 0.013 0.013 0.012	0.001 0.001 0.002 0.003	0.140 0.142 0.144 0.146	123 125 127 129	003 003 002 002	003 003 004 004
65	065	0.065	012	0.013	0.011	0.003	0.148	131	002	005
66 67 68 69	066 067 068 069	0.066 0.067 0.068 0.069	012 013 013 014	0.014 0.014 0.015 0.015	0.010 0.009 0.009 0.008	0.004 0.004 0.005 0.005	0.150 0.152 0.154 0.156	133 135 137 139	001 001 0. 000 0. 001	005 006 006 007
70	070	0.070	014	0.015	0.007	0.005	0.158	<i>141</i>	0.002	007

CHARGE TABLE J FT 155-AR-1
7R FUZE CORRECTION FACTORS PROJ, HE, M795
FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11
FS				FUZ	E CORRE	CTIONS	FOR			
	MUZZLE VELOCITY 1 M/S		RANGE WIND 1 KNOT		AIR TEMP 1 PCT		DEN:	IR SITY PCT	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
70	070	0.070	014	0.015	0.007	0.005	0.158	141	0.002	007
71 72 73 74	072 074	0.071 0.072 0.074 0.076	015 015	0.016 0.016 0.015 0.015	0.006	0.005 0.003 0.001 0.000	0.161 0.163 0.165 0.168	148 152	0.003 0.004 0.004 0.003	008 009 010 009
75	077	0.077	015	0.015	0.009	002	0.173	159	0.003	009
76 77 78 79	080 081	0.079 0.080 0.082 0.083	015 015	0.015 0.015 0.015 0.016	0.012 0.014 0.016 0.018	003 004 005 006	0.178 0.182 0.186 0.189	169	0.003 0.003 0.003 0.003	009 009 010 011
80	084	0.084	015	0.016	0.019	007	0.193	175	0.004	012
81 82 83 84	087 088	0.086 0.087 0.089 0.090	015 015	0.016 0.016 0.016 0.016	0.020 0.022 0.023 0.024	007 008 009 010	0.196 0.199 0.202 0.205	184	0.005 0.006 0.007 0.009	013 014 015 017
85	<b>091</b>	0.091	015	0.016	0.025	011	0.208	190	0.010	019
86 87 88 89	094 096	0.093 0.094 0.096 0.097	016 016	0.016 0.016 0.017 0.018	0.026 0.028 0.029 0.030	012 012 013 014			0.012 0.015 0.018 0.022	021 023 027 031
90	099	0.099	017	0.019	0.031	014	0.223	203	0.028	036
91 92 93	102	0.100 0.102 0.106	018 020 023	0.023	0.031 0.032 0.034	015 016 018	0.226 0.230	205 208 212	0.036 0.048 0.073	043 055 071

FT 155-AR-1 TABLE K CHARGE PART 1 7R

FOR FUZE, MTSQ, M564

PROJ, HE, M795 FUZE SETTING FUZE, MTSQ, M582

CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582

FUZE S	ETTING	
FUZE	M582	CORRECTIONS
FROM	TO	]
1.9	5.7	0.0
5.8	11.2	0.1
11.3	16.6	0.2
16.7	21.9	0.3
22.0	27.5	0.4
27.6	32.8	0.5
32.9	38.2	0.6
38.3	43.3	0.7
43.4	48.6	0.8
48.7	54.3	0.9
54.4	59.3	1.0
59.4	64.7	1.1
64.8	76.0	1.3
76.1	81.5	1.4
81.6	86.7	1.5
86.8	92.2	1.6
92.3	93.6	1.7

## FT 155-AR-1 PART 1

Part 1

Charge 8S

Projectile, HE, M795

Fuze, PD, M739A1

Muzzle Velocity – 791 M/S

Propelling Charge M203A1 - Base Section 8

## FT 155-AR-1 PART 1

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

TABLE A LINE NUMBER CHARGE 8 S

#### LINE NUMBER OF METEOROLOGICAL MESSAGE

QUADRANT ELEVATION MILS	LINE NUMBER
0.0- 61.4	0
61.5- 122.1 122.2- 188.7 188.8- 255.1 255.2- 312.5	1 2 3 4
312.6- 389.2	5
389.3- 480.7 480.8- 564.8 564.9- 644.2 644.3- 758.1	6 7 8 9
758.2- 906.8	10
906.9- 1061.9 1062.0- 1250.0	11 12

NOTE - WHEN THE PROJECTILE MUST HIT THE TARGET ON THE ASCENDING BRANCH OF ITS TRAJECTORY, USE HEIGHT OF TARGET IN METERS TO ENTER THE TABLE ON PAGE XL TO DETERMINE LINE NUMBER.

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS								
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	0					0			
	100 200 300 400					0 0 0 0	0 0 0	0 0 1 1	0 0 2 2
	500					0	0	1	2
	600 700 800 900					0 0 0 0	0 0 0 0	1 1 1 1	3333
	1000					0	0	1	3
	1100 1200 1300 1400					0 0 0 0	0 0 0	1 1 1 1	3 3 3 3
	1500					0	0	1	3
0	1600 1700 1800 1900					0 0 0	0000	1 1 1 1	ა თ თ თ
	2000					0	0	1	3
	2100 2200 2300 2400					0 0 0 0	0000	1 1 1 1	3 2 2 2
	2500					0	0	1	2
	2600 2700 2800 2900					0 0 0 0	0 0 -1 -1	0 0 0 0	2 2 2 2
	3000					0	-1	0	2
	3100 3200 3300 3400				1	0 0 0 0	-1 -1 -1 -1	0 0 0 0	1 1 1
	3500				1	0	-1	0	1
			1						

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 88

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

HEIGHT OF TARGET ABOVE GUN - METERS								LINE
400	500	600	700	800	900	1000	METERS	NO.
0	0						100	•
1 4 5	0 2 5 7	3 7 9	4 8 11	5 10 13	6 12 16	13 18	200 300 400	
5	7	9	12	14	17	20	500	
5 5 6 6	8 8 9 8	10 11 12 12	13 14 15 15	16 18 19 19	19 21 23 23	23 25 27 27	600 700 800 900	
6	9	12	16	20	24	28	1000	
6 6 6	9999	12 12 12 12	16 16 16 16	20 20 20 20	24 25 25 25 25	29 30 30 30	1100 1200 1300 1400	
6	8	12	16	20	25	30	1500	
5 5 5 5	8 8 8	12 12 12 12	16 16 16 15	20 20 20 20	25 25 25 25 25	30 30 30 30	1600 1700 1800 1900	3
5	8	12	15	20	25	30	2000	
5 5 4	8 8 7 7	11 11 11 11	15 15 15 15	20 19 19 19	25 24 24 24	30 30 30 29	2100 2200 2300 2400	
4	7	10	14	19	24	29	2500	
4 4 4 4	7 7 7 6	10 10 10 9	14 14 14 13	18 18 18 18	23 23 23 22	29 28 28 28	2600 2700 2800 2900	
3	6	9	13	17	22	27	3000	
3 3 3	6 6 5 5	9 9 8 8	13 12 12 12	17 17 16 16	22 22 21 21	27 27 26 26	3100 3200 3300 3400	
3	5	8	11	16	20	25	3500	
		2				3		

# TABLE B COMPLEMENTARY RANGE LINE NUMBER

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS								
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	3500				1	0	-1	0	1
	3600 3700 3800 3900				1 1 1 1	0 0 0 0	-1 -1 -1 -1	-1 -1 -1 -1	1 0 0
	4000				1	0	-1	-1	0
	4100 4200 4300 4400				1 1 1 1	0 0 0 0	-1 -1 -2 -2	-1 -1 -1 -2	0 0 -1 -1
	4500				1	0	-2	-2	-1
	4600 4700 4800 4900			3 3 3	1 1 1	0 0 0 0	-2 -2 -2 -2	-2 -2 -2 -2	-1 -1 -2 -2
	5000			3	1	0	-2	-2	-2
0	5100 5200 5300 5400			3 4 4 4	1 1 1	0 0 0	-2 -2 -2 -2	-3 -3 -3	-2 -2 -3 -3
	5500		8	4	1	0	-3	-3	-3
	5600 5700 5800 5900		88 8 8	4 4 4 4	1 1 1	0 0 0 0	-3 -3 -3	-3 -3 -4 -4	-3 -3 -4 -4
	6000		8	4	1	0	-3	-4	-4
	6100 6200 6300 6400	13 13 13	8 8 8	4 4 4 4	1 1 1 1	0 0 0 0	-3 -3 -3 -3	-4 -4 -4 -4	-4 -5 -5 -5
	6500	14	8	4	1	0	-3	-5	-5
	6600 6700 6800 6900	14 14 14 14	8 9 9 9 9	4 4 5	1 1 1	0 0 0	-4 -4 -4	-5 -5 -5	-5 -6 -6
	7000	14	9	5	1	0	-4	-5	-6
		0					1		2

FT 155-AR-1 TABLE B
PART 1
PROJ, HE, M795
FUZE, PD, M739 A1
COMPLEMENTARY RANGE
LINE NUMBER

CHARGE 88

## CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

HEIGHT OF TARGET ABOVE GUN - METERS								LINE
400	500	600	700	800	900	1000	METERS	NO.
3	5	8	11	16	20	25	3500	
2 2 2 2	5 4 4 4	8 7 7 7	11 11 10 10	15 15 14 14	20 19 19 18	25 24 24 23	3600 3700 3800 3900	
1	4	6	10	14	18	23	4000	
1 1 1	3 3 3 2	6 6 5 5	9 9 8 8	13 13 12 12	17 17 16 16	22 22 21 21	4100 4200 4300 4400	
0	2	5	8	11	15	20	4500	
0 0 0 -1	2 2 1 1	4 4 4 3	7 7 6 6	11 10 10 9	15 14 14 13	20 19 18 18	4600 4700 4800 4900	
-1	1	3	5	9	13	17	5000	
-1 -1 -2 -2	0 0 0 -1	2 2 2 1	5 5 4 4	8 8 7 7	12 12 11 10	17 16 15 15	5100 5200 5300 5400	3
-2	-1	1	3	6	10	14	5500	
-3 -3 -3 -3	-1 -2 -2 -2	0 0 0 -1	3 2 2 1	6554	9 9 8 7	13 13 12 11	5600 5700 5800 5900	
-4	-3	-1	1	3	7	10	6000	
-4 -4 -5 -5	-3 -4 -4 -4	-2 -2 -3 -3	0 0 -1 -1	3 2 2 1	6 5 4	10 9 8 8	6100 6200 6300 6400	
-5	-5	-4	-2	1	3	7	6500	
-6 -6 -6 -6	-5 -5 -6 -6	-4 -4 -5 -5	-2 -3 -3 -4	0 -1 -1 -2	3 2 1 1	6 5 5 4	6600 6700 6800 6900	
-7	-7	-6	-4	-2	0	3	7000	
		2				3		

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI				UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	7000	14	9	5	1	0	-4	-5	-6
	7100 7200 7300 7400	14 15 15 15	9 9 9 10	5555 5	1 1 1 1	0 0 0 0	-4 -4 -4 -4	-6 -6 -6	-7 -7 -7 -7
	7500	15	10	5	1	0	-4	-6	-8
0	7600 7700 7800 7900	15 15 16 16	10 10 10 10	5556	1 1 1 2	0 0 0 0	-4 -4 -5 -5	-6 -7 -7 -7	-8 -8 -8 -8
	8000	16	11	6	2	0	-5	- <i>7</i>	-9
	8100 8200 8300 8400	16 17 17 17	11 11 11 11	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2 2 2 2	0 0 0 0	-5 -5 -5 -5	-7 -7 -8 -8	-9 -9 -9 -10
	8500	17	12	6	2	0	-5	-8	-10
	8600 8700 8800 8900	18 18 18 18	12 12 12 12	7 7 7 7	2 2 2 2	0 0 0	-5 -5 -5 -6	-8 -8 -9	-10 -10 -11 -11
	9000	19	13	7	2	0	-6	-9	-11
	9100 9200 9300 9400	19 19 20 20	13 13 13 13	7 7 8 8	2 2 2 3	0 0 0 0	-6 -6 -6	-9 -9 -9	-11 -12 -12 -12
1	9500	20	14	8	3	0	-6	-9	-12
•	9600 9700 9800 9900	20 21 21 21	14 14 14 14	8888	3 3 3 3	0 0 0	-6 -6 -6	-10 -10 -10 -10	-12 -13 -13 -13
	10000	21	15	8	3	0	-6	-10	-13
	10100 10200 10300 10400	22 22 22 22 22	15 15 15 15	8999	3 3 3 3	0 0 0 0	-7 -7 -7 -7	-10 -10 -11 -11	-14 -14 -14 -14
	10500	22	15	9	3	0	-7	-11	-14
	1						2		

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - M	ETERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
-7	-7	-6	-4	-2	0	3	7000	
-7 -7 -8 -8	-7 -7 -8 -8	-6 -7 -7 -8	-5 -5 -6 -6	-3 -4 -4 -5	-1 -1 -2 -3	2 2 1 0	7100 7200 7300 7400	
-8	-8	-8	-7	-5	-3	-1	7500	
-9 -9 -9 -10	-9 -9 -10 -10	-9 -9 -9 -10	-8 -8 -9 -9	-6 -7 -7 -8	-4 -5 -5 -6	-1 -2 -3 -4	7600 7700 7800 7900	
-10	-10	-10	-10	-9	-7	-4	8000	
-10 -11 -11 -11	-11 -11 -12 -12	-11 -11 -12 -12	-10 -11 -11 -12	-9 -10 -10 -11	-7 -8 -9 -9	-5 -6 -7 -7	8100 8200 8300 8400	
-11	-12	-13	-12	-12	-10	-8	8500	
-12 -12 -12 -13	-13 -13 -14 -14	-13 -14 -14 -15	-13 -13 -14 -15	-12 -13 -13 -14	-11 -12 -12 -13	-9 -10 -10 -11	8600 8700 8800 8900	3
-13	-14	-15	-15	-15	-14	-12	9000	
-13 -14 -14 -14	-15 -15 -15 -16	-15 -16 -16 -17	-16 -16 -17 -17	-15 -16 -16 -17	-14 -15 -15 -16	-13 -13 -14 -15	9100 9200 9300 9400	
-14	-16	-17	-18	-17	-17	-15	9500	
-15 -15 -15 -16	-16 -17 -17 -18	-18 -18 -18 -19	-18 -19 -19 -20	-18 -19 -19 -20	-17 -18 -19 -19	-16 -17 -18 -18	9600 9700 9800 9900	
-16	-18	-19	-20	-20	-20	-19	10000	
-16 -16 -17 -17	-18 -18 -19 -19	-20 -20 -20 -21	-20 -21 -21 -22	-21 -21 -22 -22	-20 -21 -22 -22	-20 -20 -21 -21	10100 10200 10300 10400	
-17	-19	-21	-22	-23	-23	-22	10500	
				3				

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEI	GHT OF	TARGET	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
,	10500	22	15	9	3	0	-7	-11	-14
1	10600 10700 10800 10900	23 23 23 23	16 16 16 16	9 9 9	3 3 3 3	0 0 0	-7 -7 -7 -7	-11 -11 -11 -11	-14 -15 -15 -15
	11000	23	16	9	3	0	-7	-11	-15
	11100 11200 11300 11400	23 24 24 24	16 16 16 16	9 9 10 10	3 3 3 3	0 0 0	-7 -7 -7 -7	-11 -12 -12 -12	-15 -15 -15 -16
	11500	24	16	10	3	0	-7	-12	-16
2	11600 11700 11800 11900	24 24 24 24	16 16 16 16	10 10 10 10	3 3 3 3	0 0 0	-7 -7 -7 -7	-12 -12 -12 -12	-16 -16 -16 -16
	12000	24	16	9	3	0	-7	-12	-16
	12100 12200 12300 12400	24 24 23 23	16 16 16 16	9 9 9 9	3 3 3 3	0 0 0	-7 -7 -7 -7	-12 -12 -12 -12	-16 -16 -16 -16
	12500	23	16	9	3	0	-7	-12	-16
	12600 12700 12800 12900	23 23 23 22	16 16 15 15	9999	3 3 3 3	0 0 0 0	-7 -7 -7 -7	-12 -12 -11 -11	-15 -15 -15 -15
	13000	22	15	9	3	0	-7	-11	-15
	13100 13200 13300 13400	22 22 21 21	15 15 15 14	9 8 8 8	3 3 3 3	0 0 0 0	-7 -7 -7 -7	-11 -11 -11 -11	-15 -15 -14 -14
3	13500	21	14	8	3	0	-7	-11	-14
	13600 13700 13800 13900	20 20 20 19	14 14 13 13	8 8 8 7	3 2 2 2	0 0 0 0	-7 -7 -7 -6	-11 -10 -10 -10	-14 -14 -13 -13
	14000	19	13	7	2	0	-6	-10	-13
	,	•			4				

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
-17	-19	-21	-22	-23	-23	-22	10500	
-17 -18 -18 -18	-20 -20 -20 -21	-21 -22 -22 -22	-23 -23 -23 -24	-23 -24 -24 -24	-23 -24 -24 -25	-23 -23 -24 -24	10600 10700 10800 10900	3
-18	-21	-23	-24	-25	-25	-25	11000	
-18 -19 -19 -19	-21 -21 -21 -21	-23 -23 -23 -24	-24 -25 -25 -25	-25 -25 -26 -26	-25 -26 -26 -26	-25 -25 -26 -26	11100 11200 11300 11400	
-19	-22	-24	-25	-26	-27	-26	11500	
-19 -19 -19 -19	-22 -22 -22 -22	-24 -24 -24 -24	-25 -25 -26 -26	-26 -26 -27 -27	-27 -27 -27 -27	-27 -27 -27 -27	11600 11700 11800 11900	
-19	-22	-24	-26	-27	-27	-27	12000	
-19 -19 -19 -19	-22 -22 -22 -22	-24 -24 -24 -24	-26 -26 -25 -25	-27 -27 -27 -26	-27 -27 -27 -27	-27 -27 -27 -27	12100 12200 12300 12400	4
-19	-22	-24	-25	-26	-27	-27	12500	
-19 -19 -18 -18	-21 -21 -21 -21	-23 -23 -23 -23	-25 -25 -25 -24	-26 -26 -26 -25	-27 -26 -26 -26	-27 -26 -26 -26	12600 12700 12800 12900	
-18	-21	-23	-24	-25	-25	-25	13000	
-18 -18 -17 -17	-20 -20 -20 -19	-22 -22 -22 -21	-24 -23 -23 -23	-25 -24 -24 -23	-25 -25 -24 -24	-25 -24 -24 -23	13100 13200 13300 13400	
-17	-19	-21	-22	-23	-23	-23	13500	
-17 -16 -16 -16	-19 -18 -18 -18	-20 -20 -20 -19	-22 -21 -21 -20	-22 -22 -21 -20	-22 -22 -21 -20	-22 -21 -20 -20	13600 13700 13800 13900	5
-15	-17	-18	-19	-20	-19	-19	14000	
		4				Į	5	

TABLE B FT 155-AR-1
PART 1
COMPLEMENTARY RANGE PROJ, HE, M795
LINE NUMBER FUZE, PD, M739 A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIGHT OF TARGET ABOVE GUN - METERS							
NO.	METERS	-400	-300	-200	-100	0	100	200	300	
	14000	19	13	7	2	0	-6	-10	-13	
3	14100 14200 14300 14400	18 18 18 17	12 12 12 11	7 7 7 6	2 2 2 2	0 0 0 0	-6 -6 -6	-10 -9 -9 -9	-12 -12 -12 -11	
	14500	17	11	6	2	0	-6	-9	-11	
	14600 14700 14800	16 16 15	11 11 10	6 6 6	2 2 1	0 0 0	-6 -5 -5	-8 -8 -8	-11 -10 -10	
	14900 15000	15 14	10 9	5	1 1	0	-5 -5	-8 -7	-9 -9	
	15100 15200 15300 15400	14 13 12 12	9 8 8 8	5 4 4 4	1 1 1 1	0 0 0 0	-5 -5 -4 -4	- 7 - 7 - 6 - 6	-9 -8 -8 -7	
4	15500	11	7	3	0	0	-4	-6	-7	
	15600 15700 15800 15900	10 10 9 8	6 6 5 5	3 3 2 2	0 0 0	0 0 0 0	-4 -4 -4 -3	-5 -5 -5 -4	-6 -6 -5 -4	
	16000	7	4	2	-1	0	-3	-4	-4	
	16100 16200 16300 16400	6 5 5 4	3 3 2 2	1 1 0 0	-1 -1 -1 -1	0 0 0 0	-3 -3 -3 -2	-3 -3 -2 -2	-3 -3 -2 -1	
	16500	3	1	-1	-2	0	-2	-2	-1	
5	16600 16700 16800 16900	2 1 0 - <i>I</i>	0 0 -1 -2	-1 -1 -2 -2	-2 -2 -2 -2	0 0 0 0	-2 -2 -1 -1	-1 -1 0	0 1 2 2	
	17000	-2	-2	-3	-3	0	-1	1	3	
	17100 17200 17300 17400	-3 -4 -5 -6	-3 -4 -5 -5	-3 -4 -4 -5	-3 -3 -3	0 0 0 0	0 0 0 0	2 2 3 3	4 5 6 6	
	17500	-7	-6	-5	-4	0	1	4	7	
		5					6			

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	ME TERS	NO.
-15	-17	-18	-19	-20	-19	-19	14000	
-15 -14 -14 -13	-17 -16 -16 -15	-18 -17 -17 -16	-19 -18 -17 -16	-19 -18 -17 -16	-19 -18 -17 -16	-18 -17 -16 -15	14100 14200 14300 14400	
-13	-14	-15	-16	-15	-15	-13	14500	
-12 -12 -11 -11	-14 -13 -12 -12	-15 -14 -13 -12	-15 -14 -13 -12	-14 -13 -12 -11	-14 -12 -11 -10	-12 -11 -10 -8	14600 14700 14800 14900	5
-10	-11	-11	-11	-10	-9	-7	15000	
-10 -9 -8 -8	-10 -10 -9 -8	-10 -9 -8 -7	-10 -9 -8 -7	-9 -8 -6 -5	-7 -6 -4 -3	-5 -4 -2 0	15100 15200 15300 15400	
-7	-7	-6	-5	-4	-1	1	15500	
-6 -6 -5 -4	-6 -5 -4 -3	-5 -4 -3 -2	-4 -3 -1 0	-2 -1 1 2	0 2 3 5	3 5 7 9	15600 15700 15800 15900	
-3	-2	-1	1	4	7	10	16000	
-2 -2 -1 0	-1 0 1 2	0 2 3 4	3 4 6 7	5 7 9 10	9 11 12 14	12 15 17 19	16100 16200 16300 16400	
1	3	6	9	12	16	21	16500	
2 3 4 5	4 5 7 8	7 8 10 11	10 12 14 15	14 16 18 20	18 21 23 25	23 26 28 31	16600 16700 16800 16900	6
6	9	13	17	22	27	33	17000	
7 8 9 10	10 12 13 14	14 16 18 19	19 21 23 25	24 26 28 31	30 32 34 37	36 38 41 44	17100 17200 17300 17400	
11	16	21	27	33	40	47	17500	
				6				

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE	LINE	HEI		TARGET		UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
5	17500	-7	-6	-5	-4	0	1	4	7
	17600 17700 17800	-8 -9 -10	-7 -8 -9	-6 -6 -7	-4 -4 -5	0 0 0	1 1	4 5 6	8 9 10
	17900	-11	-10	-7	-5	0	2 2	6	11
	18000	-12	-10	-8	-5	0	2	7	12
	18100 18200 18300 18400	-14 -15 -16 -18	-11 -12 -13 -14	-9 -9 -10 -11	-5 -6 -6 -6	0 0 0 0	3 3 3 4	7 8 9 10	13 14 15 16
6	18500	-19	-15	-11	-7	0	4	10	17
	18600 18700 18800 18900	-20 -22 -23 -25	-16 -18 -19 -20	-12 -13 -13 -14	-7 -7 -8 -8	0 0 0	5 5 5 6	11 12 13 14	18 19 21 22
	19000	-26	-21	-15	-8	0	6	14	23
	19100 19200 19300	-28 -30 -31	-22 -23 -25	-16 -17 -17	-9 -9 -10	0 0 0	7 7 8	15 16 17	24 26 27
	19400	-33	-26	-18	-10	0	8	18	29
	19500	-35	-27	-19	-11	0	8	19	30
	19600 19700 19800 19900	-37 -39 -41 -43	-29 -30 -32 -33	-20 -21 -22 -23	-11 -12 -12 -13	0 0 0	9 10 10 11	20 21 22 23	32 33 35 37
7	20000	-45	-35	-24	-13	0	11	24	38
	20100 20200	-47 -49	-36 -30	-25 -27	-14 -14	0	12	26 27	40 42
	20300 20400	-51 -54	-38 -40 -42	-28 -29	-14 -15 -15	0 0	13 13 14	28 30	44 44 46
	20500	-56	-44	-30	-16	0	15	31	48
	20600 20700	-59 -62	-46 -48	-32 -33	-17 -17	0 0	15 16	33 34	51 53 56
8	20800 20900	-65 -68	-50 -52	-34 -36	-18 -19	0 0	17 18	36 38	56 58
	21000	-71	-55	-38	-20	0	19	39	61
					8				

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
11	16	21	27	33	40	47	17500	
12 14 15 16	17 19 20 22	23 25 26 28	29 31 33 35	35 38 40 43	42 45 48 51	50 53 56 59	17600 17700 17800 17900	6
17	24	30	38	45	54	63	18000	
19 20 22 23	25 27 29 31	32 34 36 39	40 42 45 47	48 51 54 57	57 60 63 67	66 70 73 77	18100 18200 18300 18400	
25	32	41	50	60	70	81	18500	7
26 28 29 31	34 36 38 40	43 46 48 51	53 56 58 61	63 66 69 73	74 77 81 85	85 89 93 98	18600 18700 18800 18900	<b>'</b>
32	42	53	64	76	89	102	19000	
34 36 38	45 47 49	56 59 62	68 71 74	80 84 88	93 97 102	107 112 117	19100 19200 19300	
40	52	64	78	92	107	122	19400	
42	54	68	81	96	111	127	19500	
44 46 48 51	57 60 63 65	71 74 77 81	85 89 93 97	100 105 109 114	116 121 127 132	133 139 145 151	19600 19700 19800 19900	8
53	68	85	102	119	138	158	20000	
55 58 61 64	72 75 78 82	88 92 97 101	106 111 116 121	125 130 136 142	144 150 157 164	164 172 179 187	20100 20200 20300 20400	
67	86	106	127	149	172	196	20500	
70 73 76 80	90 94 98 103	110 116 121 127	132 138 145 152	155 163 170 178	179 188 197 206	205 214 224 235	20600 20700 20800 20900	9
84	108	133	159	187	216	247	21000	
				9				-

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE		HEIO	GHT OF 1	TARGET A	ABOVE G	UN - ME	TERS	
NO.	METERS	-400	-300	-200	-100	0	100	200	300
	21000	- <b>71</b>	-55	-38	-20	0	19	39	61
8	21100 21200 21300 21400	-74 -78 -81 -85	-57 -60 -63 -66	-39 -41 -43 -45	-21 -21 -22 -23	0 0 0 0	20 21 22 23	41 44 46 48	64 67 71 75
	21500	-89	-69	-47	-25	0	24	51	79
9	21600 21700 21800 21900	-94 -99 -104 -110	-72 -76 -80 -85	-50 -52 -55 -58	-26 -27 -29 -30	0 0 0 0	26 27 29 31	54 57 61 66	84 89 95 103
	22000	-117	-90	-62	-32	0	34	72	114
	22100 22200	-124 -134	-97 -105	-67 -73	-35 -38	0 0 *****	38 43 *****	80	130
	22200 22100	-300 -317	-217 -231	-139 -149	-67 -72	0	58 66	124	171
	22000	-333	-243	-158	-77	0	71	137	196
	21900 21800 21700 21600	-348 -361 -375 -387	-255 -265 -275 -285	-165 -173 -180 -186	-81 -84 -88 -91	0 0 0	76 80 84 87	147 155 163 170	212 226 238 249
	21500	-399	-294	-193	-94	0	90	177	260
11	21400 21300 21200 21100	-413 -428 -444 -458	-303 -313 -325 -337	-199 -204 -212 -220	-98 -100 -103 -107	0 0 0 0	94 97 100 103	183 190 196 202	269 279 288 297
	21000	-472	-348	-227	-111	0	106	207	305
	20900 20800 20700 20600	-485 -498 -510 -522	-358 -367 -376 -386	-234 -241 -247 -253	-115 -118 -121 -124	0 0 0	110 114 117 120	215 223 229 236	315 326 337 347
	20500	-533	-394	-259	-127	0	123	242	357
	20400 20300	-545 -557	-403 -412	-265 -270	-130 -133	0	126 130	248 255	366 375
40	20200 20100	-568 -580	-420 -429	-276 -282	-136 -139	00	132 135	260 266	384 393
12	20000	-591	-437	-287	-142	0	138	272	402
				1	12				

328

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
84	108	133	159	187	216	247	21000	
88 93 97 103	113 119 125 132	140 147 155 163	167 176 186 196	197 207 219 231	228 240 253 269	260 275 291 310	21100 21200 21300 21400	9
108	140	173	208	247	288	333	21500	
115 122 132 144	148 159 172 190	184 198 217 242	223 242 266 309	265 290 325	312 344 406	364 409	21600 21700 21800 21900	
161	218						22000	
*****	*****	****	*****	*****	*****	*****	22100 22200 *****	10
							22200 22100	
246	281						22000	
272 291 308	323 350 373	363 403 432	385 446 485	476 530	564	584	21900 21800 21700	
323	393 411	457 480	517 545	570 604	616 657	652 703	21600 21500	
351 364 376 388	429 445 461 476	502 522 541 560	570 595 617 639	634 662 689 715	693 726 757 786	746 784 819 853	21400 21300 21200 21100	
400	491	578	661	740	814	884	21000	
411 425 439 454	505 520 537 554	595 612 631 651	681 701 722 744	763 786 809 834	841 868 893 920	915 945 973 1002	20900 20800 20700 20600	11
467	572	671	767	859	947	1032	20500	
480 492 504 516	588 604 619 634	691 711 730 748	789 812 835 857	884 909 935 961	975 1003 1031 1059	1063 1093 1123 1153	20400 20300 20200 20100	
527	648	765	878	985	1087	1184	20000	
	1	2				11		

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

LINE	RANGE	RANGE HEIGHT OF TARGET ABOVE GUN - METERS										
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	20000	-591	-437	-287	-142	0	138	272	402			
	19900 19800 19700 19600	-603 -615 -627 -638	-446 -455 -463 -472	-293 -299 -305 -311	-144 -147 -150 -153	0 0 0 0	141 144 146 149	277 283 289 294	410 418 427 435			
	19500	-650	-481	-316	-156	0	152	300	443			
	19400 19300 19200 19100	-662 -674 -687 -699	-490 -499 -508 -517	-322 -328 -334 -340	-159 -162 -165 -168	0 0 0 0	155 158 161 164	306 311 317 323	452 460 469 477			
	19000	-712	-526	-346	-171	0	167	329	486			
	18900 18800 18700 18600	-724 -737 -750 -763	-536 -545 -555 -564	-352 -359 -365 -371	-174 -177 -180 -183	0 0 0 0	170 173 176 179	334 340 346 352	495 503 512 521			
	18500	- <b>776</b>	-574	-377	-186	0	182	358	530			
12	18400 18300 18200 18100	-789 -803 -817 -831	-584 -594 -604 -614	-384 -390 -397 -403	-189 -192 -196 -199	0 0 0	185 188 191 194	364 371 377 383	539 548 557 567			
	18000	-845	-624	-410	-202	0	198	389	576			
	17900 17800 17700 17600	-859 -874 -889 -905	-635 -646 -657 -668	-417 -424 -431 -439	-205 -209 -212 -216	0 0 0	201 204 208 211	396 402 409 416	585 595 605 615			
	17500	- <b>921</b>	-680	-446	-220	0	215	423	625			
	17400 17300 17200 17100	-937 -953 -970 -988	-692 -703 -716 -728	-454 -461 -469 -477	-223 -227 -231 -235	0 0 0	218 222 226 229	429 436 444 451	635 645 656 666			
	17000	-1005	-741	-486	-238	0	233	458	677			
	16900 16800 16700 16600	-1024 -1043 -1062 -1083	-754 -768 -782 -796	-494 -502 -511 -521	-242 -246 -251 -255	0 0 0	237 241 245 250	466 474 482 490	688 699 711 723			
	16500	-1103	-811	-530	-260	0	254	498	735			
				1	2							

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CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

## LINE NUMBERS OF METEOROLOGICAL MESSAGE

	HE I GHT		ET ABOVE				RANGE	LINE
400	500	600	700	800	900	1000	METERS	NO.
527	648	765	878	985	1087	1184	20000	11
539 550 561 572	663 677 691 704	782 800 816 833	898 918 937 957	1009 1032 1054 1077	1115 1141 1167 1192	1215 1245 1274 1303	19900 19800 19700 19600	
583	718	849	976	1099	1217	1331	19500	
594 605 616 628	732 746 760 774	866 882 899 915	995 1015 1034 1053	1121 1143 1164 1186	1242 1266 1291 1315	1358 1385 1413 1440	19400 19300 19200 19100	
639	788	932	1072	1208	1340	1467	19000	
650 662 673 685	802 816 830 845	949 966 983 1000	1091 1111 1130 1150	1230 1252 1274 1296	1364 1389 1413 1438	1494 1521 1548 1575	18900 18800 18700 18600	
697	859	1017	1170	1319	1463	1603	18500	
709 721 733 745	874 888 903 918	1034 1052 1069 1087	1190 1210 1230 1251	1341 1364 1387 1410	1488 1513 1539 1564	1630 1658 1686 1714	18400 18300 18200 18100	12
757	934	1105	1271	1433	1590	1742	18000	
770 782 795 808	949 965 980 996	1123 1142 1160 1179	1292 1313 1335 1356	1457 1480 1504 1528	1616 1642 1669 1696	1771 1800 1829 1858	17900 17800 17700 17600	
821	1012	1198	1378	1553	1723	1888	17500	
834 848 861 875	1028 1044 1061 1078	1217 1236 1256 1276	1400 1422 1444 1467	1577 1602 1628 1653	1750 1778 1805 1834	1917 1948 1978 2009	17400 17300 17200 17100	
889	1096	1296	1490	1679	1862	2040	17000	
904 918 933 948	1113 1131 1149 1167	1316 1337 1358 1380	1514 1537 1562 1586	1705 1732 1759 1786	1891 1921 1950 1981	2072 2104 2136 2169	16900 16800 16700 16600	
964	1186	1402	1611	1814	2011	2202	16500	
				12				

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FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

LINE	RANGE		HEIGHT OF TARGET ABOVE GUN - METERS									
NO.	METERS	-400	-300	-200	-100	0	100	200	300			
	16500	-1103	-811	-530	-260	0	254	498	735			
	16400 16300 16200 16100	-1125 -1147 -1171 -1195	-826 -842 -859 -875	-540 -550 -560 -571	-264 -269 -274 -279	0 0 0 0	258 263 267 272	506 515 524 533	747 759 772 784			
	16000	-1219	-892	-581	-283	0	277	542	798			
	15900 15800 15700 15600	-1245 -1273 -1301	-910 -929 -949 -970	-592 -604 -616 -629	-288 -294 -300 -305	0 0 0 0	282 288 293 298	552 562 572 582	812 826 840 855			
12	15500		- <b>991</b>	-642	-312	0	304	592	870			
12	15400 15300 15200 15100		-1013	-655 -669 -684 -699	-318 -324 -330 -337	0 0 0	310 316 322 329	603 615 627 639	885 901 918 935			
	15000				-344	0	336	651	952			
	14900 14800 14700 14600				-351 -359	0 0 0 0	343 351 358 366	664 678 691 705	971 989 1009 1028			
	14500					0	373	719	1048			
	14400 14300 14200					0	382	735	1069 1091			
					12							

CHARGE 88

# CHANGE IN RANGE, IN METERS TO CORRECT FOR COMPLEMENTARY ANGLE OF SITE

HEIGHT OF TARGET ABOVE GUN - METERS RANGE LINE									
	HEIGHT	OF TARG	ET ABOVE	GUN - N	IE TERS		RANGE	LINE	
400	500	600	700	800	900	1000	METERS	NO.	
964	1186	1402	1611	1814	2011	2202	16500		
979 995 1012 1028	1205 1225 1244 1264	1424 1447 1470 1493	1636 1662 1688 1715	1842 1871 1900 1930	2042 2074 2106 2138	2236 2270 2305 2340	16400 16300 16200 16100		
1045	1285	1517	1742	1960	2171	2376	16000		
1063 1081 1099 1118	1306 1328 1350 1372	1542 1567 1592 1618	1770 1798 1827 1856	1990 2022 2054 2087	2205 2239 2274 2310	2412 2449 2487 2526	15900 15800 15700 15600		
1137	1395	1645	1886	2120	2346	2565	15500	1 2	
1157 1177 1198 1220	1419 1443 1468 1494	1672 1700 1729 1758	1916 1948 1980 2013	2153 2188 2223 2259	2382 2420 2458 2498	2604 2645 2686 2728	15400 15300 15200 15100	12	
1241	1520	1788	2046	2296	2538	2771	15000		
1264 1288 1312 1336	1547 1574 1603 1632	1818 1850 1883 1916	2080 2116 2152 2189	2334 2372 2412 2452	2578 2620 2663 2706	2815 2859 2905 2952	14900 14800 14700 14600		
1361	1661	1949	2226	2493	2751	2999	14500		
1387 1415	1692 1724	1984 2020	2265 2304	2535 2578 2623	2796 2842 2890	3047 3097 3148	14400 14300 14200		
				12				-	

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

## COMPONENTS OF A ONE KNOT WIND

		0.1.2.1.1.0 0.	ĺ	A ONE KNOT WIT		
CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND		CHART DIRECTION OF WIND	CROSS WIND	RANGE WIND
MIL	KNOT	KNOT		MIL	KNOT	KNOT
0	0	H1.00		3200	0	T1.00
100 200 300	R. 10 R. 20 R. 29	H. 99 H. 98 H. 96		3300 3400 3500	L. 10 L. 20 L. 29	T. 99 T. 98 T. 96
400	R. 38	H. 92		3600	L.38	T.92
500 600 700	R. 47 R. 56 R. 63	H. 88 H. 83 H. 77		3700 3800 3900	L. 47 L. 56 L. 63	T. 88 T. 83 T. 77
800	R. 71	H. 71		4000	L.71	T. 71
900 1000 1100	R. 77 R. 83 R. 88	H. 63 H. 56 H. 47		4100 4200 4300	L.77 L.83 L.88	T. 63 T. 56 T. 47
1200	R.92	H. 38		4400	L.92	T. 38
1300 1400 1500	R. 96 R. 98 R. 99	H. 29 H. 20 H. 10		4500 4600 4700	L.96 L.98 L.99	T. 29 T. 20 T. 10
1600	R1.00	0		4800	L1.00	0
1700 1800 1900	R. 99 R. 98 R. 96	T. 10 T. 20 T. 29		4900 5000 5100	L.99 L.98 L.96	H. 10 H. 20 H. 29
2000	R. 92	T. 38		5200	L.92	H. 38
2100 2200 2300	R. 88 R. 83 R. 77	T. 47 T. 56 T. 63		5300 5400 5500	L. 88 L. 83 L. 77	H. 47 H. 56 H. 63
2400	R. 71	T. 71		5600	L.71	H. 71
2500 2600 2700	R. 63 R. 56 R. 47	T. 77 T. 83 T. 88		5700 5800 5900	L. 63 L. 56 L. 47	H. 77 H. 83 H. 88
2800	R. 38	T.92		6000	L.38	H. 92
2900 3000 3100	R. 29 R. 20 R. 10	T. 96 T. 98 T. 99		6100 6200 6300	L. 29 L. 20 L. 10	H. 96 H. 98 H. 99
3200	0	T1.00		6400	0	H1.00

NOTE - FOR A COMPLETE EXPLANATION OF THE USE OF THIS TABLE, SEE PARAGRAPH 12, EXPLANATION OF COMPONENTS OF A ONE KNOT WIND.

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CHARGE 88

FT 155-AR-1 TABLE D
PART 1
PROJ, HE, M795
FUZE, PD, M739A1 AND DENSITY CORRECTIONS

CORRECTIONS TO TEMPERATURE (DT) AND DENSITY (DD), IN PERCENT, TO COMPENSATE FOR THE DIFFERENCE IN ALTITUDE, IN METERS, BETWEEN THE BATTERY AND THE MDP

DH		0	+10-	+20-	+30-	+40-	+50-	+60-	+70-	+80-	+90-
0	DT DD	0.0 0.0	0.0 -0.1+	0.0 -0.2+	-0.1+ -0.3+	-0.1+ -0.4+	-0.1+ -0.5+	-0.1+ -0.6+	-0.2+ -0.7+	-0.2+ -0.8+	-0.2+ -0.9+
+100-											-0.4+ -1.9+
+200-											-0.7+ -2.9+
+300-											-0.9+ -3.9+

NOTES - 1. DH IS BATTERY HEIGHT ABOVE OR BELOW THE MDP.
2. IF ABOVE THE MDP, USE THE SIGN BEFORE THE NUMBER.
3. IF BELOW THE MDP, USE THE SIGN AFTER THE NUMBER.

TABLE E PROPELLANT TEMPERATURE EFFECTS ON MUZZLE VELOCITY DUE TO PROPELLANT TEMPERATURE

TEMPERATURE OF PROPELLANT	EFFI OI VELO M203A1	N	TEMPERATURE OF PROPELLANT
DEGREES F	M/S	M/S	DEGREES C
-40 -30 -20 -10	-31.7 -28.5 -25.5 -22.6	-24.0 -21.8 -19.8 -17.8	-40.0 -34.4 -28.9 -23.3
0	-19.8	-15.8	-17.8
10 20 30 40	-17.0 -14.2 -11.4 -8.7	-13.9 -11.9 -9.8 -7.6	-12.2 -6.7 -1.1 4.4
50	-5.8	-5.3	10.0
60 70 80 90	-3.0 0.0 3.1 6.3	-2.8 0.0 3.0 6.3	15.6 21.1 26.7 32.2
100	9.6	10.0	37.8
110 120 130	13.1 16.8 20.7	14.0 18.5 23.5	43.3 48.9 54.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	ш∟ш	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	TETAITT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
0	0.0			125	1	0.0	0.0	0.00
100 200 300 400	0.8 1.7 2.4 3.2			125 124 123 122	1 1 1 1	0.1 0.3 0.4 0.5	0.0 0.1 0.1 0.2	0.00 0.00 0.01 0.01
500	4.1			121	1	0.6	0.2	0.01
600 700 800 900	4.9 5.8 6.6 7.5			119 118 117 116	1 1 1 1	0.8 0.9 1.0 1.2	0.2 0.3 0.3 0.4	0.01 0.02 0.02 0.02
1000	8.3			115	1	1.3	0.4	0.02
1100 1200 1300 1400	9.2 10.1 11.0 11.9			114 113 112 111	1 1 1 1	1.4 1.6 1.7 1.9	0.4 0.5 0.5 0.6	0.03 0.03 0.03 0.03
1500	12.8	2.0	1.03	110	1	2.0	0.6	0.04
1600 1700 1800 1900	13.7 14.6 15.5 16.5	2.1 2.3 2.4 2.6	0.96 0.90 0.85 0.80	109 108 107 106	1 1 1 1	2.1 2.3 2.4 2.6	0.6 0.7 0.7 0.8	0.04 0.04 0.04 0.05
2000	17.4	2.7	0.76	105	1	2.7	0.8	0.05
2100 2200 2300 2400	18.4 19.4 20.4 21.3	2.9 3.0 3.1 3.3	0.72 0.69 0.66 0.63	103 102 101 100	1 1 1 1	2.9 3.0 3.1 3.3	0.9 0.9 1.0 1.0	0.05 0.05 0.06 0.06
2500	22.3	3.4	0.60	99	1	3.4	1.1	0.06
2600 2700 2800 2900	23.4 24.4 25.4 26.4	3.6 3.7 3.9 4.1	0.58 0.55 0.53 0.51	99 98 97 96	1 1 1	3.6 3.7 3.9 4.1	1.1 1.2 1.2 1.3	0.06 0.07 0.07 0.07
3000	27.5	4.2	0.50	95	1	4.2	1.3	0.07
3100 3200 3300 3400	28.6 29.6 30.7 31.8	4.4 4.5 4.7 4.8	0.48 0.46 0.45 0.43	94 93 92 91	1 1 1	4.4 4.5 4.7 4.8	1.4 1.4 1.5 1.5	0.08 0.08 0.08 0.09
3500	32.9	5.0	0.42	90	1	5.0	1.6	0.09

CHARGE 8S TABLE F

1	10	11	12	13	14	15	16	17	18	19
R	10		12		CORREC	-			10	13
A N G E		ZLE CITY M/S	WI	NGE ND NO T	A	IR EMP PCT	A I DENS 1 P	I TY	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	М	M	M	M	M	M	М	М	М	М
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
100 200 300 400	0.3 0.5 0.8 1.0	-0.3 -0.5 -0.8 -1.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	-1 -1 -2 -3	1 2 2 3
500	1.3	-1.2	0.0	0.0	0.0	0.0	-0.1	0.1	-3	3
600 700 800 900	1.5 1.8 2.0 2.3	-1.5 -1.7 -2.0 -2.2	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 -0.1 -0.1 -0.1	0.0 0.0 0.1 0.1	-0.1 -0.2 -0.3 -0.4	0.1 0.2 0.2 0.3	-4 -4 -5 -6	4 5 5 6
1000	2.5	-2.4	0.0	0.0	-0.1	0.1	-0.5	0.4	-6	6
1100 1200 1300 1400	2.8 3.0 3.2 3.5	-2.7 -2.9 -3.1 -3.4	0.0 0.0 0.1 0.1	0.0 0.0 -0.1 -0.1	-0.2 -0.2 -0.2 -0.3	0.1 0.2 0.2 0.2	-0.6 -0.7 -0.8 -0.9	0.5 0.6 0.7 0.9	-7 -7 -8 -8	7 7 8 8
1500	3.7	-3.6	0.1	-0.1	-0.3	0.2	-1.0	1.0	-9	9
1600 1700 1800 1900	3.9 4.2 4.4 4.6	-3.8 -4.0 -4.2 -4.5	0.1 0.1 0.1 0.1	-0.1 -0.1 -0.1 -0.1	-0.3 -0.4 -0.4 -0.5	0.3 0.3 0.3 0.4	-1.1 -1.3 -1.4 -1.6	1.1 1.3 1.4 1.6	-9 -10 -10 -10	9 10 10 11
2000	4.8	-4.7	0.1	-0.1	-0.5	0.4	-1.8	1.8	-11	11
2100 2200 2300 2400	5.1 5.3 5.5 5.7	-4.9 -5.1 -5.3 -5.5	0.2 0.2 0.2 0.2	-0.2 -0.2 -0.2 -0.2	-0.5 -0.6 -0.6 -0.7	0.5 0.5 0.6 0.6	-1.9 -2.1 -2.3 -2.5	2.0 2.2 2.4 2.6	-11 -12 -12 -12	11 12 12 13
2500	5.9	-5.8	0.2	-0.2	-0.7	0.7	-2.7	2.8	-13	13
2600 2700 2800 2900	6.2 6.4 6.6 6.8	-6.0 -6.2 -6.4 -6.6	0.3 0.3 0.3 0.3	-0.2 -0.3 -0.3 -0.3	-0.8 -0.9 -0.9 -1.0	0.7 0.8 0.8 0.9	-3.0 -3.2 -3.4 -3.7	3.0 3.3 3.5 3.8	-13 -13 -14 -14	13 14 14 14
3000	7.0	-6.8	0.3	-0.3	-1.1	1.0	-3.9	4.0	-14	14
3100 3200 3300 3400	7.2 7.4 7.6 7.8	-7.0 -7.2 -7.4 -7.6	0.4 0.4 0.4 0.4	-0.4 -0.4 -0.4 -0.4	-1.1 -1.2 -1.3 -1.4	1.0 1.1 1.1 1.2	-4.2 -4.5 -4.7 -5.0	4.3 4.6 4.9 5.2	-14 -15 -15 -15	15 15 15 15
3500	8.0	-7.8	0.5	-0.5	-1.4	1.3	-5.3	5.5	-15	16

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE	DFS PER	DR PER 1 MIL	F O	TIME OF		MUTH CTIONS
G E	V	BURST FUZE M582	10 M DEC HOB	D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
3500	32.9	5.0	0.42	90	1	5.0	1.6	0.09
3600 3700 3800 3900	34.0 35.2 36.3 37.5	5.2 5.3 5.5 5.7	0.41 0.39 0.38 0.37	89 88 87 86	1 1 1	5.2 5.3 5.5 5.7	1.6 1.7 1.7 1.8	0.09 0.09 0.10 0.10
4000	38.6	5.8	0.36	85	1	5.8	1.8	0.10
4100 4200 4300 4400	39.8 41.0 42.2 43.4	6.0 6.2 6.3 6.5	0.35 0.34 0.33 0.33	84 84 83 82	1 1 1 1	6.0 6.2 6.3 6.5	1.9 1.9 2.0 2.1	0.11 0.11 0.11 0.11
4500	44.6	6.7	0.32	81	1	6.7	2.1	0.12
4600 4700 4800 4900	45.9 47.1 48.4 49.7	6.9 7.0 7.2 7.4	0.31 0.30 0.29 0.29	80 79 78 78	1 1 1 1	6.9 7.0 7.2 7.4	2.2 2.2 2.3 2.4	0.12 0.12 0.13 0.13
5000	51.0	7.6	0.28	77	1	7.6	2.4	0.13
5100 5200 5300 5400	52.3 53.6 54.9 56.3	7.8 8.0 8.1 8.3	0.28 0.27 0.26 0.26	76 75 74 74	1 1 1 1	7.8 8.0 8.1 8.3	2.5 2.5 2.6 2.7	0.14 0.14 0.14 0.15
5500	57.7	8.5	0.25	73	1	8.5	2.7	0.15
5600 5700 5800 5900	59.0 60.4 61.9 63.3	8.7 8.9 9.1 9.3	0.25 0.24 0.24 0.23	72 71 70 70	1 1 1	8.7 8.9 9.1 9.3	2.8 2.9 2.9 3.0	0.15 0.16 0.16 0.16
6000	64.7	9.5	0.23	69	1	9.5	3.1	0.16
6100 6200 6300 6400	66.2 67.7 69.2 70.7	9.7 9.9 10.1 10.3	0.22 0.22 0.22 0.21	68 67 67 66	1 1 1	9.7 9.9 10.1 10.3	3.1 3.2 3.3 3.3	0.17 0.17 0.18 0.18
6500	72.2	10.5	0.21	65	1	10.5	3.4	0.18
6600 6700 6800 6900	73.7 75.3 76.9 78.5	10.7 10.9 11.1 11.3	0.20 0.20 0.20 0.19	64 64 63 62	1 1 1	10.7 10.9 11.1 11.3	3.5 3.6 3.6 3.7	0.19 0.19 0.19 0.20
7000	80.1	11.5	0.19	62	2	11.5	3.8	0.20

CHARGE 8 S TABLE F

1	10	11	12	13	14	15	16	17	18	19
R					CORREC	-				
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	A	IR EMP PCT	A I DENS 1 F	I TY	PROJ WT OF 1 SQ (4 SQ STD)	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	М	M	M	M	M	M	М	M	М
3500	8.0	-7.8	0.5	-0.5	-1.4	1.3	-5.3	5.5	-15	16
3600 3700 3800 3900	8.2 8.4 8.6 8.8	-8.0 -8.2 -8.3 -8.5	0.5 0.5 0.6 0.6	-0.5 -0.5 -0.6 -0.6	-1.5 -1.6 -1.7 -1.8	1.4 1.4 1.5 1.6	-5.6 -5.9 -6.3 -6.6	5.8 6.1 6.4 6.8	-15 -16 -16 -16	16 16 16 16
4000	9.0	-8.7	0.6	-0.6	-1.9	1.7	-6.9	7.1	-16	17
4100 4200 4300 4400	9.2 9.4 9.5 9.7	-8.9 -9.1 -9.3 -9.5	0.7 0.7 0.7 0.8	-0.6 -0.7 -0.7 -0.7	-1.9 -2.0 -2.1 -2.2	1.7 1.8 1.9 2.0	-7.3 -7.6 -8.0 -8.3	7.5 7.9 8.2 8.6	-16 -16 -16 -16	17 17 17 17
4500	9.9	-9.6	0.8	-0.8	-2.3	2.1	-8.7	9.0	-17	17
4600 4700 4800 4900	10.1 10.3 10.5 10.6	-9.8 -10.0 -10.2 -10.3	0.9 0.9 0.9 1.0	-0.8 -0.9 -0.9 -0.9	-2.4 -2.5 -2.6 -2.7	2.2 2.3 2.4 2.5	-9.1 -9.5 -9.9 -10.3	9.4 9.8 10.2 10.6	-17 -17 -17 -17	17 17 17 17
5000	10.8	-10.5	1.0	-1.0	-2.8	2.5	-10.7	11.1	-17	17
5100 5200 5300 5400	11.0 11.2 11.3 11.5	-10.7 -10.9 -11.0 -11.2	1.1 1.1 1.2 1.2	-1.0 -1.1 -1.1 -1.2	-2.9 -3.0 -3.2 -3.3	2.6 2.7 2.8 2.9	-11.1 -11.5 -11.9 -12.4	11.5 12.0 12.4 12.9	-17 -17 -17 -17	17 17 17 17
5500	11.7	-11.4	1.3	-1.2	-3.4	3.0	-12.8	13.3	-17	17
5600 5700 5800 5900	11.8 12.0 12.2 12.3	-11.5 -11.7 -11.8 -12.0	1.3 1.4 1.4 1.5	-1.2 -1.3 -1.3 -1.4	-3.5 -3.6 -3.7 -3.9	3.2 3.3 3.4 3.5	-13.3 -13.7 -14.2 -14.7	13.8 14.3 14.8 15.3	-17 -16 -16 -16	17 17 17 17
6000	12.5	-12.2	1.5	-1.4	-4.0	3.6	-15.1	15.8	-16	17
6100 6200 6300 6400	12.6 12.8 13.0 13.1	-12.3 -12.5 -12.6 -12.8	1.6 1.6 1.7 1.8	-1.5 -1.5 -1.6 -1.6	-4.1 -4.2 -4.3 -4.5	3.7 3.8 3.9 4.1	-15.6 -16.1 -16.6 -17.1	16.3 16.9 17.4 17.9	-16 -16 -16 -16	17 17 17 17
6500	13.3	-12.9	1.8	-1.7	-4.6	4.2	-17.6	18.5	-15	17
6600 6700 6800 6900	13.4 13.6 13.7 13.9	-13.1 -13.2 -13.4 -13.5	1.9 1.9 2.0 2.1	-1.8 -1.8 -1.9 -1.9	-4.7 -4.9 -5.0 -5.1	4.3 4.4 4.5 4.7	-18.1 -18.7 -19.2 -19.7	19.0 19.6 20.2 20.7	-15 -15 -15 -15	16 16 16 16
7000	14.0	-13.7	2.1	-2.0	-5.3	4.8	-20.3	21.3	-14	16

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

The color of th									
N	1	2	3	4	5	6	7	8	9
G E         V         FUZE M582         DEC MOB         D ELEV DEC TO L)         K         DRIFT CW CORR TO L)         CW OF KNOT           M         MIL         M         MIL         SEC         MIL         MIL           7000         80.1         11.5         0.19         62         2         11.5         3.8         0.20           7100         81.7         11.8         0.19         61         2         11.8         3.8         0.20            7200         83.4         12.0         0.18         60         2         12.0         3.9         0.21           7400         86.7         12.4         0.18         60         2         12.0         4.0         0.21           7500         88.4         12.6         0.17         58         2         12.6         4.2         0.22           7600         90.2         12.9         0.17         58         2         12.9         4.2         0.22           7700         91.9         13.1         0.17         56         2         13.3         4.4         0.23           7900         95.5         13.5         0.16         56         2         13.3         4.6<	Α	E L E	GRAZE	PER	PER	0	OF		
7000         80.1         11.5         0.19         62         2         11.5         3.8         0.20           7100         81.7         11.8         0.19         61         2         11.5         3.8         0.20           7200         83.4         12.0         0.18         60         2         12.0         3.9         0.21           7300         85.0         12.2         0.18         60         2         12.2         4.0         0.21           7400         86.7         12.4         0.18         59         2         12.4         4.1         0.21           7500         88.4         12.6         0.17         58         2         12.6         4.2         0.22           7600         90.2         12.9         0.17         58         2         12.9         4.2         0.22           7700         91.9         13.1         0.17         58         2         12.9         4.2         0.22           7800         93.7         13.3         0.17         56         2         13.3         4.4         0.23           7900         95.5         13.5         0.16         56         2         <	G	V	FUZE	DEC				( CORR	ÖF
7100         81.7         11.8         0.19         61         2         11.8         3.8         0.20           7200         83.4         12.0         0.18         60         2         12.0         3.9         0.21           7300         85.0         12.2         0.18         60         2         12.0         3.9         0.21           7400         86.7         12.4         0.18         59         2         12.4         4.0         0.21           7500         88.4         12.6         0.17         58         2         12.9         0.17         58         2         12.9         4.2         0.22           7600         90.2         12.9         0.17         58         2         12.9         4.2         0.22           7700         91.9         13.1         0.17         56         2         13.3         4.4         0.22           7800         93.7         13.3         0.17         56         2         13.3         4.4         0.23           8000         97.3         13.8         0.16         55         2         13.8         4.6         0.24           8100         99.1         <	М	MIL			M	MIL	SEC	MIL	MIL
7200         83.4         12.0         0.18         60         2         12.2         3.9         0.21           7300         85.0         12.4         0.18         60         2         12.2         4.0         0.21           7400         86.7         12.4         0.18         59         2         12.2         4.0         0.21           7500         88.4         12.6         0.17         58         2         12.6         4.2         0.22           7600         90.2         12.9         0.17         58         2         12.9         4.2         0.22           7800         93.7         13.3         0.17         56         2         13.1         4.3         0.22           7800         93.7         13.3         0.16         56         2         13.3         4.4         0.23           8000         97.3         13.8         0.16         55         2         13.8         4.6         0.24           8100         99.1         14.0         0.16         54         2         14.2         4.7         0.24           8200         101.0         14.2         0.16         54         2	7000	80.1	11.5	0.19	62	2	11.5	3.8	0.20
7600         90.2         12.9         0.17         58         2         12.9         4.2         0.22           7800         91.9         13.1         0.17         57         2         13.1         4.3         0.22           7800         93.7         13.3         0.17         56         2         13.3         4.4         0.23           7900         95.5         13.5         0.16         56         2         13.3         4.4         0.23           8000         97.3         13.8         0.16         55         2         13.8         4.6         0.24           8100         99.1         14.0         0.16         54         2         14.0         4.6         0.24           8200         101.0         14.2         0.16         54         2         14.0         4.6         0.24           8300         102.8         14.5         0.15         53         2         14.5         4.8         0.25           8500         106.7         14.9         0.15         52         2         14.9         5.0         0.26           8600         108.6         15.2         0.15         51         2	7200 7300	83.4 85.0	12.0 12.2	0.18 0.18	60 60	2	12.0 12.2	3.9 4.0	0.21 0.21
7700         91.9         13.1         0.17         57         2         13.1         4.3         0.23           7800         93.7         13.3         0.17         56         2         13.3         4.4         0.23           8000         97.3         13.8         0.16         55         2         13.8         4.6         0.24           8100         99.1         14.0         0.16         54         2         14.0         4.6         0.24           8200         101.0         14.2         0.16         54         2         14.0         4.6         0.24           8300         102.8         14.5         0.15         53         2         14.5         4.8         0.25           8400         104.7         14.7         0.15         52         2         14.7         4.9         0.25           8500         106.7         14.9         0.15         52         2         14.7         4.9         0.26           8600         108.6         15.2         0.15         51         2         15.2         5.1         0.26           8700         110.6         15.4         0.14         49         2	7500	88.4	12.6	0.17	58	2	12.6	4.2	0.22
8100         99.1         14.0         0.16         54         2         14.0         4.6         0.24           8200         101.0         14.2         0.16         54         2         14.2         4.7         0.24           8300         102.8         14.5         0.15         53         2         14.5         4.8         0.25           8400         104.7         14.7         0.15         52         2         14.7         4.9         0.25           8500         106.7         14.9         0.15         52         2         14.9         5.0         0.26           8600         108.6         15.2         0.15         51         2         15.4         5.2         0.26           8700         110.6         15.4         0.14         51         2         15.4         5.2         0.26           8800         112.5         15.7         0.14         50         2         15.7         5.2         0.27           8900         116.6         16.2         0.14         49         2         16.2         5.4         0.28           9100         118.6         16.4         0.14         48         2	7700 7800	91.9 93.7	13.1 13.3	0.17 0.17	57 56	2	13.1 13.3	4.3 4.4	0.22 0.23
8300         102.8         14.5         0.15         53         2         14.5         4.8         0.25           8500         106.7         14.9         0.15         52         2         14.7         4.9         0.25           8600         108.6         15.2         0.15         51         2         15.2         5.1         0.26           8700         110.6         15.4         0.14         51         2         15.4         5.2         0.26           8800         112.5         15.7         0.14         50         2         15.7         5.2         0.27           8900         114.5         15.9         0.14         49         2         16.2         5.4         0.28           9100         118.6         16.4         0.14         49         2         16.2         5.4         0.28           9200         120.7         16.7         0.13         48         2         16.7         5.6         0.28           9300         122.8         17.0         0.13         47         2         17.0         5.7         0.29           9500         127.1         17.5         0.13         46         2	8000	97.3	13.8	0.16	55	2	13.8	4.6	0.24
8600         108.6         15.2         0.15         51         2         15.2         5.1         0.26           8700         110.6         15.4         0.14         51         2         15.4         5.2         0.26           8800         112.5         15.7         0.14         50         2         15.7         5.2         0.27           8900         114.5         15.9         0.14         49         2         15.9         5.3         0.27           9000         116.6         16.2         0.14         49         2         16.2         5.4         0.28           9100         118.6         16.4         0.14         48         2         16.4         5.5         0.28           9200         120.7         16.7         0.13         48         2         16.7         5.6         0.28           9300         122.8         17.0         0.13         47         2         17.0         5.7         0.29           9400         125.0         17.2         0.13         46         2         17.5         5.9         0.30           9600         129.3         17.7         0.13         46         2	8200 8300	101.0 102.8	14.2 14.5	0.16 0.15	54 53	2	14.2 14.5	4.7 4.8	0.24 0.25
8700 8800         110.6 112.5 114.5         15.4 15.7 15.9         0.14 0.14 0.14         51 50 2 15.9         2 15.7 5.2 15.9         5.2 5.2 5.2 0.27         0.26 0.27 5.2 0.27           9000         116.6         16.2 0.14         0.14 49         49         2 16.2         5.4 0.28         0.28           9100 9200 120.7 16.7 9300 122.8 9300 122.8 17.0 0.13 47         16.7 0.13 47         0.13 2 17.2 0.13 47         48 2 2 2 17.0 0.13 47         2 2 2 17.0 0.5 0.28         0.28 0.28           9500 9500 127.1 17.5         17.5 0.13 0.12 45         2 17.7 0.13 46         2 17.7 0.0 17.7 0.13 45         17.7 0.0 13 18.0 0.12 44 3 18.3 0.12 44 3 18.3 0.2 10.30 136.0 18.5 0.12 44         17.7 0.0 13 18.8 0.12 44         6.0 0.30 0.31 0.31 0.30 136.0 18.5 0.12 44         0.12 44 3 3 18.8 0.4 0.32         0.32 0.31 0.30 0.31 0.30 0.31 0.30 0.31 0.30 0.33 10.300 145.3 19.7 0.12 42 3 19.4 0.12 42 3 19.7 0.12 42 3 19.7 0.12 42 3 19.7 0.11 41         0.5 0.32 0.33 19.9 0.6 0.33 19.9 0.8 0.33         0.33 0.33 19.9 0.8 0.33	8500	106.7	14.9	0.15	52	2	14.9	5.0	0.26
9100         118.6         16.4         0.14         48         2         16.4         5.5         0.28           9200         120.7         16.7         0.13         48         2         16.7         5.6         0.28           9300         122.8         17.0         0.13         47         2         17.0         5.7         0.29           9400         125.0         17.2         0.13         47         2         17.2         5.8         0.29           9500         127.1         17.5         0.13         46         2         17.5         5.9         0.30           9600         129.3         17.7         0.13         46         2         17.7         6.0         0.30           9700         131.5         18.0         0.12         45         2         18.0         6.1         0.30           9800         133.7         18.3         0.12         44         3         18.3         6.2         0.31           9900         136.0         18.5         0.12         43         3         18.8         6.4         0.32           10100         140.6         19.1         0.12         43         3 <td>8700 8800</td> <td>110.6 112.5</td> <td>15.4 15.7</td> <td>0.14 0.14</td> <td>51 50</td> <td>2 2 2 2</td> <td>15.4 15.7</td> <td>5.1 5.2 5.2 5.3</td> <td>0.26 0.27</td>	8700 8800	110.6 112.5	15.4 15.7	0.14 0.14	51 50	2 2 2 2	15.4 15.7	5.1 5.2 5.2 5.3	0.26 0.27
9200         120.7         16.7         0.13         48         2         16.7         5.6         0.28           9300         122.8         17.0         0.13         47         2         17.0         5.7         0.29           9400         125.0         17.2         0.13         47         2         17.0         5.8         0.29           9500         127.1         17.5         0.13         46         2         17.5         5.9         0.30           9600         129.3         17.7         0.13         46         2         17.7         6.0         0.30           9700         131.5         18.0         0.12         45         2         18.0         6.1         0.30           9800         133.7         18.3         0.12         44         3         18.3         6.2         0.31           9900         136.0         18.5         0.12         44         3         18.5         6.3         0.31           10000         138.3         18.8         0.12         43         3         18.8         6.4         0.32           10100         140.6         19.1         0.12         43         3 <td>9000</td> <td>116.6</td> <td>16.2</td> <td>0.14</td> <td>49</td> <td>2</td> <td>16.2</td> <td>5.4</td> <td>0.28</td>	9000	116.6	16.2	0.14	49	2	16.2	5.4	0.28
9600         129.3         17.7         0.13         46         2         17.7         6.0         0.30           9700         131.5         18.0         0.12         45         2         18.0         6.1         0.30           9800         133.7         18.3         0.12         44         3         18.3         6.2         0.31           9900         136.0         18.5         0.12         44         3         18.5         6.3         0.31           10000         138.3         18.8         0.12         43         3         18.8         6.4         0.32           10100         140.6         19.1         0.12         43         3         19.1         6.5         0.32           10200         142.9         19.4         0.12         42         3         19.4         6.6         0.33           10300         145.3         19.7         0.12         42         3         19.7         6.7         0.33           10400         147.7         19.9         0.11         41         3         19.9         6.8         0.33	9200 9300	120.7 122.8	16.7	0.13 0.13	48 47	2	16.7	5.6	0.28
9700         131.5         18.0         0.12         45         2         18.0         6.1         0.30           9800         133.7         18.3         0.12         44         3         18.3         6.2         0.31           9900         136.0         18.5         0.12         44         3         18.5         6.3         0.31           10000         138.3         18.8         0.12         43         3         18.8         6.4         0.32           10100         140.6         19.1         0.12         43         3         19.1         6.5         0.32           10200         142.9         19.4         0.12         42         3         19.4         6.6         0.33           10300         145.3         19.7         0.12         42         3         19.7         6.7         0.33           10400         147.7         19.9         0.11         41         3         19.9         6.8         0.33	9500	127.1	17.5	0.13	46	2	17.5	5.9	0.30
10100     140.6     19.1     0.12     43     3     19.1     6.5     0.32       10200     142.9     19.4     0.12     42     3     19.4     6.6     0.33       10300     145.3     19.7     0.12     42     3     19.7     6.7     0.33       10400     147.7     19.9     0.11     41     3     19.9     6.8     0.33	9700 9800	131.5 133.7	18.0 18.3	0.12 0.12	45 44	2	18.0 18.3	6.1 6.2	0.30 0.31
10400 147.7 19.9 0.11 41 3 19.9 6.8 0.33	10000	138.3	18.8	0.12	43	3	18.8	6.4	0.32
10500 150.1 20.2 0.11 41 3 20.2 6.9 0.34	10200 10300	142.9 145.3	19.4 19.7	0.12 0.12	42 42		19.4 19.7	6.6 6.7	0.33 0.33
	10500	150.1	20.2	0.11	41	3	20.2	6.9	0.34

CHARGE 8S TABLE F

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	RA WI 1 K		1	IR EMP PCT	A I DENS 1 F	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	М	M	М	M	М	М	М	М
7000	14.0	-13.7	2.1	-2.0	-5.3	4.8	-20.3	21.3	-14	16
7100 7200 7300 7400	14.2 14.3 14.5 14.6	-13.8 -14.0 -14.1 -14.3	2.2 2.3 2.3 2.4	-2.1 -2.1 -2.2 -2.2	-5.4 -5.6 -5.7 -5.8	4.9 5.1 5.2 5.3	-20.8 -21.4 -22.0 -22.5	21.9 22.5 23.1 23.7	-14 -14 -14 -13	15 15 15 15
7500	14.7	-14.4	2.5	-2.3	-6.0	5.4	-23.1	24.4	-13	14
7600 7700 7800 7900	14.9 15.0 15.2 15.3	-14.5 -14.7 -14.8 -14.9	2.6 2.6 2.7 2.8	-2.4 -2.4 -2.5 -2.6	-6.1 -6.3 -6.4 -6.6	5.6 5.7 5.9 6.0	-23.7 -24.3 -24.9 -25.5	25.0 25.6 26.3 26.9	-13 -13 -12 -12	14 14 14 13
8000	15.4	-15.1	2.9	-2.7	-6.7	6.1	-26.1	27.6	-12	13
8100 8200 8300 8400	15.6 15.7 15.8 16.0	-15.2 -15.3 -15.5 -15.6	2.9 3.0 3.1 3.2	-2.7 -2.8 -2.9 -2.9	-6.9 -7.0 -7.2 -7.4	6.3 6.4 6.6 6.7	-26.7 -27.3 -27.9 -28.6	28.2 28.9 29.6 30.3	-11 -11 -11 -10	13 13 12 12
8500	16.1	-15.7	3.3	-3.0	-7.5	6.9	-29.2	30.9	-10	12
8600 8700 8800 8900	16.2 16.4 16.5 16.6	-15.9 -16.0 -16.1 -16.2	3.4 3.5 3.5 3.6	-3.1 -3.2 -3.3 -3.3	-7.7 -7.8 -8.0 -8.2	7.0 7.1 7.3 7.4	-29.9 -30.5 -31.2 -31.8	31.6 32.3 33.0 33.8	-9 -9 -9 -8	11 11 10 10
9000	16.7	-16.4	3.7	-3.4	-8.3	7.6	-32.5	34.5	-8	10
9100 9200 9300 9400	16.9 17.0 17.1 17.2	-16.5 -16.6 -16.7 -16.9	3.8 3.9 4.0 4.1	-3.5 -3.6 -3.7 -3.7	-8.5 -8.7 -8.8 -9.0	7.7 7.9 8.0 8.2	-33.1 -33.8 -34.5 -35.2	35.2 35.9 36.7 37.4	-7 -7 -7 -6	9 9 8 8
9500	17.4	-17.0	4.2	-3.8	-9.2	8.4	-35.9	38.2	-6	8
9600 9700 9800 9900	17.5 17.6 17.7 17.8	-17.1 -17.2 -17.4 -17.5	4.3 4.4 4.5 4.6	-3.9 -4.0 -4.1 -4.2	-9.3 -9.5 -9.7 -9.9	8.5 8.7 8.8 9.0	-36.6 -37.3 -38.0 -38.7	38.9 39.7 40.4 41.2	-5 -5 -4 -4	7 7 6 6
10000	18.0	-17.6	4.7	-4.3	-10.0	9.1	-39.4	41.9	-3	5
10100 10200 10300 10400	18.1 18.2 18.3 18.4	-17.7 -17.8 -17.9 -18.1	4.8 5.0 5.1 5.2	-4.4 -4.5 -4.6 -4.7	-10.2 -10.4 -10.6 -10.7	9.3 9.4 9.6 9.7	-40.2 -40.9 -41.6 -42.4	42.7 43.5 44.2 45.0	-3 -2 -2 -1	5 4 4 3
10500	18.6	-18.2	5.3	-4.8	-10.9	9.8	-43.1	45.8	-1	3

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E V	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH CTIONS
G E	V	FUZE M582	DEC HOB	D ELEV	K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
10500	150.1	20.2	0.11	41	3	20.2	6.9	0.34
10600 10700 10800 10900	152.6 155.1 157.6 160.1	20.5 20.8 21.1 21.4	0.11 0.11 0.11 0.11	40 40 40 39	3 3 3	20.5 20.8 21.1 21.4	7.0 7.1 7.2 7.3	0.34 0.35 0.35 0.36
11000	162.7	21.7	0.10	39	3	21.7	7.4	0.36
11100 11200 11300 11400	165.3 167.9 170.6 173.3	22.0 22.3 22.6 22.9	0.10 0.10 0.10 0.10	38 38 37 37	3 3 3 3	22.0 22.3 22.6 22.9	7.5 7.6 7.7 7.8	0.36 0.37 0.37 0.38
11500	176.0	23.2	0.10	36	3	23.2	7.9	0.38
11600 11700 11800 11900	178.8 181.6 184.4 187.2	23.5 23.8 24.1 24.4	0.10 0.09 0.09 0.09	36 36 35 35	4 4 4 4	23.5 23.8 24.1 24.4	8.1 8.2 8.3 8.4	0.39 0.39 0.40 0.40
12000	190.1	24.7	0.09	35	4	24.7	8.5	0.40
12100 12200 12300 12400	193.0 196.0 198.9 201.9	25.1 25.4 25.7 26.0	0.09 0.09 0.09 0.09	34 34 33 33	4 4 4 4	25.1 25.4 25.7 26.0	8.6 8.7 8.8 9.0	0.41 0.41 0.42 0.42
12500	205.0	26.3	0.09	33	4	26.3	9.1	0.43
12600 12700 12800 12900	208.0 211.1 214.3 217.4	26.7 27.0 27.3 27.7	0.08 0.08 0.08 0.08	32 32 32 31	4 4 4 4	26.7 27.0 27.3 27.7	9.2 9.3 9.4 9.6	0.43 0.43 0.44 0.44
13000	220.6	28.0	0.08	31	5	28.0	9.7	0.45
13100 13200 13300 13400	223.9 227.1 230.4 233.7	28.3 28.7 29.0 29.3	0.08 0.08 0.08 0.08	31 31 30 30	5 5 5 5	28.3 28.7 29.0 29.3	9.8 9.9 10.0 10.2	0.45 0.46 0.46 0.46
13500	237.1	29.7	0.08	30	5	29.7	10.3	0.47
13600 13700 13800 13900	240.5 243.9 247.3 250.8	30.0 30.4 30.7 31.1	0.07 0.07 0.07 0.07	29 29 29 29	5 5 5 5	30.0 30.4 30.7 31.1	10.4 10.5 10.6 10.8	0.47 0.48 0.48 0.48
14000	254.3	31.4	0.07	28	5	31.4	10.9	0.49

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 CHARGE 8S TABLE F CORRECTION FACTORS 1 10 11 12 13 14 15

1	10	11	12	13	14	15	16	17	18	19
R				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NOT	1	IR TEMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	M	М	M	М	М	М	М	М	М	М
10500	18.6	-18.2	5.3	-4.8	-10.9	9.8	-43.1	45.8	-1	3
10600 10700 10800 10900	18.7 18.8 18.9 19.0	-18.3 -18.4 -18.5 -18.6	5.4 5.5 5.7 5.8	-4.9 -5.0 -5.1 -5.2	-11.1 -11.3 -11.4 -11.6	10.0 10.1 10.2 10.3	-43.8 -44.6 -45.3 -46.1	46.5 47.3 48.1 48.8	0 1 1 2	2 2 1 1
11000	19.1	-18.7	5.9	-5.3	-11.8	10.4	-46.9	49.6	2	0
11100 11200 11300 11400	19.2 19.4 19.5 19.6	-18.8 -19.0 -19.1 -19.2	6.0 6.2 6.3 6.4	-5.4 -5.5 -5.6 -5.7	-12.0 -12.1 -12.3 -12.5	10.5 10.6 10.7 10.8	-47.6 -48.4 -49.2 -50.0	50.3 51.1 51.8 52.5	3 3 4 4	0 -1 -1 -2
11500	19.7	-19.3	6.6	-5.8	-12.6	10.9	-50.7	53.3	5	-2
11600 11700 11800 11900	19.8 19.9 20.0 20.1	-19.4 -19.5 -19.6 -19.7	6.7 6.8 7.0 7.1	-5.9 -6.0 -6.1 -6.3	-12.8 -12.9 -13.1 -13.2	10.9 11.0 11.0	-51.5 -52.3 -53.1 -53.9	54.0 54.7 55.4 56.1	5 6 7 7	-3 -3 -4 -4
12000	20.2	-19.8	7.2	-6.4	-13.4	11.1	-54.6	56.9	8	-5
12100 12200 12300 12400	20.3 20.4 20.5 20.7	-19.9 -20.0 -20.1 -20.2	7.4 7.5 7.7 7.8	-6.5 -6.6 -6.7 -6.9	-13.5 -13.6 -13.7 -13.8	11.1 11.1 11.2 11.2	-55.4 -56.2 -57.0 -57.8	57.6 58.3 58.9 59.6	8 9 9 10	-5 -6 -6 -7
12500	20.8	-20.3	8.0	-7 <b>.</b> 0	-13.9	11.2	-58.6	60.3	10	-7
12600 12700 12800 12900	20.9 21.0 21.1 21.2	-20.4 -20.5 -20.6 -20.8	8.1 8.3 8.5 8.6	-7.1 -7.2 -7.4 -7.5	-14.0 -14.1 -14.2 -14.3	11.1 11.1 11.1 11.1	-59.3 -60.1 -60.9 -61.7	61.0 61.7 62.4 63.0	11 11 12 12	-8 -8 -9 -9
13000	21.3	-20.9	8.8	-7 <b>.</b> 6	-14.3	11.0	-62.4	63.7	13	-10
13100 13200 13300 13400	21.4 21.5 21.6 21.7	-21.0 -21.1 -21.2 -21.3	8.9 9.1 9.3 9.4	-7.8 -7.9 -8.0 -8.2	-14.4 -14.4 -14.5 -14.5	11.0 10.9 10.9 10.8	-63.2 -64.0 -64.7 -65.5	64.4 65.0 65.7 66.3	13 14 14 15	-10 -11 -11 -12
13500	21.8	-21.4	9.6	-8.3	-14.5	10.7	-66.2	67.0	15	-12
13600 13700 13800 13900	21.9 22.0 22.1 22.2	-21.5 -21.6 -21.7 -21.8	9.8 9.9 10.1 10.3	-8.4 -8.6 -8.7 -8.8	-14.5 -14.6 -14.6 -14.6	10.7 10.6 10.5 10.4	-67.0 -67.7 -68.5 -69.2	67.6 68.3 68.9 69.6	16 16 17 17	-13 -13 -13 -14
14000	22.3	-21.9	10.4	- <b>9.0</b>	-14.5	10.3	- <b>70.0</b>	70.2	18	-14

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE	DFS PER	DR PER	F O B	TIME OF		MUTH CTIONS
G E	٧	BURST FUZE M582	10 M DEC HOB	1 MIL D ELEV	R K	FLIGHT	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
14000	254.3	31.4	0.07	28	5	31.4	10.9	0.49
14100 14200 14300 14400	257.9 261.5 265.1 268.7	31.8 32.1 32.5 32.8	0.07 0.07 0.07 0.07	28 28 28 27	5666	31.8 32.1 32.5 32.8	11.0 11.1 11.3 11.4	0.49 0.50 0.50 0.51
14500	272.4	33.2	0.07	27	6	33.2	11.5	0.51
14600 14700 14800 14900	276.1 279.9 283.7 287.5	33.6 33.9 34.3 34.7	0.07 0.07 0.06 0.06	27 27 26 26	6666	33.6 33.9 34.3 34.7	11.7 11.8 11.9 12.0	0.51 0.52 0.52 0.53
15000	291.3	35.0	0.06	26	6	35.0	12.2	0.53
15100 15200 15300 15400	295.2 299.2 303.1 307.1	35.4 35.8 36.2 36.5	0.06 0.06 0.06 0.06	26 25 25 25	6 7 7 7	35.4 35.8 36.2 36.5	12.3 12.4 12.6 12.7	0.53 0.54 0.54 0.54
15500	311.1	36.9	0.06	25	7	36.9	12.8	0.55
15600 15700 15800 15900	315.2 319.3 323.5 327.7	37.3 37.7 38.1 38.5	0.06 0.06 0.06 0.06	24 24 24 24	7 7 7 7	37.3 37.7 38.1 38.5	12.9 13.1 13.2 13.3	0.55 0.56 0.56 0.56
16000	331.9	38.9	0.06	24	7	38.9	13.5	0.57
16100 16200 16300 16400	336.1 340.4 344.8 349.2	39.3 39.7 40.1 40.5	0.06 0.06 0.06 0.05	23 23 23 23	7 8 8 8	39.3 39.7 40.1 40.5	13.6 13.8 13.9 14.0	0.57 0.58 0.58 0.58
16500	353.6	40.9	0.05	22	8	40.9	14.2	0.59
16600 16700 16800 16900	358.1 362.6 367.1 371.7	41.3 41.7 42.1 42.5	0.05 0.05 0.05 0.05	22 22 22 22 22	88888	41.3 41.7 42.1 42.5	14.3 14.4 14.6 14.7	0.59 0.59 0.60 0.60
17000	376.4	42.9	0.05	21	9	42.9	14.9	0.61
17100 17200 17300 17400	381.1 385.8 390.6 395.4	43.4 43.8 44.2 44.6	0.05 0.05 0.05 0.05	21 21 21 21	თთთთ	43.4 43.8 44.2 44.6	15.0 15.2 15.3 15.5	0.61 0.61 0.62 0.62
17500	400.3	45.1	0.05	20	9	45.1	15.6	0.63

CHARGE 8S TABLE F

1	10	11	12	13	14	15	16	17	18	19
Ŗ				RANGE	CORREC	TIONS F	OR			
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	1	IR EMP PCT	A I DENS 1 P	I TY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
М	М	M	M	М	М	M	M	М	М	М
14000	22.3	-21.9	10.4	-9.0	-14.5	10.3	-70.0	70.2	18	-14
14100 14200 14300 14400	22.4 22.5 22.6 22.7	-22.0 -22.1 -22.2 -22.3	10.6 10.8 11.0 11.2	-9.1 -9.3 -9.4 -9.6	-14.5 -14.5 -14.5 -14.4	10.2 10.1 10.0 9.9	-70.7 -71.4 -72.2 -72.9	70.9 71.5 72.1 72.8	18 19 19 20	-15 -15 -16 -16
14500	22.8	-22.4	11.3	-9.7	-14.4	9.7	-73.6	73.4	20	-17
14600 14700 14800 14900	22.9 23.0 23.1 23.3	-22.5 -22.6 -22.7 -22.8	11.5 11.7 11.9 12.1	-9.8 -10.0 -10.1 -10.3	-14.3 -14.2 -14.2 -14.1	9.6 9.5 9.3 9.2	-74.4 -75.1 -75.8 -76.5	74.0 74.6 75.3 75.9	20 21 21 22	-17 -17 -18 -18
15000	23.4	-22.9	12.3	-10.4	-14.0	9.1	-77.2	76.5	22	-19
15100 15200 15300 15400	23.5 23.6 23.7 23.8	-23.0 -23.1 -23.2 -23.3	12.5 12.7 12.9 13.1	-10.6 -10.7 -10.9 -11.1	-13.9 -13.8 -13.7 -13.6	8.9 8.7 8.6 8.4	-77.9 -78.6 -79.3 -80.0	77.1 77.7 78.4 79.0	23 23 24 24	-19 -19 -20 -20
15500	23.9	-23.4	13.3	-11.2	-13.5	8.2	-80.7	79.6	24	-21
15600 15700 15800 15900	24.0 24.1 24.2 24.3	-23.5 -23.6 -23.7 -23.8	13.5 13.7 13.9 14.1	-11.4 -11.5 -11.7 -11.8	-13.4 -13.3 -13.1 -13.0	8.1 7.9 7.7 7.5	-81.4 -82.1 -82.8 -83.5	80.2 80.8 81.4 82.0	25 25 26 26	-21 -22 -22 -22
16000	24.4	-23.9	14.3	-12.0	-12.9	7.3	-84.2	82.6	27	-23
16100 16200 16300 16400	24.5 24.6 24.7 24.8	-24.0 -24.1 -24.2 -24.3	14.5 14.7 14.9 15.1	-12.2 -12.3 -12.5 -12.7	-12.7 -12.6 -12.4 -12.2	7.1 6.9 6.6 6.4	-84.9 -85.6 -86.2 -86.9	83.2 83.8 84.4 85.0	27 27 28 28	-23 -24 -24 -24
16500	24.9	-24.5	15.4	-12.8	-12.1	6.2	-87 <b>.</b> 6	85.5	29	-25
16600 16700 16800 16900	25.0 25.1 25.2 25.4	-24.6 -24.7 -24.8 -24.9	15.6 15.8 16.0 16.2	-13.0 -13.2 -13.3 -13.5	-11.9 -11.7 -11.5 -11.3	6.0 5.7 5.5 5.2	-88.3 -89.0 -89.6 -90.3	86.1 86.7 87.3 87.9	29 29 30 30	-25 -26 -26 -26
17000	25.5	-25.0	16.5	-13.7	-11.1	5.0	-91.0	88.4	31	-27
17100 17200 17300 17400	25.6 25.7 25.8 25.9	-25.1 -25.2 -25.3 -25.4	16.7 16.9 17.2 17.4	-13.8 -14.0 -14.2 -14.4	-10.9 -10.7 -10.5 -10.3	4.7 4.5 4.2 4.0	-91.6 -92.3 -93.0 -93.6	89.0 89.6 90.2 90.7	31 31 32 32	-27 -27 -28 -28
17500	26.0	-25.5	17.6	-14.5	-10.0	3.7	-94.3	91.3	33	-28

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

Table   Tab									
A	1	2	3	4	5	6	7	8	9
E         FUZE M582         HOB         M         MIL SEC         MIL MIL MIL           17500         400.3         45.1         0.05         20         9         45.1         15.6         0.63           17600         405.2         45.5         0.05         20         9         45.5         15.8         0.63           17700         410.2         46.0         0.05         20         10         46.0         15.9         0.63           17800         415.3         46.4         0.05         20         10         46.4         16.1         0.64           18000         425.5         47.3         0.05         19         10         47.3         16.4         0.64           18100         430.7         47.8         0.05         19         10         47.8         16.5         0.65           18200         436.0         48.2         0.05         19         10         47.8         16.5         0.65           18300         446.7         49.2         0.05         18         11         49.6         17.2         0.66           18500         457.7         50.1         0.05         18         11         49.6	Α	L	GRAZE	PER	PER	0	OF		
17500         400.3         45.1         0.05         20         9         45.1         15.6         0.63           17600         405.2         45.5         0.05         20         9         45.5         15.8         0.63           17700         410.2         46.0         0.05         20         10         46.0         15.9         0.63           17800         415.3         46.4         0.05         20         10         46.4         16.1         0.64           18000         425.5         47.3         0.05         19         10         47.3         16.4         0.64           18100         430.7         47.8         0.05         19         10         47.8         16.5         0.65           18200         436.0         48.2         0.05         19         10         47.8         16.5         0.65           18300         441.3         48.7         0.05         19         10         47.8         16.5         0.65           18500         452.2         49.6         0.05         18         11         48.7         16.8         0.66           18600         457.7         50.1         0.05	G	V	FUZE	DEC			TETAIT	(CORR	ŌF
17600         405.2         45.5         0.05         20         9         45.5         15.8         0.63           17700         410.2         46.0         0.05         20         10         46.0         15.9         0.63           17800         415.3         46.4         0.05         20         10         46.4         16.1         0.64           18000         425.5         47.3         0.05         19         10         47.3         16.4         0.64           18100         430.7         47.8         0.05         19         10         47.8         16.5         0.65           18200         436.0         48.2         0.05         19         10         47.8         16.5         0.65           18300         441.3         48.7         0.05         19         11         48.7         16.8         0.66           18500         452.2         49.6         0.05         18         11         49.6         17.2         0.66           18500         452.2         49.6         0.05         18         11         50.1         17.3         0.67           18700         463.3         50.6         0.04 <th< th=""><th>М</th><th>MIL</th><th></th><th></th><th>М</th><th>MIL</th><th>SEC</th><th>MIL</th><th>MIL</th></th<>	М	MIL			М	MIL	SEC	MIL	MIL
17700         410. 2         46. 0         0.05         20         10         46. 4         15. 9         0.63           17800         415. 3         46. 4         0.05         20         10         46. 4         16. 1         0.64           18000         420. 4         46. 9         0.05         20         10         46. 9         16. 2         0.64           18000         425. 5         47. 3         0.05         19         10         47. 8         16. 5         0.65           18200         436. 0         48. 2         0.05         19         10         47. 8         16. 5         0.65           18300         441. 3         48. 7         0.05         19         10         48. 2         16. 7         0.65           18400         446. 7         49. 2         0.05         18         11         49. 2         17. 0         0.66           18500         452. 2         49. 6         0.05         18         11         49. 6         17. 2         0.66           18600         457. 5         50. 1         0.04         18         11         50. 6         17. 5         0.67           18800         469. 0         51. 1	17500	400.3	45.1	0.05	20	9	45.1	15.6	0.63
18100         430.7         47.8         0.05         19         10         47.8         16.5         0.65           18200         436.0         48.2         0.05         19         10         48.2         16.7         0.65           18300         441.3         48.7         0.05         19         11         48.7         16.8         0.66           18400         446.7         49.2         0.05         18         11         49.2         17.0         0.66           18500         452.2         49.6         0.05         18         11         49.6         17.2         0.66           18600         457.7         50.1         0.05         18         11         50.1         17.3         0.67           18700         463.3         50.6         0.04         18         11         50.6         17.5         0.67           18800         469.0         51.1         0.04         17         12         51.1         17.7         0.67           18900         480.6         52.1         0.04         17         12         52.6         18.2         0.69           19200         480.6         53.1         0.04 <t< td=""><td>17700 17800</td><td>410.2 415.3</td><td>46.0 46.4</td><td>0.05 0.05</td><td>20 20</td><td>10 10</td><td>46.0 46.4</td><td>15.9 16.1</td><td>0.63 0.64</td></t<>	17700 17800	410.2 415.3	46.0 46.4	0.05 0.05	20 20	10 10	46.0 46.4	15.9 16.1	0.63 0.64
18200         436.0         48.2         0.05         19         10         48.2         16.7         0.65           18300         441.3         48.7         0.05         19         11         48.7         16.8         0.66           18400         446.7         49.2         0.05         18         11         49.6         17.0         0.66           18500         452.2         49.6         0.05         18         11         49.6         17.2         0.66           18600         457.7         50.1         0.05         18         11         50.1         17.3         0.67           18700         463.3         50.6         0.04         18         11         50.6         17.5         0.67           18800         469.0         51.1         0.04         17         12         51.1         17.7         0.67           18900         474.8         51.6         0.04         17         12         51.6         17.9         0.68           19100         486.5         52.6         0.04         17         12         52.6         18.2         0.69           19200         492.5         53.1         0.04 <t< td=""><td>18000</td><td>425.5</td><td>47.3</td><td>0.05</td><td>19</td><td>10</td><td>47.3</td><td>16.4</td><td>0.64</td></t<>	18000	425.5	47.3	0.05	19	10	47.3	16.4	0.64
18600         457.7         50.1         0.05         18         11         50.1         17.3         0.67           18700         463.3         50.6         0.04         18         11         50.6         17.5         0.67           18800         469.0         51.1         0.04         17         12         51.1         17.7         0.67           18900         474.8         51.6         0.04         17         12         51.1         17.7         0.67           19000         480.6         52.1         0.04         17         12         51.6         17.9         0.68           19100         486.5         52.6         0.04         17         12         52.1         18.0         0.68           19200         492.5         53.1         0.04         17         12         52.6         18.2         0.69           19300         498.6         53.6         0.04         16         13         53.6         18.6         0.69           19400         504.8         54.2         0.04         16         13         54.7         19.0         0.70           19500         511.0         54.7         0.04 <t< td=""><td>18200 18300</td><td>436.0 441.3</td><td>48.2 48.7</td><td>0.05 0.05</td><td>19 19</td><td>10 11</td><td>48.2 48.7</td><td>16.7 16.8</td><td>0.65 0.66</td></t<>	18200 18300	436.0 441.3	48.2 48.7	0.05 0.05	19 19	10 11	48.2 48.7	16.7 16.8	0.65 0.66
18700         463.3         50.6         0.04         18         11         50.6         17.5         0.67           18800         469.0         51.1         0.04         17         12         51.1         17.7         0.67           18900         474.8         51.6         0.04         17         12         51.6         17.9         0.68           19000         480.6         52.1         0.04         17         12         52.1         18.0         0.68           19100         486.5         52.6         0.04         17         12         52.6         18.2         0.69           19200         492.5         53.1         0.04         17         12         53.1         18.4         0.69           19300         498.6         53.6         0.04         16         13         53.6         18.6         0.69           19400         504.8         54.2         0.04         16         13         54.2         18.8         0.70           19500         511.0         54.7         0.04         16         13         54.7         19.0         0.70           19600         527.4         55.2         0.04 <t< td=""><td>18500</td><td>452.2</td><td>49.6</td><td>0.05</td><td>18</td><td>11</td><td>49.6</td><td>17.2</td><td>0.66</td></t<>	18500	452.2	49.6	0.05	18	11	49.6	17.2	0.66
19100         486.5         52.6         0.04         17         12         52.6         18.2         0.69           19200         492.5         53.1         0.04         17         12         53.1         18.4         0.69           19300         498.6         53.6         0.04         16         13         53.6         18.6         0.69           19400         504.8         54.2         0.04         16         13         54.2         18.8         0.70           19500         511.0         54.7         0.04         16         13         54.7         19.0         0.70           19600         517.4         55.2         0.04         16         14         55.2         19.2         0.71           19700         523.9         55.8         0.04         15         14         55.8         19.4         0.71           19800         530.5         56.3         0.04         15         14         56.3         19.6         0.72           19900         537.3         56.9         0.04         14         15         57.5         20.1         0.72           20100         551.1         58.1         0.04 <t< td=""><td>18700 18800</td><td>463.3 469.0</td><td>50.6 51.1</td><td>0.04 0.04</td><td>18 17</td><td>11 12</td><td>50.6 51.1</td><td>17.5 17.7</td><td>0.67 0.67</td></t<>	18700 18800	463.3 469.0	50.6 51.1	0.04 0.04	18 17	11 12	50.6 51.1	17.5 17.7	0.67 0.67
19200         492.5         53.1         0.04         17         12         53.1         18.4         0.69           19300         498.6         53.6         0.04         16         13         53.6         18.6         0.69           19400         504.8         54.2         0.04         16         13         54.2         18.8         0.70           19500         511.0         54.7         0.04         16         13         54.7         19.0         0.70           19600         517.4         55.2         0.04         16         14         55.2         19.2         0.71           19700         523.9         55.8         0.04         15         14         55.8         19.4         0.71           19800         530.5         56.3         0.04         15         14         56.3         19.6         0.72           19900         537.3         56.9         0.04         15         14         56.9         19.8         0.72           20000         544.1         57.5         0.04         14         15         57.5         20.1         0.72           20100         551.1         58.1         0.04 <t< td=""><td>19000</td><td>480.6</td><td>52.1</td><td>0.04</td><td>17</td><td>12</td><td>52.1</td><td>18.0</td><td>0.68</td></t<>	19000	480.6	52.1	0.04	17	12	52.1	18.0	0.68
19600         517.4         55.2         0.04         16         14         55.2         19.2         0.71           19700         523.9         55.8         0.04         15         14         55.8         19.4         0.71           19800         530.5         56.3         0.04         15         14         56.3         19.6         0.72           19900         537.3         56.9         0.04         15         14         56.9         19.8         0.72           20000         544.1         57.5         0.04         14         15         57.5         20.1         0.72           20100         551.1         58.1         0.04         14         15         58.1         20.3         0.73           20200         558.2         58.7         0.04         14         16         58.7         20.5         0.73           20300         565.5         59.3         0.04         14         16         59.3         20.8         0.74           20400         573.0         59.9         0.04         13         16         59.9         21.1         0.75           20500         580.6         60.5         0.04 <t< td=""><td>19200 19300</td><td>492.5 498.6</td><td>53.1 53.6</td><td>0.04 0.04</td><td>17 16</td><td>12 13</td><td>53.1 53.6</td><td>18.4 18.6</td><td>0.69 0.69</td></t<>	19200 19300	492.5 498.6	53.1 53.6	0.04 0.04	17 16	12 13	53.1 53.6	18.4 18.6	0.69 0.69
19700         523.9         55.8         0.04         15         14         55.8         19.4         0.71           19800         530.5         56.3         0.04         15         14         56.3         19.6         0.72           19900         537.3         56.9         0.04         15         14         56.9         19.8         0.72           20000         544.1         57.5         0.04         14         15         57.5         20.1         0.72           20100         551.1         58.1         0.04         14         15         58.1         20.3         0.73           20200         558.2         58.7         0.04         14         16         58.7         20.5         0.73           20300         565.5         59.3         0.04         14         16         59.3         20.8         0.74           20400         573.0         59.9         0.04         13         16         59.9         21.1         0.74           20500         580.6         60.5         0.04         13         17         60.5         21.3         0.75           20700         596.5         61.8         0.04 <t< td=""><td>19500</td><td>511.0</td><td>54.7</td><td>0.04</td><td>16</td><td>13</td><td>54.7</td><td>19.0</td><td>0.70</td></t<>	19500	511.0	54.7	0.04	16	13	54.7	19.0	0.70
20100         551.1         58.1         0.04         14         15         58.1         20.3         0.73           20200         558.2         58.7         0.04         14         16         58.7         20.5         0.73           20300         565.5         59.3         0.04         14         16         59.3         20.8         0.74           20400         573.0         59.9         0.04         13         16         59.9         21.1         0.74           20500         580.6         60.5         0.04         13         17         60.5         21.3         0.75           20600         588.4         61.2         0.04         13         17         61.2         21.6         0.75           20700         596.5         61.8         0.04         12         18         61.8         21.9         0.76           20800         604.7         62.5         0.04         12         19         62.5         22.2         0.76           20900         613.3         63.2         0.04         12         19         63.2         22.5         0.77	19700 19800	523.9 530.5	55.8 56.3	0.04 0.04	15 15	14 14	55.8 56.3	19.4 19.6	0.71 0.72
20200         558.2         58.7         0.04         14         16         58.7         20.5         0.73           20300         565.5         59.3         0.04         14         16         59.3         20.8         0.74           20400         573.0         59.9         0.04         13         16         59.9         21.1         0.74           20500         580.6         60.5         0.04         13         17         60.5         21.3         0.75           20600         588.4         61.2         0.04         13         17         61.2         21.6         0.75           20700         596.5         61.8         0.04         12         18         61.8         21.9         0.76           20800         604.7         62.5         0.04         12         19         62.5         22.2         0.76           20900         613.3         63.2         0.04         12         19         63.2         22.5         0.77	20000	544.1	57.5	0.04	14	15	57.5	20.1	0.72
20600     588.4     61.2     0.04     13     17     61.2     21.6     0.75       20700     596.5     61.8     0.04     12     18     61.8     21.9     0.76       20800     604.7     62.5     0.04     12     19     62.5     22.2     0.76       20900     613.3     63.2     0.04     12     19     63.2     22.5     0.77	20200 20300	558.2 565.5	58.7 59.3	0.04 0.04	14 14	16 16	58.7 59.3	20.5 20.8	0.73 0.74
20700         596.5         61.8         0.04         12         18         61.8         21.9         0.76           20800         604.7         62.5         0.04         12         19         62.5         22.2         0.76           20900         613.3         63.2         0.04         12         19         63.2         22.5         0.77	20500	580.6	60.5	0.04	13	17	60.5	21.3	0.75
21000 622.1 63.9 0.04 11 20 63.9 22.9 0.77	20700 20800	596.5 604.7	61.8 62.5	0.04 0.04	12 12	18 19	61.8 62.5	21.9 22.2	0.76 0.76
	21000	622.1	63.9	0.04	11	20	63.9	22.9	0.77

FT 155-AR-1 TABLE F CHARGE 88 CORRECTION FACTORS

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 12 14 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP PROJ WT AIR G **VELOCITY** WIND **DENSITY** OF 1 SQ 1 M/S 1 KNOT 1 PCT PCT (4 SQ STD) DEC HEAD DEC INC DEC INC DEC INC TAIL INC M M M M M M M M M M M 17500 26.0 -25.5 -94.3 91.3 28 17.6 -14.5 -10.0 3.7 33 17.9 -14.7 -14.9 -15.1 -**9.**8 3.4 3.1 2.9 17600 **-95.0** 91.9 26.1 -25.7 33 -29 -9.6 -9.3 26.2 26.3 -25.8 -25.9 33 34 92.5 93.0 93.6 17700 17800 18.1 18.4 -95.6 -29 -96.3-30 26.4 2.6 34 -26.0 18.6 -15.3-9.0 96.9 -30 17900 18000 26.5 **-26.1** 18.9 -15.4 -8.8 2.3 **-97.6** 94.2 34 -30 -15.6 -15.8 -8.5 -8.2 2.0 1.7 -98.294.7 95.3 95.9 35 35 18100 26.7 -26.219.1 -31 -26.3-26.426.8 19.4 19.7 -98.9 18200 -31-8.0 -7.7-99.6 -100.2 26.9 27.0 1.4 -16.035 18300 -31 19.9 -16.296.4 -3218400 18500 27.1 **-26.6** 20.2 -16.4 -7.4 0.8 100.9 97.0 36 -32 97.6 98.1 27.2 27.3 20.5 20.7 -7.1 -6.7 0.5 18600 -26.8 -26.9101.5 102.2 37 37 -16.6 -16.7 -32-33 18700 18800 27.5 -27.021.0 -16.9 0.298.7 37 -6.4102.8 -33 21.3 -17.1 0.5 99.3 -6.1103.4 -33 19000 27.7 21.6 -5.8 -34 -27.2-17.3 -0.8 -104.1 99.8 38 27.8 27.9 28.0 -27.3 -27.4 -27.5 21.9 22.2 22.5 -17.5 -17.7 -17.9 -5.4 -5.1 -4.7 19100 -1.2 104.7 100.4 38 39 39 -34 -1.5-1.9100.4 100.9 101.5 19200 105.4 -34 106.0 39 19400 28.2 22.9 -18.1 -4.4 -2.2106.6 102.0 -35 -35 19500 28.3 -27.723.2 -18.3-4.0-2.6-107.3 102.6 40 23.5 23.9 103.2 19600 28.4 -27.9-18.5 -3.6 -3.0107.9 40 -36 108.5 103.7 19700 28.5 -28.0-18.7-3.2-3.3 40 -36 28.6 28.8 24.3 24.6 -18.9 -19.1 -2.8-2.4104.3 104.9 41 19800 109.2 -28.2-4.1 19900 109.8 -36 20000 28.9 -28.325.0 -19.3 -1.9 -4.5 110.4 105.5 41 -37 25.4 25.9 26.3 20100 29.0 -28.4 -19.5 -1.5 -4.9 111.1 106.1 42 -37 -28.5-28.720200 29.1 -19.8 -1.0-5.4 111.7 106.7 42 -37 -20.0 -20.220300 29.2 **-0.6** -5.8-112.3107.3 42 -38113.0 108.0 29.4 -28.8 20400 26.9 -**0.1** -6.243 -38 20500 27.4 108.6 43 29.5 -28.9-20.40.4 -6.6 113.6 -38 0.9 1.5 2.0 2.6 -7.1 -7.5 -8.0 29.6 29.7 29.8 43 44 44 20600 -**29.0** 28.1 -**20.6** 114.2 109.3 -39 -114.8 | 110.1 -115.4 | 110.9 -29.1-29.328.8 20700  $^{-20.8}_{-21.1}$ -39

20800

20900

21000

29.9

30.1

-29.4

-29.5

-21.3

-21.5

- 39

-39

40

44

45

116.0

116.7

-8.4

-8.9

3.2

112.0

113.4

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L E	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	V	FUZE M582	DEC HOB	D ELEV	K	T E T GITT	DRIFT (CORR TO L)	CW OF 1 KNOT
M	MIL			М	MIL	SEC	MIL	MIL
21000	622.1	63.9	0.04	11	20	63.9	22.9	0.77
21100 21200 21300 21400	631.2 640.6 650.5 660.8	64.7 65.5 66.3 67.1	0.04 0.04 0.04 0.04	11 10 10 9	21 22 23 24	64.7 65.5 66.3 67.1	23.2 23.6 24.0 24.4	0.78 0.78 0.79 0.79
21500	671.6	68.0	0.04	9	26	68.0	24.9	0.80
21600 21700 21800 21900	683.1 695.4 708.6 723.1	68.9 69.9 70.9 72.1	0.04 0.04 0.04 0.03	8 8 7 6	27 29 32 36	68.9 69.9 70.9 72.1	25.4 26.0 26.7 27.4	0.80 0.81 0.82 0.83
22000	739.5	73.4	0.03	6	42	73.4	28.3	0.83
22100 22200	758.9 784.4	74.9 76.9	0.03 0.03	4	53	74.9 76.9	29.4 31.0	0.84 0.85
*****	*****	******	*****	*******	****	*****	******	******
22200 22100	884.7 907.2	84.5 86.2	0.03 0.03	5	51	84.5 86.2	38.9 41.1	0.99 1.00
22000	924.0	87.5	0.03	7	40	87.5	43.0	1.01
21900 21800 21700 21600	937.9 950.1 961.0 970.9	88.5 89.4 90.2 90.9	0.03 0.03 0.03 0.03	8 9 10 10	34 30 27 25	88.5 89.4 90.2 90.9	44.6 46.1 47.6 48.9	1.03 1.04 1.05 1.06
21500	980.2	91.6	0.03	11	23	91.6	50.2	1.07
21400 21300 21200 21100	988.8 996.9 1004.6 1011.9	92.2 92.8 93.3 93.8	0.03 0.03 0.03 0.03	12 13 13 14	22 20 19 18	92.2 92.8 93.3 93.8	51.5 52.7 53.9 55.1	1.08 1.09 1.10 1.11
21000	1018.8	94.3	0.03	15	17	94.3	56.2	1.12
20900 20800 20700 20600	1025.3 1031.6 1037.5 1043.3	94.8 95.2 95.6 96.0	0.03 0.03 0.03 0.03	16 16 17 18	17 16 15 15	94.8 95.2 95.6 96.0	57.4 58.5 59.6 60.7	1.13 1.14 1.15 1.16
20500	1048.8	96.4	0.03	18	14	96.4	61.8	1.17
20400 20300 20200 20100	1054.2 1059.4 1064.4 1069.4	96.7 97.1 97.4 97.7	0.03 0.03 0.03 0.03	19 19 20 21	14 13 13 12	96.7 97.1 97.4 97.7	62.9 64.0 65.1 66.2	1.18 1.19 1.20 1.21
20000	1074.2	98.0	0.03	21	12	98.0	67.4	1.22

FT 155-AR-1 TABLE F CHARGE PART 1 PROJ, HE, M795 FUZE, PD, M739A1 88 CORRECTION FACTORS 12 16 17 18 19 10 11 13 15 RANGE CORRECTIONS FOR R A N MUZZLE **RANGE** AIR TEMP AIR DENSITY PROJ WT G **VELOCITY** WIND OF 1 SQ 1 PCT 1 M/S 1 KNOT 1 PCT (4 SQ STD) DEC INC HEAD DEC INC DEC INC DEC INC TAIL M M M M M M M M М M 21000 30.1 -29.5 3.2 -8.9 116.7 113.4 45 40 -21.5 -9.3 -9.8 -10.3 21100 30.2 -**29.6** -21.8 3.8 117.3 115.9 45 -40 -22.0 -22.221200 21300 30.3 30.4 -29.7 -29.9 4.5 117.9 -40 -40 -41 45 45 -118.5 -22.55.8 -10.746 21400 30.5 -30.0119.1 21500 30.6 -30.1 -22.7 6.6 -11.2 119.7 46 -41 30.8 31.1 31.3 31.5 21600 21700 -23.0 7.4 8.2 -11.7 -12.2 -120.3 -30.246 -41 -23.2-120.9 46 -30.4-41 9.1 10.1 -23.5-23.7-12.721800 -30.5-121.5 47 -42 -30.6 21900 -42 22000 -*30.7* -24.011.1 -13.6 -122.748 -42 22100 22200  $-30.8 \\ -31.0$ 12.2 -42 -43 48 -123.9 -33.3 -30.6 22200 -10.7 -137.4 -46 22100 -33.3-30.511.9 -10.2-137.651 -46

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N	E L F	FS FOR GRAZE BURST	DFS PER 10 M	DR PER 1 MIL	F O R	TIME OF FLIGHT		MUTH
G E	E V	FUZE M582	DEC HOB	D ELEV	K	1210111	DRIFT (CORR TO L)	CW OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
20000	1074.2	98.0	0.03	21	12	98.0	67.4	1.22
19900 19800 19700 19600	1078.9 1083.4 1087.9 1092.3	98.3 98.6 98.9 99.1	0.03 0.03 0.03 0.03	22 22 23 23	12 11 11 11	98.3 98.6 98.9 99.1	68.5 69.6 70.8 71.9	1.23 1.24 1.25 1.26
19500	1096.6	99.4	0.03	24	11	99.4	73.1	1.27
19400 19300 19200 19100	1100.8 1104.9 1108.9 1112.9	99.7 99.9 100.2 100.4	0.03 0.03 0.03 0.03	24 25 25 25	10 10 10 10	99.7 99.9 100.2 100.4	74.2 75.4 76.6 77.8	1.28 1.29 1.30 1.31
19000	1116.8	100.6	0.03	26	9	100.6	79.1	1.32
18900 18800 18700 18600	1120.6 1124.3 1128.0 1131.7	100.9 101.1 101.3 101.5	0.03 0.03 0.03 0.03	26 27 27 28	9999	100.9 101.1 101.3 101.5	80.3 81.5 82.8 84.1	1.33 1.35 1.36 1.37
18500	1135.2	101.7	0.03	28	8	101.7	85.4	1.38
18400 18300 18200 18100	1138.7 1142.2 1145.6 1148.9	102.0 102.2 102.4 102.5	0.03 0.03 0.03 0.03	29 29 30 30	8888	102.0 102.2 102.4 102.5	86.7 88.1 89.4 90.8	1.39 1.40 1.42 1.43
18000	1152.2	102.7	0.03	31	8	102.7	92.2	1.44
17900 17800 17700 17600	1155.5 1158.7 1161.8 1164.9	102.9 103.1 103.3 103.5	0.03 0.03 0.03 0.03	31 31 32 32	7 7 7 7	102.9 103.1 103.3 103.5	93.7 95.2 96.7 98.2	1.45 1.47 1.48 1.49
17500	1168.0	103.6	0.03	33	7	103.6	99.7	1.51
17400 17300 17200 17100	1171.0 1174.0 1176.9 1179.8	103.8 104.0 104.2 104.3	0.03 0.03 0.03 0.03	33 34 34 35	7 7 6 6	103.8 104.0 104.2 104.3	101.3 103.0 104.6 106.4	1.52 1.54 1.55 1.57
17000	1182.7	104.5	0.03	35	6	104.5	108.1	1.58
16900 16800 16700 16600	1185.5 1188.3 1191.0 1193.7	104.7 104.8 105.0 105.1	0.03 0.03 0.03 0.03	36 36 37 37	6666	104.7 104.8 105.0 105.1	109.9 111.7 113.6 115.6	1.60 1.62 1.63 1.65
16500	1196.4	105.3	0.03	38	6	105.3	117.6	1.67

CHARGE 8S TABLE F

1	10	11	12	13	14	15	16	17	18	19
R	10	- 11	12		CORREC				10	13
A N G E	VELO	ZLE CITY M/S	WI	NGE ND NO T	A	IR EMP PCT	A I DENS 1 F	SITY	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
M	M	M	M	M	M	М	M	М	М	М
20000	33.1	-33.3	31.6	-28.3	-2.2	-0.4	-132.4	121.3	50	-45
19900 19800 19700 19600	33.1 33.0 32.9 32.9	-33.3 -33.2 -33.1 -32.9	31.6 31.6 31.6 31.7	-28.2 -28.1 -28.0 -27.8	-2.6 -3.0 -3.4 -3.8	- <b>0.2</b> 0.1 0.3 0.5	-131.8 -131.3 -130.7 -130.2	121.5 121.7 121.8 121.8	50 50 50 50	-45 -45 -45 -45
19500	32.8	-32.8	31.7	-27.7	-4.1	0.7	-129.6	121.6	50	-45
19400 19300 19200 19100	32.7 32.7 32.6 32.5	-32.7 -32.6 -32.4 -32.3	31.6 31.6 31.5 31.4	-27.5 -27.4 -27.2 -27.1	-4.4 -4.7 -4.9 -5.2	0.9 1.1 1.3 1.5	-129.0 -128.4 -127.8 -127.1	121.4 121.2 121.0 120.7	50 50 50 50	-45 -45 -45 -45
19000	32.4	-32.2	31.3	-26.9	-5.4	1.6	-126.5	120.4	50	-45
18900 18800 18700 18600	32.3 32.2 32.1 32.0	-32.0 -31.9 -31.7 -31.6	31.1 31.0 30.9 30.8	-26.7 -26.6 -26.4 -26.2	-5.7 -5.9 -6.1 -6.2	1.8 2.0 2.1 2.3	-125.9 -125.2 -124.6 -123.9	120.1 119.7 119.4 119.0	50 51 51 51	-45 -45 -45 -45
18500	31.8	-31.4	30.7	-26.0	-6.4	2.4	-123.2	118.7	51	-45
18400 18300 18200 18100	31.7 31.6 31.4 31.3	-31.3 -31.1 -30.9 -30.8	30.6 30.5 30.4 30.3	-25.8 -25.6 -25.4 -25.2	-6.6 -6.8 -6.9 -7.1	2.5 2.7 2.8 2.9	-122.5 -121.8 -121.1 -120.4	118.3 117.9 117.5 117.0	51 51 51 51	-45 -46 -46 -46
18000	31.2	-30.6	30.2	-25.0	-7.2	3.0	-119.7	116.6	51	-46
17900 17800 17700 17600	31.0 30.9 30.7 30.5	-30.4 -30.2 -30.1 -29.9	30.2 30.1 30.0 29.9	-24.7 -24.5 -24.3 -24.0	-7.3 -7.5 -7.6 -7.7	3.1 3.2 3.3 3.4	-119.0 -118.3 -117.5 -116.8	116.1 115.7 115.2 114.7	51 51 52 52	-46 -46 -46 -46
17500	30.4	-29.7	29.8	-23.7	-7.8	3.5	-116.0	114.2	52	-47
17400 17300 17200 17100	30.2 30.1 29.9 29.7	-29.5 -29.3 -29.1 -28.9	29.7 29.6 29.5 29.4	-23.5 -23.2 -22.9 -22.6	-7.9 -8.0 -8.1 -8.2	3.6 3.7 3.8 3.8	-115.2 -114.5 -113.7 -112.9	113.6 113.1 112.5 112.0	52 52 52 53	-47 -47 -47 -47
17000	29.5	-28.7	29.2		-8.3	3.9	-112.1	111.4	53	-48
16900 16800 16700 16600	29.4 29.2 29.0 28.8	-28.5 -28.3 -28.1 -27.9	29.1 29.0 28.9 28.8		-8.4 -8.5 -8.6 -8.7	4.0 4.1 4.1 4.2	-111.3 -110.4 -109.6 -108.8	110.8 110.2 109.6 109.0	53 53 54 54	-48 -48 -48 -49
16500	28.6	-27.7	28.7		-8.8	4.3	-107.9	108.4	54	-49

CHARGE 8S

TABLE F BASIC DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9
R A N G	E L E V	FS FOR GRAZE BURST	DFS PER 10 M DEC	DR PER 1 MIL D ELEV	F O R K	TIME OF FLIGHT	AZ I	MUTH CTIONS CW
Ĕ	•	FUZE M582	НОВ				(CORR TO L)	OF 1 KNOT
М	MIL			М	MIL	SEC	MIL	MIL
16500	1196.4	105.3	0.03	38	6	105.3	117.6	1.67
16400 16300 16200 16100	1199.0 1201.6 1204.1 1206.7	105.4 105.6 105.7 105.9	0.03 0.03 0.03 0.03	38 39 39 40	555	105.4 105.6 105.7 105.9	119.6 121.7 123.9 126.2	1.69 1.71 1.73 1.75
16000	1209.2	106.0	0.03	41		106.0	128.5	1.77
15900 15800 15700 15600	1211.6 1214.0 1216.4 1218.7	106.2 106.3 106.5 106.6	0.03 0.03 0.03 0.03	41 42 42 43		106.2 106.3 106.5 106.6	130.9 133.3 135.9 138.5	1.80 1.82 1.84 1.87
15500	1221.1	106.8	0.03	44		106.8	141.2	1.90
15400 15300 15200 15100	1223.3 1225.6 1227.8 1230.0	106.9 107.1 107.2 107.4	0.03 0.03 0.03 0.03	44 45 46 46		106.9 107.1 107.2 107.4	144.1 147.0 150.0 153.2	1.92 1.95 1.98 2.01
15000	1232.1	107.5	0.03	47		107.5	156.5	2.05
14900 14800 14700 14600	1234.2 1236.3 1238.3 1240.3	107.7 107.8 108.0 108.1	0.03 0.03 0.03 0.03	48 49 49 50		107.7 107.8 108.0 108.1	159.9 163.4 167.0 170.9	2.08 2.12 2.16
14500	1242.3	108.3	0.03	51		108.3	174.8	
14400 14300 14200 14100	1244.2 1246.1 1248.0 1249.8	108.5 108.6 108.8 109.0	0.03 0.03 0.03 0.03	52 53 54		108.5 108.6 108.8 109.0	178.9 183.1 187.5 192.1	
14090	1250.0							

FT 155-AR-1 TABLE F CHARGE 88 CORRECTION FACTORS

PART 1 PROJ, HE, M795 FUZE, PD, M739A1 10 11 12 13 14 15 16 17 18 19 RANGE CORRECTIONS FOR R A N G A I R DENS I TY MUZZLE **RANGE** AIR TEMP PROJ WT **VELOCITY** WIND OF 1 SQ 1 M/S 1 KNOT 1 PCT 1 PCT (4 SQ STD) DEC DEC INC HEAD TAIL DEC INC INC DEC INC M M M M M M M M M M M 16500 28.6 -27.7 28.7 -8.8 4.3 107.9 108.4 54 49 4.3 4.4 4.4 4.5 28.4 28.2 28.0 27.8 28.5 28.4 28.3 28.1 -27.5 -27.2 -27.0 -26.8 -8.8 -107.1 -106.2 -105.3 16400 107.8 55 -49 16300 16200 -8.9 -9.0 107.1 106.5 105.8 55 55 -50 -50 16100 56 -51 -**9**.1 16000 27.6 -26.5 28.0 4.5 105.2 56 -51 104.5 103.9 103.2 102.5 -26.3 -26.1 -25.8 -25.6 27.9 27.7 27.6 27.4 -9.2 -9.2 4.6 4.6 4.7 4.7 57 57 58 58 15900 27.4 27.1 -52 -52 15800 26.9 26.7 -53 -53 15700 -9.3 15600 -9.4 15500 -**9.4** 59 26.4 -25.327.3 4.8 101.8 -54 15400 15300 26.2 26.0 -9.5 -9.5 101.1 100.3 4.8 4.9 60 60 -55 -55 27.1 26.9 -25.115200 25.7 26.8 -9.6 4.9 99.6 61 -56 15100 25.5 26.6 **-9.7** 98.9 62 -57 15000 25.2 26.4 -9.7 98.1 63 -58 5.0 26.2 26.0 25.8 25.6 97.3 96.6 95.8 95.0 5.0 5.0 5.0 5.1 24.9 24.7 24.4 -9.8 -9.9 -9.9 14900 -59 14800 14700 -60 -61 24.1 14600 -10.0-*62* 23.8 25.3 14500 -10.094.2 5.1 -63 23.5 23.2 22.9 22.6 25.1 24.9 24.6 24.3 93.4 92.5 91.7 90.8 5.1 5.1 5.2 5.3 14400 -10.1 -64 14300 -10.1-65

-10.1

14200 14100

CHARGE 8S

TABLE G SUPPLEMENTARY DATA

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1

1	2	3	4	5	6	7	8	9	10	11	12	13
R A	E L		PROB	ABLE	ERRO	RS	ANGLE OF	COT ANGLE	TML VEL	МО		S I TE OR
N G	Ē			F	UZE M	582	FALL	OF FALL	VLL			OF SITE
Ē	•	R	D	НВ	ТВ	RB					SITE	SITE
M	MIL	M	M	M	SEC	M	MIL		M/S	M	MIL	MIL
0	0.0	24	0				0		791	0	0.000	0.00
1000 2000 3000 4000	8.3 17.4 27.5 38.6	23 22 21 21	0 1 1 2	1 1 1	0.04 0.04 0.04	28 26 25	9 19 32 47	115.4 52.4 31.7 21.5	739 688 640 594	2 9 22 42	0.000 0.000 0.000 0.000	0.00 0.00 0.00 0.00
5000	51.0	21	2	2	0.04	24	66	15.5	550	71	0.000	0.00
6000 7000 8000 9000	64.7 80.1 97.3 116.6	22 23 25 26	3 3 4 4	2 3 3 4	0.04 0.04 0.04 0.04	23 23 23 23	88 115 147 185	11.6 8.9 6.9 5.5	509 470 435 402	110 163 233 322	-0.003	0.00 0.00 0.00 0.01
10000	138.3	28	5	5	0.04	24	230	4.4	372	437	-0.007	0.01
11000 12000 13000 14000	162.7 190.1 220.6 254.3	31 33 36 38	5 6 6 7	6 7 8 10	0.04 0.04 0.05 0.05	25 26 28 29	283 342 405 471	3.5 2.9 2.4 2.0	349 333 323 317	580 759 979 1244	-0.010 -0.013 -0.014 -0.012	0.01 0.02 0.02 0.02
15000	291.3	41	8	12	0.05	31	537	1.7	314	1559	-0.007	0.02
16000 17000 18000 19000	331.9 376.4 425.5 480.6	43 46 48 51	8 9 10 11	14 17 21 25	0.05 0.06 0.06 0.07	32 34 36 38	605 672 740 808	1.5 1.3 1.1 1.0	314 315 318 321	1931 2369 2885 3498	0.004 0.024 0.056 0.112	
20000	544.1	53	12	30	0.08	40	879	0.9	326	4247	0.218	-0.123
21000 22000	622.1 739.5	56 59	13 15	36 48	0.09 0.11 ****	42 45	956 1054	0.7 0.6	332 339	5216 6750	0.484	-0.270 -0.786
22000 21000	924.0 1018.8	65 65	17 18	67 79	0.16 0.19	51 52	1183 1244	0.4 0.4	347 350	9229 10464		1.95 1.42
20000	1074.2	64	18	87	0.21	53	1279	0.3	351	11148	-1.344	1.27
19000 18000 17000 16000	1116.8 1152.2 1182.7 1209.2	61 58 55	18 17 17 16	93 98 102 106	0.22 0.23 0.24 0.25	52 50 47 44	1307 1331 1353 1374	0.3 0.3 0.2 0.2	352 353 353 354	11644 12033 12347 12603	-1.233 -1.168 -1.125 -1.092	1.19 1.14 1.10 1.08
15000	1232.1		16	110	0.26	41	1394	0.2	354	12811	-1.067	1.05

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE H ROTATION - RANGE

## CORRECTIONS TO RANGE, IN METERS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

CHARGE 8 S

			A	ZIMUTH (	OF TARG	ET - MII	_S						
RANGE METERS	0 3200	200 3000	400 2800	600 2600	800 2400	1000 2200	1200 2000	1400 1800	1600 1600				
1000 2000 3000 4000	0 0 0 0	-2+ -4+ -6+ -7+	-4+ -8+ -11+ -14+	-6+ -11+ -16+ -20+	-8+ -15+ -20+ -25+	-9+ -17+ -24+ -29+	-10+ -19+ -27+ -33+	-11+ -20+ -28+ -35+	-11+ -21+ -29+ -35+				
5000	0	-8+	-16+	-23+	-29+	-34+	-38+	-40+	-41+				
6000 7000 8000 9000	0 0 0 0	-9+ -9+ -10+ -10+	-17+ -19+ -19+ -20+	-25+ -27+ -28+ -29+	-32+ -34+ -36+ -37+	-38+ -40+ -42+ -43+	-42+ -45+ -47+ -48+	-44+ -47+ -50+ -51+	- 45+ - 48+ - 51+ - 52+				
10000	0	-10+	-20+	-29+	-37+	-44+	-49+	-52+	-53+				
11000 12000 13000 14000	0 0 0 0	-10+ -10+ -11+ -11+	-20+ -21+ -21+ -21+	-30+ -30+ -30+ -31+	-38+ -38+ -38+ -39+	-44+ -45+ -45+ -46+	-49+ -50+ -50+ -51+	-52+ -53+ -53+ -54+	-53+ -54+ -54+ -55+				
15000	0	-11+	-21+	-31+	-40+	-47+	-52+	-55+	-56+				
16000 17000 18000 19000	0 0 0	-11+ -11+ -12+ -12+	-22+ -22+ -23+ -24+	-32+ -33+ -33+ -34+	-41+ -42+ -43+ -44+	-48+ -49+ -50+ -51+	-53+ -54+ -56+ -57+	-56+ -58+ -59+ -60+	-57+ -59+ -60+ -62+				
20000	0	-12+	-24+	-35+	-44+	-52+	-58+	-61+	-63+				
21000 22000	0	-12+ -12+	-24+ -23+	-35+ -34+	-45+ -43+	-52+ -50+	-58+ -56+	-62+ -59+	-63+ -61+				
22000 21000	0	****** -7+ -2+	****** -13+ -5+	****** -19+ -7+	****** -25+ -9+	****** -29+ -11+	****** -32+ -12+	****** -34+ -12+	****** -35+ -13+				
20000	0	+1-	+3-	+4-	+5-	+6-	+6-	+7-	+7-				
19000 18000 17000 16000	0 0 0	+4- +8- +11- +14-	+9- +15- +21- +28-	+13- +21- +31- +41-	+16- +27- +39- +52-	+19- +32- +46- +61-	+21- +36- +51- +68-	+22- +38- +54- +72-	+23- +39- +55- +74-				
15000	0	+19-	+37-	+54-	+69-	+81-	+90-	+95-	+97-				
	3200 6400	3400 6200	3600 6000	3800 5800	4000 5600	4200 5400	4400 5200	4600 5000	4800 4800				
		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$											

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.
4. CORRECTIONS ARE FOR 0 DEGREES LATITUDE. FOR OTHER LATITUDES MULTIPLY CORRECTIONS BY THE FACTOR GIVEN BELOW.

LATITUDE (DEG)	10	20	30	40	50	60	70	
MULTIPLY BY	.98	.94	. 87	.77	. 64	. 50	. 34	35

# CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 0 DEGREES LATITUDE

		AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10000	R0.1L	R0.1L	0.0	0.0	0.0	0.0	0.0	L0.1R	L0.1R	
11000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
12000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
13000	R0.1L	R0.1L	R0.1L	0.0	0.0	0.0	L0.1R	L0.1R	L0.1R	
14000	R0.2L	R0.1L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.1R	L0.2R	
15000	R0.2L	R0.2L	R0.1L	R0.1L	0.0	L0.1R	L0.1R	L0.2R	L0.2R	
16000	R0.3L	R0.2L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.2R	L0.3R	
17000	R0.3L	R0.3L	R0.2L	R0.1L	0.0	L0.1R	L0.2R	L0.3R	L0.3R	
18000	R0.4L	R0.4L	R0.3L	R0.2L	0.0	L0.2R	L0.3R	L0.4R	L0.4R	
19000	R0.5L	R0.5L	R0.4L	R0.2L	0.0	L0.2R	L0.4R	L0.5R	L0.5R	
20000	R0.7L	R0.6L	R0.5L	R0.3L	0.0	L0.3R	L0.5R	L0.6R	L0.7R	
21000	R0.9L	R0.8L	R0.6L	R0.3L	0.0	L0.3R	L0.6R	L0.8R	L0.9R	
22000	R1.3L	R1.2L	R0.9L	R0.5L	0.0	L0.5R	L0.9R	L1.2R	L1.3R	
22000	R2.3L	R2.1L	R1.6L	R0.9L	0.0	L0.9R	L1.6R	L2.1R	L2.3R	
21000	R3.0L	R2.8L	R2.1L	R1.2L	0.0	L1.2R	L2.1R	L2.8R	L3.0R	
20000	R3.5L	R3.3L	R2.5L	R1.4L	0.0	L1.4R	L2.5R	L3.3R	L3.5R	
19000	R4.0L	R3.7L	R2.8L	R1.5L	0.0	L1.5R	L2.8R	L3.7R	L4.0R	
18000	R4.5L	R4.1L	R3.2L	R1.7L	0.0	L1.7R	L3.2R	L4.1R	L4.5R	
17000	R4.9L	R4.5L	R3.4L	R1.9L	0.0	L1.9R	L3.4R	L4.5R	L4.9R	
16000	R5.3L	R4.9L	R3.7L	R2.0L	0.0	L2.0R	L3.7R	L4.9R	L5.3R	
15000	R5.6L	R5.2L	R4.0L	R2.2L	0.0	L2.2R	L4.0R	L5.2R	L5.6R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZI	MUTH OF	TARGE 1	r - MILS	i			

### 0 DEGREES LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 88 ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 10 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS				
RANGE METERS	0 6400	400 6000	800 5600	1200 5200	1600 4800	2000 4400	2400 4000	2800 3600	3200 3200	
1000 2000 3000 4000	0.0 0.0 L0.1R L0.1R									
5000	L0.1R									
6000 7000 8000 9000	L0.1R L0.1R L0.1R L0.1R	L0.1R L0.1R L0.1R L0.2R	L0.1R L0.1R L0.1R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.1R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	L0.1R L0.2R L0.2R L0.2R	
10000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.3R	L0.3R	L0.3R	
11000 12000 13000 14000	L0.2R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.2R L0.2R	L0.2R L0.2R L0.3R L0.3R	L0.2R L0.3R L0.3R L0.3R	L0.3R L0.3R L0.4R L0.4R	L0.3R L0.3R L0.4R L0.5R	L0.3R L0.4R L0.4R L0.5R	L0.3R L0.4R L0.4R L0.5R	
15000	L0.2R	L0.2R	L0.2R	L0.3R	L0.4R	L0.5R	L0.5R	L0.6R	L0.6R	
16000 17000 18000 19000	L0.2R L0.1R L0.1R L0.1R	L0.2R L0.2R L0.1R L0.1R	L0.2R L0.2R L0.2R L0.2R	L0.3R L0.3R L0.4R L0.4R	L0.4R L0.5R L0.5R L0.6R	L0.5R L0.6R L0.7R L0.7R	L0.6R L0.7R L0.8R L0.9R	L0.6R L0.7R L0.9R L1.0R	L0.7R L0.8R L0.9R L1.1R	
20000	0.0	0.0	L0.2R	L0.4R	L0.6R	L0.9R	L1.1R	L1.2R	L1.3R	
21000 22000	R0.2L R0.5L	R0.1L R0.4L	L0.1R R0.1L	L0.4R L0.3R	L0.7R L0.8R	L1.0R L1.3R	L1.3R L1.7R	L1.5R L2.0R	L1.5R L2.1R	
22000	******* R1.3L	R1.1L	****** R0.6L	******* L0.1R	L1.0R	******* L1.8R	L2.5R	L3.0R	L3.2R	
21000	R1.9L	R1.7L	R1.1L	R0.1L	L1.0R	L2.2R	L3.1R	L3.8R	L4.0R	
20000	R2.4L	R2.2L	R1.4L	R0.3L	L1.1R	L2.4R	L3.5R	L4.3R	L4.6R	
19000 18000 17000 16000	R2.9L R3.3L R3.7L R4.1L	R2.6L R2.9L R3.3L R3.7L	R1.7L R2.0L R2.3L R2.6L	R0.4L R0.6L R0.7L R0.9L	L1.1R L1.1R L1.1R L1.1R	L2.6R L2.8R L3.0R L3.1R	L3.9R L4.2R L4.5R L4.8R	L4.7R L5.2R L5.6R L5.9R	L5.0R L5.5R L5.9R L6.3R	
15000	R4.4L	R4.0L	R2.8L	R1.0L	L1.1R	L3.2R	L5.0R	L6.2R	L6.7R	
	3200 3200	2800 3600	2400 4000	2000 4400	1600 4800	1200 5200	800 5600	400 6000	0 6400	
		AZIMUTH OF TARGET - MILS								

### 10 DEGREES SOUTH LATITUDE

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 20 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS								
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
3000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
4000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
5000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
6000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
7000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
8000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
9000	L0.3R	L0.3R	L0.3R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	
10000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	
11000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	
12000	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	
13000	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	
14000	L0.5R	L0.5R	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	
15000	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	L0.8R	L0.9R	L0.9R	L0.9R	
16000	L0.6R	L0.6R	L0.6R	L0.7R	L0.8R	L0.9R	L1.0R	L1.0R	L1.1R	
17000	L0.6R	L0.6R	L0.7R	L0.8R	L0.9R	L1.0R	L1.1R	L1.2R	L1.2R	
18000	L0.6R	L0.6R	L0.7R	L0.8R	L1.0R	L1.1R	L1.3R	L1.3R	L1.4R	
19000	L0.6R	L0.6R	L0.8R	L0.9R	L1.1R	L1.3R	L1.4R	L1.5R	L1.6R	
20000	L0.6R	L0.6R	L0.8R	L1.0R	L1.2R	L1.4R	L1.6R	L1.8R	L1.8R	
21000	L0.5R	L0.6R	L0.8R	L1.0R	L1.3R	L1.7R	L1.9R	L2.1R	L2.2R	
22000	L0.4R	L0.4R	L0.7R	L1.1R	L1.6R	L2.0R	L2.4R	L2.7R	L2.8R	
22000	R0.2L	R0.1L	L0.4R	L1.1R	L1.9R	L2.7R	L3.4R	L3.9R	L4.0R	
21000	R0.8L	R0.6L	0.0	L0.9R	L2.0R	L3.1R	L4.0R	L4.6R	L4.9R	
20000	R1.2L	R1.0L	R0.2L	L0.8R	L2.1R	L3.4R	L4.5R	L5.2R	L5.4R	
19000	R1.6L	R1.3L	R0.5L	L0.7R	L2.2R	L3.6R	L4.8R	L5.6R	L5.9R	
18000	R2.0L	R1.7L	R0.8L	L0.6R	L2.2R	L3.8R	L5.1R	L6.1R	L6.4R	
17000	R2.4L	R2.0L	R1.0L	L0.4R	L2.2R	L4.0R	L5.4R	L6.4R	L6.8R	
16000	R2.7L	R2.4L	R1.3L	L0.3R	L2.2R	L4.1R	L5.7R	L6.8R	L7.2R	
15000	R3.1L	R2.7L	R1.5L	L0.2R	L2.2R	L4.2R	L6.0R	L7.1R	L7.5R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
			AZI	MUTH OF	TARGE T	- MILS	i			

20 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 88 ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 30 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGE T	- MILS				
RANGE	0	400	800	1200	1600	2000	2400	2800	3200	
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200	
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
4000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	
5000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
6000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	
7000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	
8000	L0.4R	L0.4R	L0.4R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	
9000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.6R	L0.6R	L0.6R	L0.6R	
10000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.7R	L0.7R	
11000	L0.6R	L0.6R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	
12000	L0.7R	L0.7R	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	
13000	L0.8R	L0.8R	L0.8R	L0.8R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	
14000	L0.8R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	
15000	L0.9R	L0.9R	L1.0R	L1.0R	L1.1R	L1.2R	L1.2R	L1.2R	L1.3R	
16000	L1.0R	L1.0R	L1.0R	L1.1R	L1.2R	L1.3R	L1.4R	L1.4R	L1.4R	
17000	L1.0R	L1.1R	L1.1R	L1.2R	L1.3R	L1.4R	L1.5R	L1.6R	L1.6R	
18000	L1.1R	L1.1R	L1.2R	L1.3R	L1.5R	L1.6R	L1.7R	L1.8R	L1.8R	
19000	L1.2R	L1.2R	L1.3R	L1.4R	L1.6R	L1.8R	L1.9R	L2.0R	L2.0R	
20000	L1.2R	L1.2R	L1.4R	L1.5R	L1.8R	L2.0R	L2.2R	L2.3R	L2.3R	
21000	L1.2R	L1.3R	L1.4R	L1.7R	L2.0R	L2.3R	L2.5R	L2.7R	L2.7R	
22000	L1.2R	L1.3R	L1.5R	L1.9R	L2.3R	L2.7R	L3.1R	L3.3R	L3.4R	
*****	******	*****	*****	*****	******	******	*****	******	*****	
22000	L0.8R	L0.9R	L1.4R	L2.0R	L2.8R	L3.5R	L4.1R	L4.6R	L4.7R	
21000	L0.4R	L0.6R	L1.1R	L2.0R	L3.0R	L4.0R	L4.8R	L5.4R	L5.6R	
20000	0.0	L0.2R	L0.9R	L1.9R	L3.1R	L4.2R	L5.2R	L5.9R	L6.1R	
19000	R0.3L	R0.1L	L0.7R	L1.8R	L3. 1R	L4.5R	L5.6R	L6.4R	L6.6R	
18000	R0.7L	R0.4L	L0.5R	L1.7R	L3. 2R	L4.7R	L5.9R	L6.8R	L7.1R	
17000	R1.0L	R0.7L	L0.2R	L1.6R	L3. 2R	L4.8R	L6.2R	L7.1R	L7.4R	
16000	R1.3L	R1.0L	0.0	L1.5R	L3. 2R	L5.0R	L6.5R	L7.4R	L7.8R	
15000	R1.7L	R1.3L	R0.2L	L1.4R	L3.2R	L5.1R	L6.7R	L7.7R	L8.1R	
	3200	2800	2400	2000	1600	1200	800	400	0	
	3200	3600	4000	4400	4800	5200	5600	6000	6400	
		AZIMUTH OF TARGET - MILS								

### 30 DEGREES SOUTH LATITUDE

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 40 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.4R
6000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
7000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
8000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
9000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
10000	L0.7R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
11000	L0.8R	L0.8R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R
12000	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R
13000	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R
14000	L1.1R	L1.1R	L1.2R	L1.2R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R
15000	L1.2R	L1.3R	L1.3R	L1.3R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R
16000	L1.3R	L1.4R	L1.4R	L1.5R	L1.5R	L1.6R	L1.7R	L1.7R	L1.7R
17000	L1.4R	L1.5R	L1.5R	L1.6R	L1.7R	L1.8R	L1.9R	L1.9R	L1.9R
18000	L1.6R	L1.6R	L1.6R	L1.7R	L1.9R	L2.0R	L2.1R	L2.2R	L2.2R
19000	L1.7R	L1.7R	L1.8R	L1.9R	L2.1R	L2.2R	L2.3R	L2.4R	L2.4R
20000	L1.8R	L1.8R	L1.9R	L2.1R	L2.3R	L2.5R	L2.6R	L2.7R	L2.8R
21000	L1.9R	L1.9R	L2.1R	L2.3R	L2.5R	L2.8R	L3.0R	L3.2R	L3.2R
22000	L2.0R	L2.0R	L2.2R	L2.6R	L2.9R	L3.3R	L3.6R	L3.8R	L3.9R
22000	L1.8R	L1.9R	L2.3R	L2.9R	L3.5R	L4.2R	L4.8R	L5.2R	L5.3R
21000	L1.5R	L1.7R	L2.2R	L2.9R	L3.8R	L4.7R	L5.4R	L5.9R	L6.1R
20000	L1.2R	L1.4R	L2.0R	L2.9R	L4.0R	L5.0R	L5.9R	L6.5R	L6.7R
19000	L1.0R	L1.2R	L1.9R	L2.9R	L4.0R	L5.2R	L6.2R	L6.9R	L7.1R
18000	L0.7R	L0.9R	L1.7R	L2.8R	L4.1R	L5.4R	L6.5R	L7.3R	L7.5R
17000	L0.4R	L0.7R	L1.5R	L2.7R	L4.1R	L5.6R	L6.8R	L7.6R	L7.9R
16000	L0.1R	L0.4R	L1.3R	L2.6R	L4.1R	L5.7R	L7.0R	L7.9R	L8.2R
15000	R0.2L	L0.2R	L1.1R	L2.5R	L4.1R	L5.8R	L7.2R	L8.1R	L8.5R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

40 DEGREES SOUTH LATITUDE

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 88

## ROTATION - AZIMUTH

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 50 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
4000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
5000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
6000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
7000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
8000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
9000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
10000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R	L1.0R	L1.0R	L1.0R
11000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R
12000	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.3R	L1.3R
13000	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R
14000	L1.4R	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
15000	L1.5R	L1.5R	L1.6R	L1.6R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R
16000	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.9R	L2.0R	L2.0R	L2.0R
17000	L1.8R	L1.8R	L1.9R	L1.9R	L2.0R	L2.1R	L2.2R	L2.2R	L2.2R
18000	L2.0R	L2.0R	L2.0R	L2.1R	L2.2R	L2.3R	L2.4R	L2.5R	L2.5R
19000	L2.1R	L2.1R	L2.2R	L2.3R	L2.4R	L2.6R	L2.7R	L2.8R	L2.8R
20000	L2.3R	L2.3R	L2.4R	L2.5R	L2.7R	L2.9R	L3.0R	L3.1R	L3.1R
21000	L2.5R	L2.5R	L2.6R	L2.8R	L3.0R	L3.2R	L3.4R	L3.5R	L3.6R
22000	L2.7R	L2.7R	L2.9R	L3.2R	L3.5R	L3.8R	L4.1R	L4.3R	L4.3R
22000	L2.8R	L2.9R	L3.2R	L3.7R	L4.2R	L4.8R	L5.3R	L5.6R	L5.7R
21000	L2.6R	L2.8R	L3.2R	L3.8R	L4.5R	L5.3R	L5.9R	L6.3R	L6.5R
20000	L2.4R	L2.6R	L3.1R	L3.8R	L4.7R	L5.6R	L6.3R	L6.8R	L7.0R
19000	L2.2R	L2.4R	L3.0R	L3.8R	L4.8R	L5.8R	L6.6R	L7.2R	L7.4R
18000	L2.0R	L2.2R	L2.9R	L3.8R	L4.9R	L6.0R	L6.9R	L7.5R	L7.8R
17000	L1.8R	L2.0R	L2.7R	L3.7R	L4.9R	L6.1R	L7.1R	L7.8R	L8.1R
16000	L1.6R	L1.8R	L2.5R	L3.6R	L4.9R	L6.2R	L7.3R	L8.1R	L8.3R
15000	L1.3R	L1.6R	L2.4R	L3.6R	L4.9R	L6.3R	L7.5R	L8.3R	L8.6R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

### 50 DEGREES SOUTH LATITUDE

## CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

## 60 DEGREES NORTH LATITUDE

		AZIMUTH OF TARGET - MILS							
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
5000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
6000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
7000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
8000	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R	L0.8R
9000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L1.0R
10000	L1.0R	L1.0R	L1.0R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R	L1.1R
11000	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
12000	L1.3R	L1.3R	L1.3R	L1.3R	L1.4R	L1.4R	L1.4R	L1.4R	L1.4R
13000	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.6R	L1.6R	L1.6R
14000	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.8R	L1.8R	L1.8R
15000	L1.8R	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R	L2.0R	L2.0R
16000	L1.9R	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.2R	L2.2R	L2.2R
17000	L2.1R	L2.1R	L2.2R	L2.2R	L2.3R	L2.3R	L2.4R	L2.4R	L2.4R
18000	L2.3R	L2.3R	L2.4R	L2.4R	L2.5R	L2.6R	L2.7R	L2.7R	L2.7R
19000	L2.5R	L2.5R	L2.6R	L2.7R	L2.8R	L2.9R	L2.9R	L3.0R	L3.0R
20000	L2.7R	L2.8R	L2.8R	L2.9R	L3.1R	L3.2R	L3.3R	L3.4R	L3.4R
21000	L3.0R	L3.0R	L3.1R	L3.3R	L3.4R	L3.6R	L3.7R	L3.8R	L3.9R
22000	L3.3R	L3.4R	L3.5R	L3.7R	L4.0R	L4.2R	L4.4R	L4.5R	L4.6R
22000	L3.6R	L3.7R	L4.0R	L4.3R	L4.8R	L5.2R	L5.6R	L5.8R	L5.9R
21000	L3.6R	L3.8R	L4.1R	L4.6R	L5.1R	L5.7R	L6.2R	L6.5R	L6.6R
20000	L3.6R	L3.7R	L4.1R	L4.6R	L5.3R	L6.0R	L6.6R	L7.0R	L7.1R
19000	L3.4R	L3.6R	L4.0R	L4.7R	L5.4R	L6.2R	L6.9R	L7.3R	L7.5R
18000	L3.3R	L3.5R	L4.0R	L4.7R	L5.5R	L6.4R	L7.1R	L7.6R	L7.8R
17000	L3.1R	L3.3R	L3.8R	L4.6R	L5.6R	L6.5R	L7.3R	L7.8R	L8.0R
16000	L3.0R	L3.2R	L3.7R	L4.6R	L5.6R	L6.6R	L7.5R	L8.0R	L8.2R
15000	L2.8R	L3.0R	L3.6R	L4.5R	L5.6R	L6.7R	L7.6R	L8.2R	L8.4R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGET	- MILS	i		

**60 DEGREES SOUTH LATITUDE** 

NOTES - 1. WHEN ENTERING FROM THE TOP USE THE SIGN BEFORE THE NUMBER.
2. WHEN ENTERING FROM THE BOTTOM USE THE SIGN AFTER THE NUMBER.
3. R DENOTES CORRECTION TO THE RIGHT, L TO THE LEFT.
4. AZIMUTH IS MEASURED CLOCKWISE FROM NORTH.

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, PD, M739A1 TABLE I CHARGE 88 ROTATION - AZIMUTH

# CORRECTIONS TO AZIMUTH, IN MILS, TO COMPENSATE FOR THE ROTATION OF THE EARTH

### 70 DEGREES NORTH LATITUDE

			AZI	MUTH OF	TARGET	- MILS			
RANGE	0	400	800	1200	1600	2000	2400	2800	3200
METERS	6400	6000	5600	5200	4800	4400	4000	3600	3200
1000	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R	L0.1R
2000	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R	L0.2R
3000	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R	L0.3R
4000	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R	L0.4R
5000	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R	L0.5R
6000	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R	L0.6R
7000	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R	L0.7R
8000	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R	L0.9R
9000	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R	L1.0R
10000	L1.1R	L1.1R	L1.1R	L1.1R	L1.2R	L1.2R	L1.2R	L1.2R	L1.2R
11000	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R	L1.3R
12000	L1.4R	L1.4R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R	L1.5R
13000	L1.6R	L1.6R	L1.6R	L1.6R	L1.7R	L1.7R	L1.7R	L1.7R	L1.7R
14000	L1.8R	L1.8R	L1.8R	L1.8R	L1.8R	L1.9R	L1.9R	L1.9R	L1.9R
15000	L2.0R	L2.0R	L2.0R	L2.0R	L2.0R	L2.1R	L2.1R	L2.1R	L2.1R
16000	L2.2R	L2.2R	L2.2R	L2.2R	L2.3R	L2.3R	L2.3R	L2.3R	L2.3R
17000	L2.4R	L2.4R	L2.4R	L2.4R	L2.5R	L2.5R	L2.6R	L2.6R	L2.6R
18000	L2.6R	L2.6R	L2.6R	L2.7R	L2.7R	L2.8R	L2.8R	L2.9R	L2.9R
19000	L2.8R	L2.8R	L2.9R	L2.9R	L3.0R	L3.1R	L3.1R	L3.2R	L3.2R
20000	L3.1R	L3.1R	L3.2R	L3.2R	L3.3R	L3.4R	L3.5R	L3.5R	L3.5R
21000	L3.4R	L3.4R	L3.5R	L3.6R	L3.7R	L3.8R	L3.9R	L4.0R	L4.0R
22000	L3.9R	L3.9R	L4.0R	L4.1R	L4.3R	L4.5R	L4.6R	L4.7R	L4.7R
22000	L4.4R	L4.5R	L4.6R	L4.9R	L5.2R	L5.5R	L5.7R	L5.9R	L6.0R
21000	L4.6R	L4.6R	L4.9R	L5.2R	L5.6R	L6.0R	L6.3R	L6.5R	L6.6R
20000	L4.6R	L4.7R	L4.9R	L5.3R	L5.8R	L6.2R	L6.6R	L6.9R	L7.0R
19000	L4.5R	L4.6R	L4.9R	L5.4R	L5.9R	L6.4R	L6.9R	L7.2R	L7.3R
18000	L4.5R	L4.6R	L4.9R	L5.4R	L6.0R	L6.6R	L7.1R	L7.4R	L7.5R
17000	L4.4R	L4.5R	L4.9R	L5.4R	L6.0R	L6.7R	L7.2R	L7.6R	L7.7R
16000	L4.3R	L4.4R	L4.8R	L5.4R	L6.1R	L6.8R	L7.3R	L7.7R	L7.9R
15000	L4.1R	L4.3R	L4.7R	L5.3R	L6.1R	L6.8R	L7.4R	L7.8R	L8.0R
	3200	2800	2400	2000	1600	1200	800	400	0
	3200	3600	4000	4400	4800	5200	5600	6000	6400
			AZ I	MUTH OF	TARGE T	- MILS	i		

## 70 DEGREES SOUTH LATITUDE

**CHARGE** TABLE J FT 155-AR-1 88 **FUZE CORRECTION FACTORS** PROJ, HE, M795 FUZE, MTSQ, M582

PART 1

1 3 4 5 7 8 9 10 11 FS **FUZE CORRECTIONS FOR RANGE** MUZZLE AIR AIR PROJ WT **VELOCITY** WIND **TEMP DENSITY** OF 1 SQ (4 SQ STD) 1 M/S 1 KNOT 1 PCT PCT TAIL DEC DEC INC HEAD INC DEC INC DEC INC 0 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 003 004 005 0.003 0.004 0.005 0.000 0.000 0.006 . 006 2 3 4 0.001 0.009 001 . 009 001 012 006 0.006 0.000 0.000 0.001 001 0.002 002 0.014 014 0.007 0.008 0.009 0.000 0.000 0.000 0.000 0.003 0.004 0.016 0.018 016 6 7 007 0.001 003 008 0.001 001 004 8 0.019 . 020 0.005 009 0.000 .001 005 010 0.010 0.000 0.000 0.006 . 021 0.002 0.021 .002 .006 10 011 0.011 0.000 0.000 0.002 . 002 0.008 .008 0.022 022 012 0.012 013 0.013 014 0.014 0.000 0.000 0.003 002 0.009 009 0.023 024 0.000 0.000 0.011 0.024 0.025 . 025 . 025 12 13 0.003 003 -.011 -.012 003 0.015 0.000 0.000 015 0.004 003 0.015 . 014 0.025 . 026 15 *016* 0.016 0.000 0.000 0.004 004 0.016 -.016 0.025 027 0.019 16 017 0.017 -.001 0.001 0.005 004 -.018 0.026 027 018 0.018 019 0.019 020 0.020 0.001 0.001 0.001 0.005 0.006 0.021 0.023 0.026 0.026 . 027 -.001 005 17 -.020 -. 022 - 024 005 0.02718 -.001 -. 00<u>1</u> 0.007 19 0.025 . 024 0.026 . 027 20 021 0.021 -.*001* 0.001 0.007 007 0.028 . 027 0.025 027 0.022 0.023 0.022 0.023 0.023 21 -.*001* 0.001 0.008 009 0.030 -. *030* 0.024 . 026 -.001 0.001 0.009 010 0.033 . 033 0.023 . 026 -. **001** 0.001 0.011 . 012 0.036 . 036 0.022 24 024 0.024 -.001 0.001 0.012 . 013 0.040 . 040 0.020 . 023 25 025 0.025 0.014 -.001 0.001 . 015 0.044 -.043 0.018 . 021 0.026 027 0.027 0.028 0.028 0.028 26 27 0.001 0.001 -.*001* 0.016 017 0.048 -. **047** 0.016 020 -.001 0.018 0.052 . 050 0.015 28 -. *001* 0.001 0.020 020 0.056 -. **054** 0.013 .016 -. **001** 29 0.001 0.022 021 0.060 . 058 0.011 . 014 30 029 0.029 -.001 0.001 0.024 . 022 0.064 0.009 -.061 . 013 0.030 0.031 0.031 0.032 0.032 0.033 0.001 0.026 0.068 0.007 -.*001* . 024 -.065 . 011 0.001 0.001 0.001 32 -.001 0.027 . 025 0.072 -. **068** 0.005 . 009 0.003 33 -.*001* 0.029026 0.076 072 .007 -. 075 34 -.*001* .027 0.080 0.031 0.001 . 005 35 .034 0.033 -.*001* 0.001 0.032 .028 0.084 -. *079* -.*001* .004 FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

## TABLE J FUZE CORRECTION FACTORS

CHARGE 8S

1	2	3	4	5	6	7	8	9	10	11
FS		-		FUZ	E CORRE	CTIONS	FOR			
	MUZZ VELOC 1 M/	CITY	RANGE WIND 1 KNOT		AIR TEMP 1 PCT		DENS	IR SITY PCT	PROJ OF 1 (4 SQ	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
35	034	0.033	001	0.001	0.032	028	0.084	079	001	004
36 37 38 39	034 035 036 037	0.034 0.035 0.036 0.037	001 001 002 002	0.001 0.002 0.002 0.002	0.034 0.035 0.036 0.038	029 030 031 032	0.088 0.092 0.096 0.100	082 085 089 092	003 004 006 008	002 0.000 0.001 0.003
40	038	0.038	002	0.002	0.039	033	0.104	096	010	0.005
41 42 43 44	039 039 040 041	0.039 0.039 0.040 0.041	002 002 002 002	0.002 0.002 0.002 0.002	0.040 0.041 0.043 0.044	034 034 035 036	0.108 0.112 0.116 0.120	099 102 105 109	011 013 015 016	0.006 0.008 0.009 0.011
45	042	0.042	002	0.003	0.045	036	0.123	112	018	0.012
46 47 48 49	043 044 045 046	0.043 0.044 0.045 0.046	002 003 003 003	0.003 0.003 0.003 0.003	0.046 0.047 0.047 0.048	037 037 038 038	0.127 0.131 0.135 0.138	115 118 122 125	019 021 022 023	0.013 0.015 0.016 0.017
50	046	0.046	003	0.003	0.049	039	0.142	128	025	0.018
51 52 53 54	047 048 049 050	0.047 0.048 0.049 0.050	003 003 004 004	0.004 0.004 0.004 0.004	0.050 0.051 0.051 0.052	039 039 040 040	0.146 0.149 0.153 0.157	131 134 137 140	026 027 029 030	0.020 0.021 0.022 0.023
55	051	0.051	004	0.004	0.053	040	0.160	143	031	0.024
56 57 58 59	052 053 054 055	0.052 0.053 0.054 0.055	004 004 005 005	0.005 0.005 0.005 0.005	0.053 0.054 0.054 0.055	040 041 041 041	0.164 0.167 0.171 0.174	146 149 152 155	032 033 034 035	0.025 0.026 0.027 0.027
60	056	0.056	005	0.006	0.055	041	0.177	158	036	0.028
61 62 63 64	057 058 059 060	0.057 0.058 0.059 0.060	005 005 006 006	0.006 0.006 0.006 0.007	0.056 0.056 0.057 0.057	041 041 041 041	0.181 0.184 0.187 0.191	161 164 167 169	037 038 038 039	0.029 0.030 0.030 0.031
65	061	0.061	006	0.007	0.057	041	0.194	172	040	0.031
66 67 68 69	062 063 064 064	0.062 0.063 0.064 0.065	006 007 007 007	0.007 0.007 0.008 0.008	0.058 0.058 0.058 0.058	041 041 041 041	0.197 0.200 0.204 0.207	175 178 180 183	041 041 042 042	0.032 0.032 0.033 0.033
70	065	0.066	007	0.008	0.058	041	0.210	186	042	0.033

CHARGE TABLE J
8S
FUZE CORRECTION FACTORS

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582

1	2	3	4	5	6	7	8	9	10	11	
FS		FUZE CORRECTIONS FOR									
	MUZZ VELOC 1 M/	) TY		IGE ND (NOT	AI TEN 1 F		DENS	IR SITY PCT	PROJ OF 1 (4 SQ	SQ	
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC	
70	065	0.066	007	0.008	0.058	041	0.210	186	042	0.033	
71 72 73 74	066 067 068 069	0.067 0.068 0.069 0.070	008 008 008 009	0.009 0.009 0.009 0.010	0.059 0.059 0.059 0.059	040 040 040 040	0.213 0.216 0.219 0.222	188 191 193 196	043 043 043 043	0.033 0.034 0.034 0.034	
75	070	0.071	009	0.010	0.059	039	0.225	198	043	0.034	
76 77 78 79	071 072 073 074	0.072 0.073 0.074 0.075	009 009 010 010	0.010 0.011 0.011 0.011	0.059 0.059 0.059 0.058	039 039 039 038	0.227 0.230 0.233 0.235	201 203 205 208	043 043 043 043	0.033 0.033 0.033 0.033	
80	075	0.076	010	0.012	0.058	038	0.238	210	042	0.032	
81 82 83 84	076 077 078 079	0.077 0.078 0.079 0.080	011 011 012 012	0.012 0.012 0.013 0.013	0.058 0.057 0.056 0.056	038 038 037 037	0.240 0.243 0.245 0.247	212 214 217 219	042 041 040 039	0.032 0.031 0.030 0.029	
85	080	0.081	012	0.014	0.055	037	0.248	221	038	0.028	
86 87 88 89	081 082 083 084	0.082 0.082 0.083 0.084	013 013 014 014	0.014 0.015 0.015 0.016	0.053 0.052 0.051 0.049	036 036 035 035	0.250 0.251 0.252 0.253	223 225 226 228	037 035 033 031	0.027 0.025 0.023 0.021	
90	085	0.085	014	0.016	0.046	035	0.254	230	029	0.018	
91 92 93 94	086 087 088 090	0.086 0.087 0.088 0.089	015 016 016 017	0.017 0.017 0.017 0.016	0.044 0.042 0.041 0.039	034 036 039 044	0.254 0.254 0.255 0.255	232 235 241 247	026 023 019 017	0.015 0.012 0.009 0.006	
95	092	0.092	017	0.016	0.039	047	0.258	253	<b>019</b>	0.008	
96 97 98 99	094 096 097 099	0.094 0.096 0.097 0.099	017 016 016 016	0.016 0.016 0.016 0.016	0.042 0.047 0.050 0.053	050 052 054 055	0.265 0.273 0.279 0.283	257 262 266 269	018 017 015 013	0.007 0.006 0.004 0.001	
100	100	0.101	015	0.016	0.054	057	0.287	273	010	002	
101 102 103 104	102 103 105 107	0.102 0.104 0.105 0.107	016 016 016 016	0.016 0.016 0.017 0.018	0.056 0.057 0.058 0.059	058 059 060 061	0.291 0.294 0.298 0.301	276 279 283 286	007 003 0.001 0.008	005 009 013 018	
105	109	0.109	<i>017</i>	0.021	0.060	062	0.305	289	0.015	026	

FT 155-AR-1 PART 1 PROJ, HE, M795 FUZE, MTSQ, M582 CHARGE 8S TABLE J FUZE CORRECTION FACTORS

1	2	3	4	5	6	7	8	9	10	11
FS		FUZE CORRECTIONS FOR								
	MUZZ VELOC 1 M/	TY		IGE ND (NO T	AI TEN 1 F	1P	DEN:	IR SITY PCT	PROJ OF 1 (4 SQ	SQ
	DEC	INC	HEAD	TAIL	DEC	INC	DEC	INC	DEC	INC
105	109	0.109	017	0.021	0.060	062	0.305	289	0.015	026
106 107 108		0.111 0.114	019 021 025	0.025	0.061 0.062 0.063	063 064 063	0.310 0.317	293 298 304	0.027 0.045	036 053 072

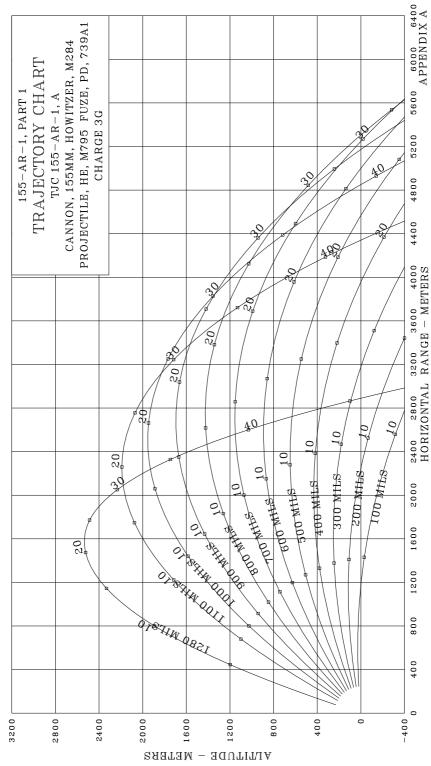
CORRECTIONS TO FUZE SETTING OF FUZE, MTSQ, M582 FOR FUZE, MTSQ, M564

	ETTING	
	M582	CORRECTIONS
FROM	TO	
2.0	3.3	0.0
3.4	6.5	0.1
6.6	9.7	0.2
9.8	12.9	0.3
13.0	15.9	0.4
16.0	19.1	0.5
19.2	22.3	0.6
22.4	25.4	0.7
25.5	28.3	0.8
28.4	31.4	0.9
31.5	34.7	1.0
34.8	37.7	1.1
37.8	40.9	1.2
41.0	44.2	1.3
44.3	47.3	1.4
47.4	50.6	1.5
50.7	53.6	1.6
53.7	56.3	1.7
56.4	59.9	1.8
60.0	62.5	1.9
62.6	66.3	2.0
66.4	68.9	2.1
69.0	72.1	2.2
72.2	74.9	2.3
75.0	79.3	2.4
79.4	84.4	2.5
84.5	86.1	2.6
86.2	87.5	2.7
87.6	90.9	2.8
91.0	94.3	2.9
94.4	97.7	3.0
97.8	100.9	3.1
101.0	104.0	3.2
104.1	107.2	3.3
107.3	109.0	3.4

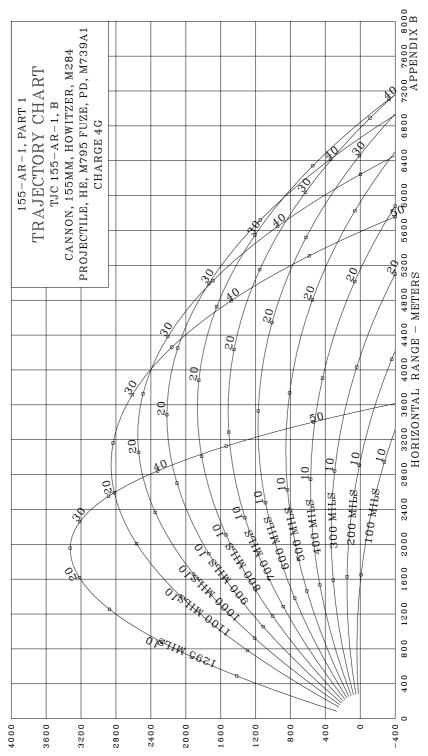
FT 155-AR-1 PART 1

APPENDICES

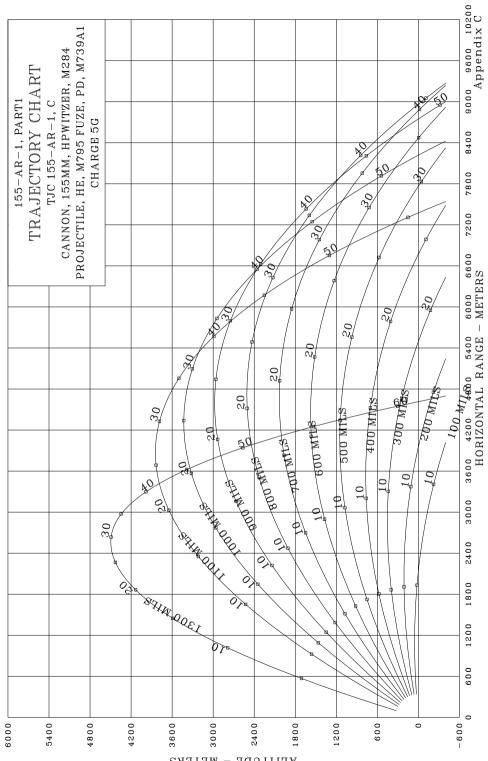
## FT 155-AR-1 PART 1



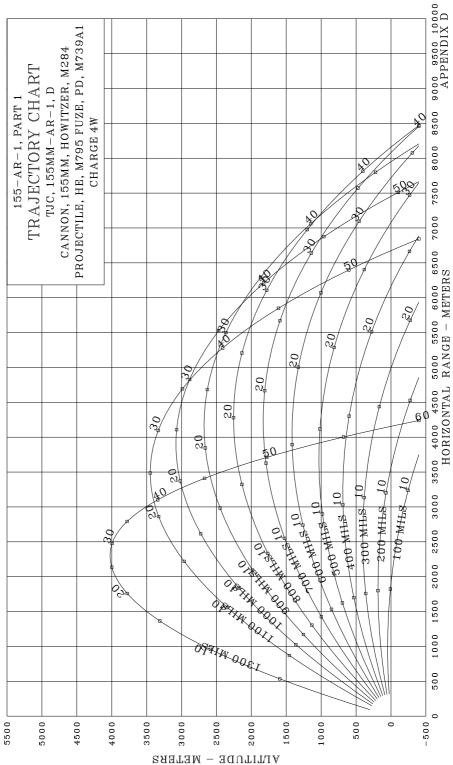
HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1



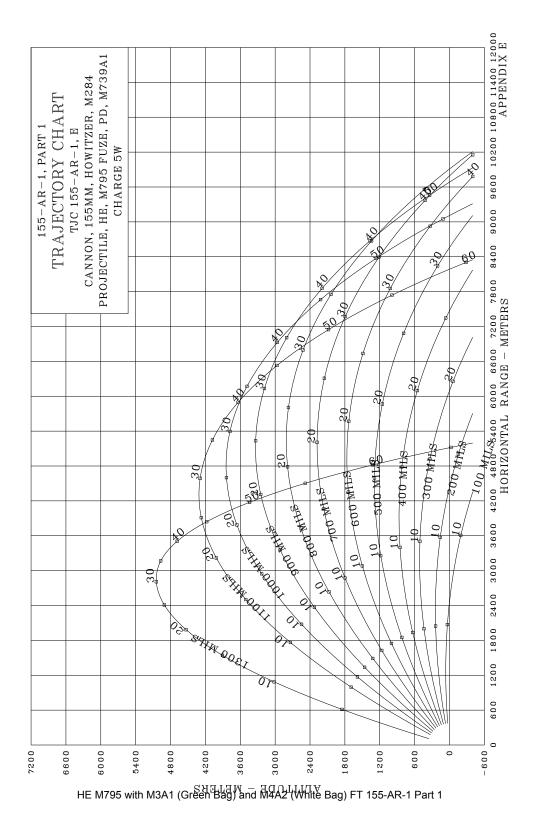
HE M795 with M3A1 (Green Baby Wand WAAZ (White Bag) FT 155-AR-1 Part 1

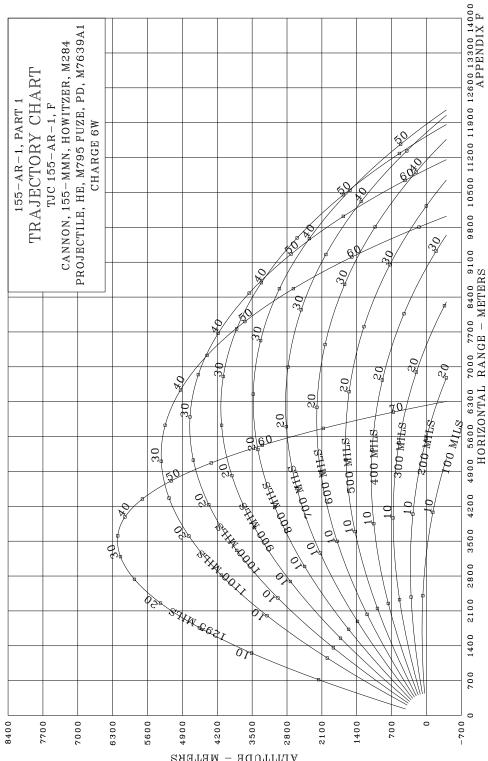


HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1

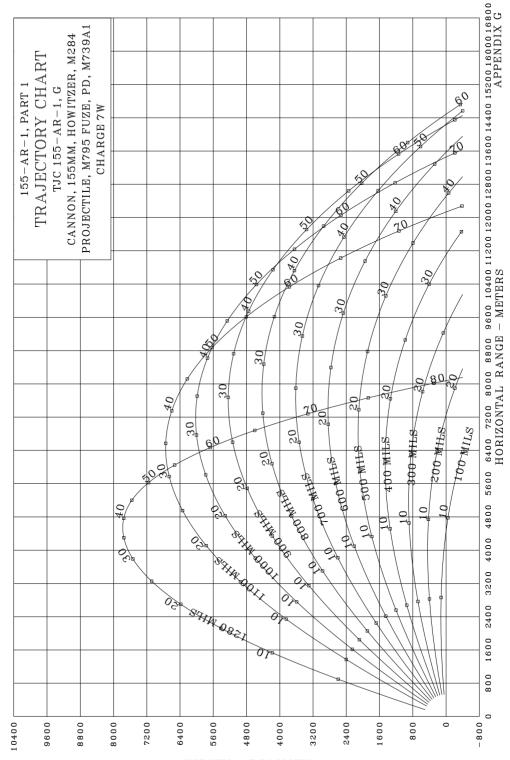


HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1

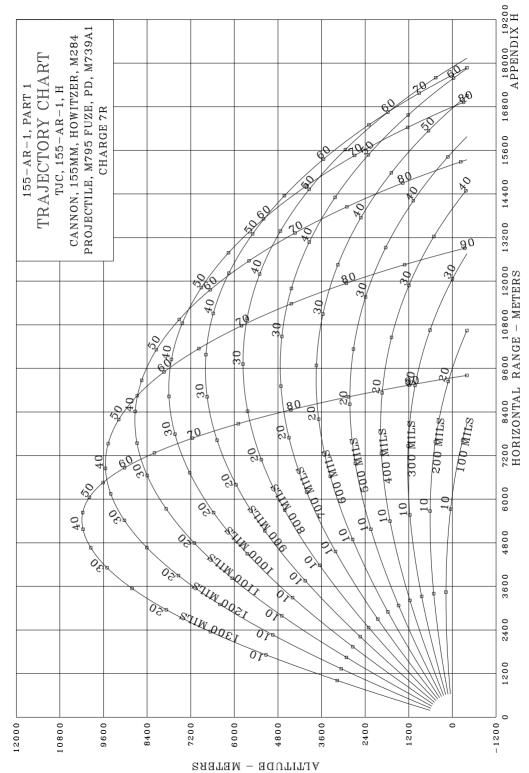




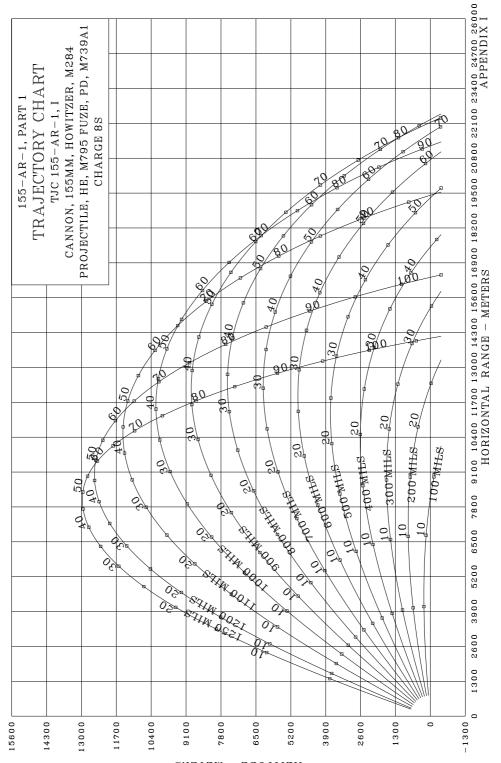
SYBLEW - Bd  $\Pi LILIV$  HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1



 $\label{eq:partition} $$\forall \mathtt{HEMPB} - \mathtt{MELEB2}$$$  HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1



HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1



HE M795 with M3A1 (Green Bag) and M4A2 (White Bag) FT 155-AR-1 Part 1

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