

G-6590107
Ref/acc
C-6225071

Arms Services Repair & Estimate System

File Add Repair Estimate Repair Expedite Repair Inquiry Repair Tools CSR Tools Reports Table Maintenance System Maintenance Help

Repair Inquiry

Repair Number: RE00133027

Serial: C6225071 Model M24 SWS Center Fire
Caliber: 7.62 NATO Produced: 12/20/1988

Repairman:

Verify Repair

High Priority

Status:

Closed 8/22/2007 7:13:25 AM

Address Information

Customer:

Received From

Return To:

Received From

Name: TRANSPORTATION OFFICER

TRANSPORTATION OFFICER

Address 1: XR WOK8 USA ROCK ISL ARSENAL

XR WOK8 USA ROCK ISL ARSENAL

Address 2: BLDG 299 GILLESPIE AVE BECK

PO Box:

BLDG 299 GILLESPIE AVE BECK

PO Box:

City: ROCK ISLAND

ROCK ISLAND

State: IL

Zip Code: 61299

Country: US

State: IL

Zip Code: 61299

Country: US

FFL:

Contact / Condition

Problems

Estimate

History / Status

Shipping / Billing

Contact Information

Phone: NN

Fax:

Email:

Comments:

Received Condition

Fair

Condition
Notes:CSR
Notes:

Accessories Received

Code	Desc	Qty
A007	With Stud	3
A017	Scope Base	1
A057	Frt and Rear Sgt Base	1

Repair Search

Refresh

Close

nagletj

8/22/2007

7:54 AM

CAPS

NUM

INS

SCRL

start

Inbox - Micr...

Calendar - M...

FW: Restrict...

Arms Service...

7:54 AM

6659 0107 (New)

Serial Number: ~~C6225071~~

Model: M24 SWS



RE00133027

SNIPER WEAPON SYSTEM - UNIQUE STATISTICAL INFORMATION

FIREARM SERIAL NUMBER / DATASET NAME: G6590107.___0
FILE DATE AND TIME: 11/30/2007 12:23

THE FOLLOWING DATA IS ALL REPORTED IN UNITS OF INCHES

The Average X Centroid of the Five Target Set:	0.061
The Average Y Centroid of the Five Target Set:	-0.014
The Average Point of Impact of the Five Target Set:	0.062
The Average Mean Radius of the Five Target Set:	0.662
The Distance from POA to Centroid Target #1:	0.228
The Distance from Centroid Target #2 to Centroid Target #1:	0.519
The Distance from Centroid Target #3 to Centroid Target #1:	0.427
The Distance from Centroid Target #4 to Centroid Target #1:	0.164
The Distance from Centroid Target #5 to Centroid Target #1:	0.276

SERIAL NUMBER: G6590107. 0

TARGET NUMBER: 1

FILE DATE: 11/30/2007

FILE TIME: 12:23

X CENTROID: -0.126

Y CENTROID: -0.190

POA TO CENTROID: 0.228

HORZ SPREAD: 1.227

VERT SPREAD: 2.475

GROUP SPREAD: 2.543

MIN RADIUS: 0.436

MAX RADIUS: 1.480

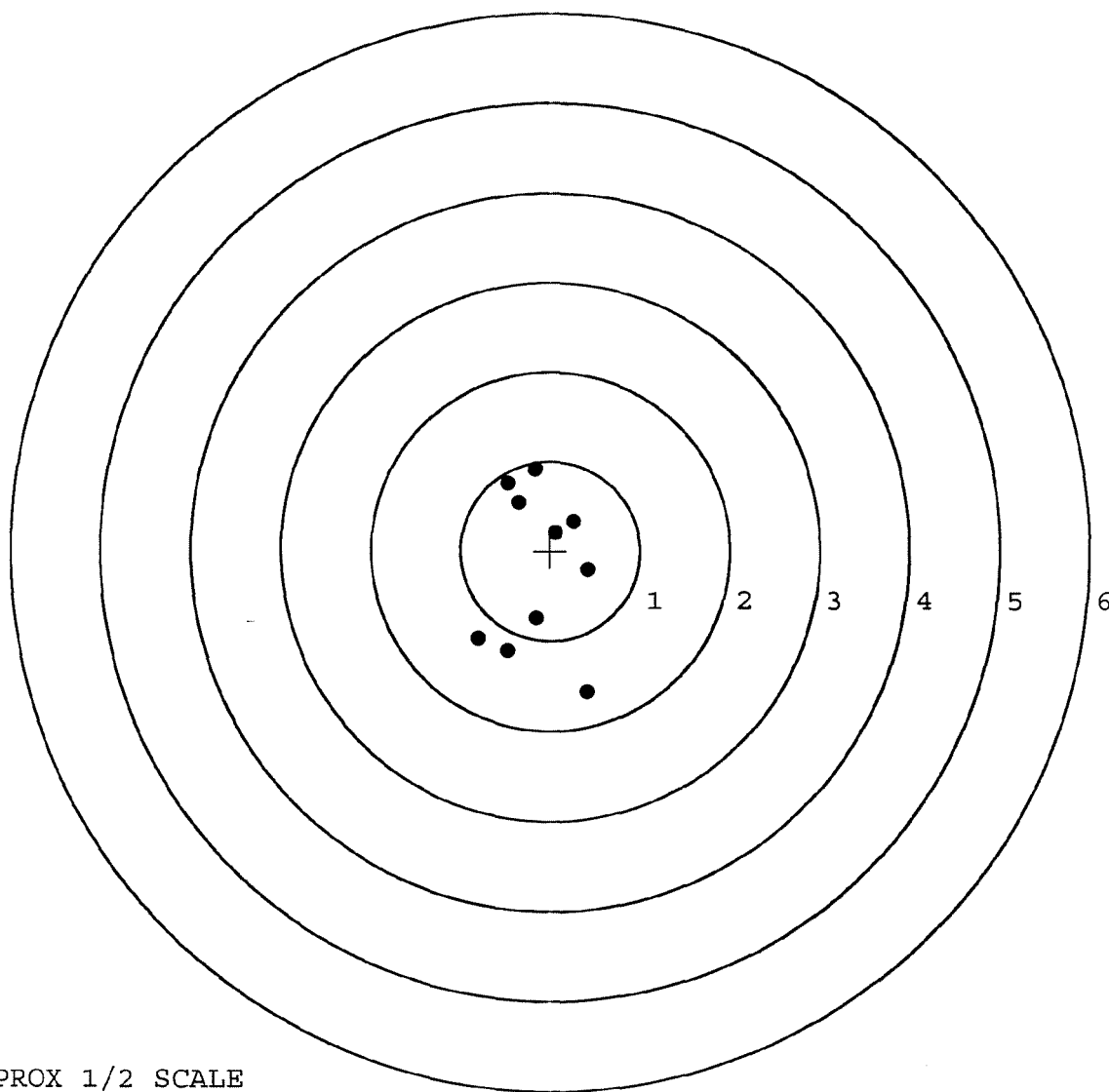
MEAN RADIUS: 0.859

IN 1 IN DIAMETER: 1

IN 2 IN DIAMETER: 6

in 3 IN DIAMETER: 10

POINT#	X	Y
1:	0.417	-1.567
2:	-0.480	-1.118
3:	-0.803	-0.981
4:	-0.154	-0.756
5:	0.424	-0.213
6:	0.063	0.203
7:	0.263	0.330
8:	-0.352	0.541
9:	-0.467	0.755
10:	-0.169	0.908



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590107. __0

TARGET NUMBER: 2

FILE DATE: 11/30/2007

FILE TIME: 12:23

POINT#	X	Y
1:	1.571	0.309
2:	1.397	0.371
3:	0.847	0.911
4:	0.467	-0.461
5:	0.166	-0.700
6:	0.521	-0.921
7:	0.344	-0.762
8:	-0.570	0.061
9:	-0.498	0.188
10:	-0.483	0.406

X CENTROID: 0.376

Y CENTROID: -0.060

POA TO CENTROID: 0.381

HORZ SPREAD: 2.141

VERT SPREAD: 1.832

GROUP SPREAD: 2.155

MIN RADIUS: 0.411

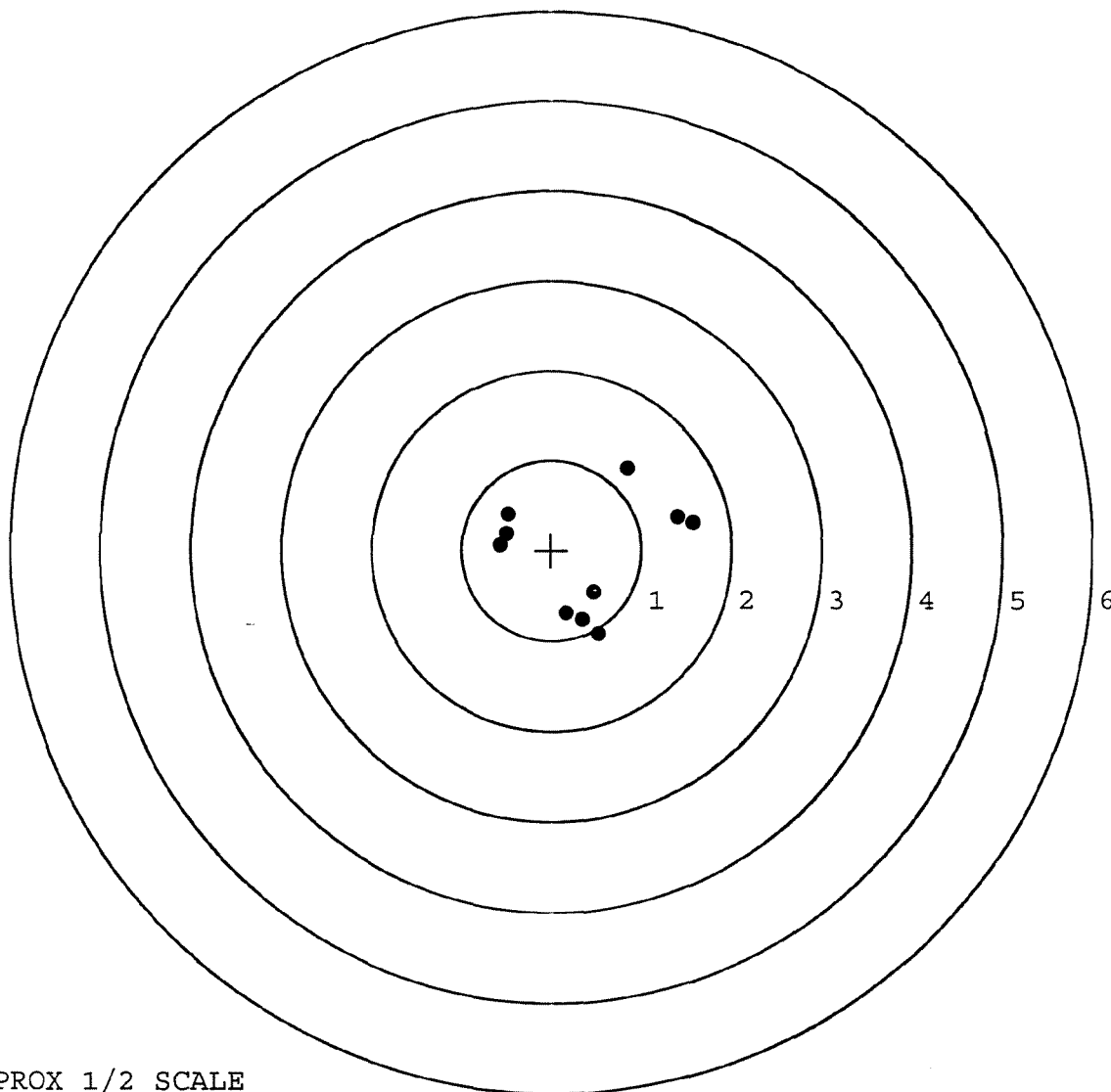
MAX RADIUS: 1.250

MEAN RADIUS: 0.894

IN 1 IN DIAMETER: 1

IN 2 IN DIAMETER: 7

in 3 IN DIAMETER: 10

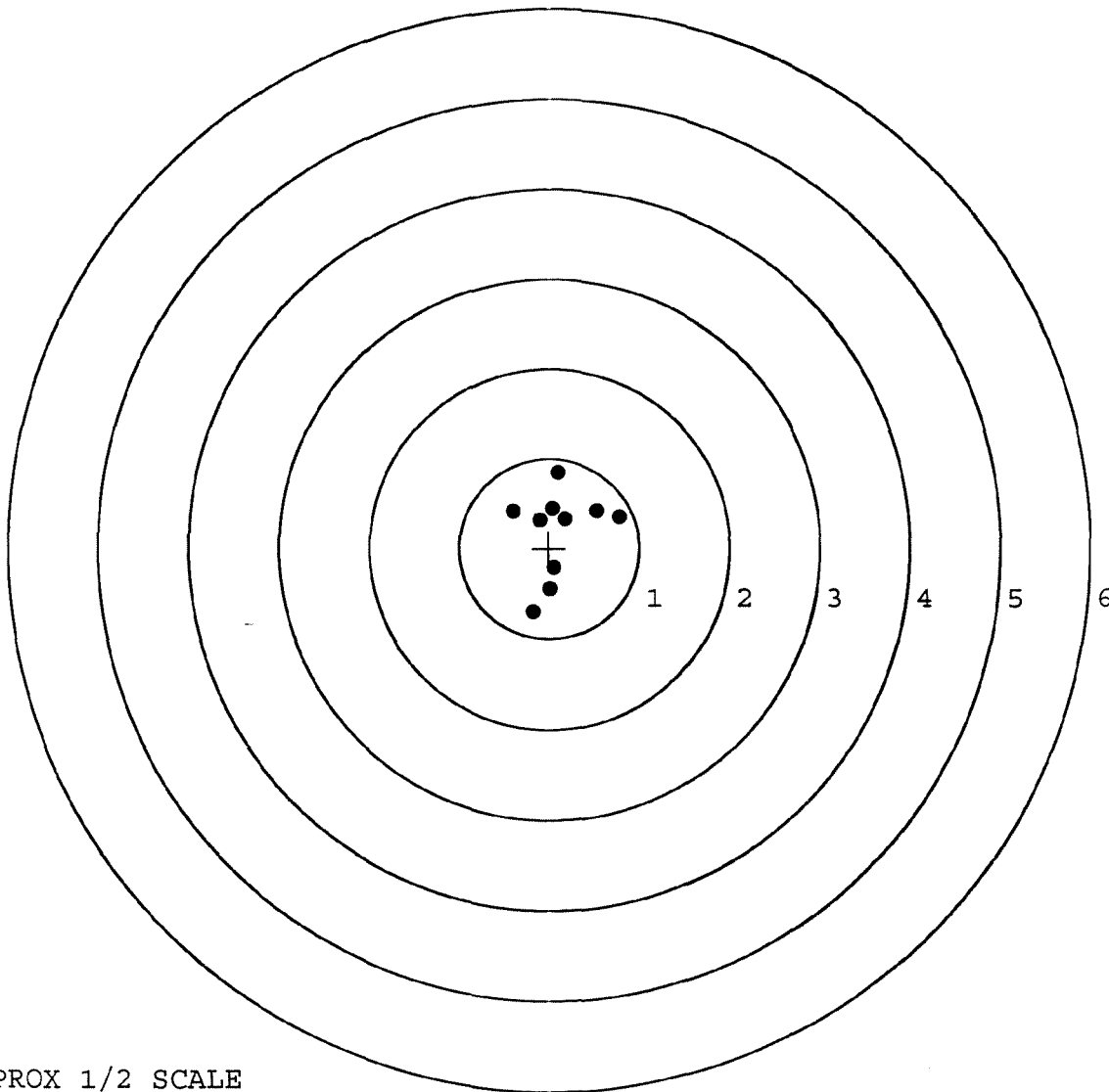


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590107. __0
 TARGET NUMBER: 3
 FILE DATE: 11/30/2007
 FILE TIME: 12:23

POINT#	X	Y
1:	0.776	0.356
2:	0.530	0.425
3:	0.102	0.842
4:	0.179	0.330
5:	-0.404	0.418
6:	-0.112	0.314
7:	0.058	-0.224
8:	0.011	-0.455
9:	-0.186	-0.713
10:	0.035	0.440

X CENTROID: 0.099
 Y CENTROID: 0.173
 POA TO CENTROID: 0.200
 HORZ SPREAD: 1.180
 VERT SPREAD: 1.555
 GROUP SPREAD: 1.581
 MIN RADIUS: 0.176
 MAX RADIUS: 0.931
 MEAN RADIUS: 0.510
 # IN 1 IN DIAMETER: 5
 # IN 2 IN DIAMETER: 10
 # in 3 IN DIAMETER: 10



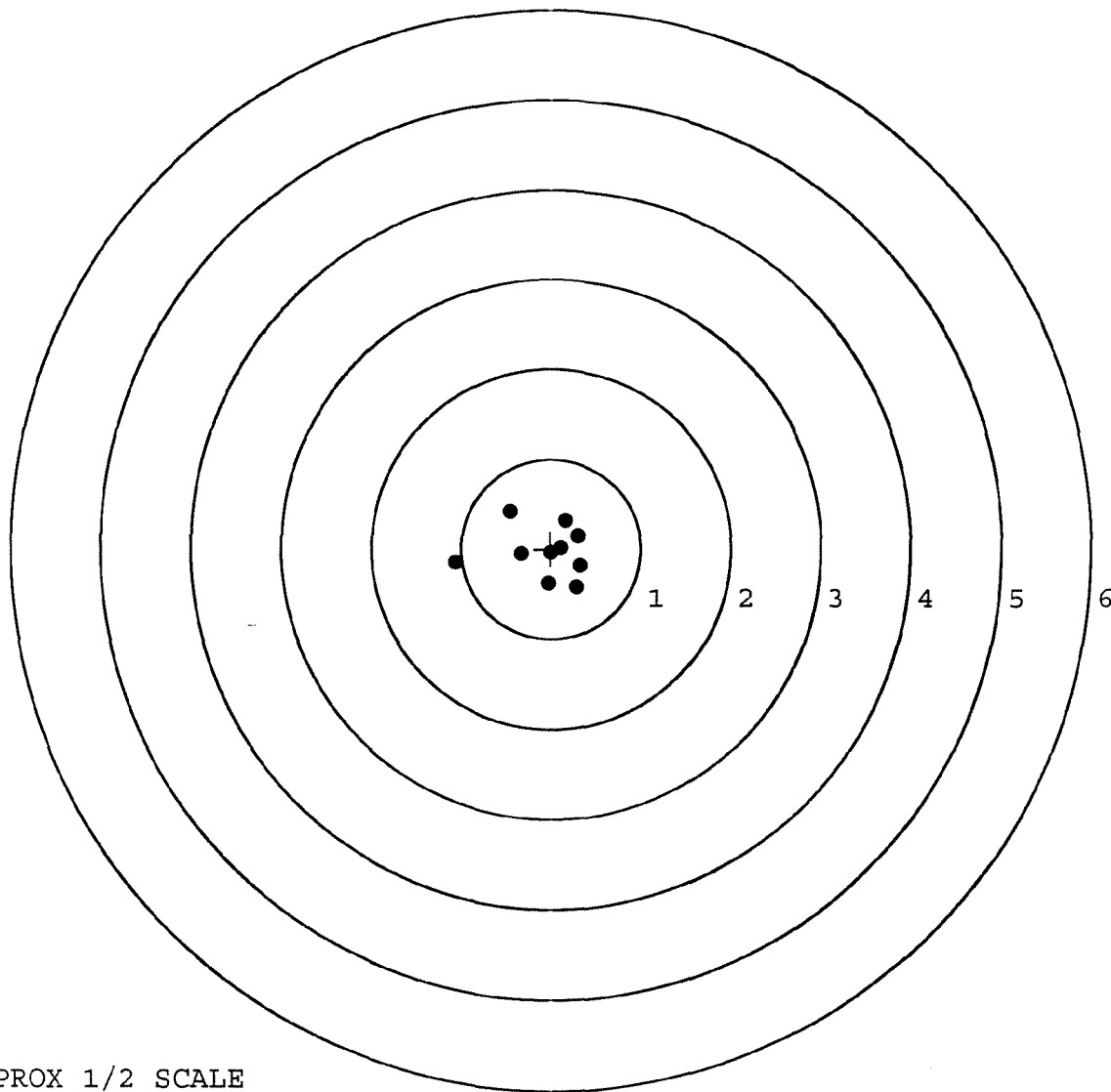
TARGET APPROX 1/2 SCALE

BARBER - M24 0164680

SERIAL NUMBER: G6590107. __0
 TARGET NUMBER: 4
 FILE DATE: 11/30/2007
 FILE TIME: 12:23

POINT#	X	Y
1:	-0.454	0.419
2:	-1.064	-0.156
3:	0.162	0.320
4:	-0.333	-0.058
5:	-0.027	-0.391
6:	0.288	-0.430
7:	0.332	-0.190
8:	0.001	-0.040
9:	0.118	0.015
10:	0.304	0.145

X CENTROID: -0.067
 Y CENTROID: -0.037
 POA TO CENTROID: 0.077
 HORZ SPREAD: 1.396
 VERT SPREAD: 0.849
 GROUP SPREAD: 1.401
 MIN RADIUS: 0.068
 MAX RADIUS: 1.004
 MEAN RADIUS: 0.428
 # IN 1 IN DIAMETER: 7
 # IN 2 IN DIAMETER: 9
 # in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590107. __0

TARGET NUMBER: 5

FILE DATE: 11/30/2007

FILE TIME: 12:23

POINT#	X	Y
1:	0.848	-0.415
2:	0.337	-0.088
3:	0.225	-0.435
4:	-0.469	-0.256
5:	-0.565	-0.717
6:	0.485	0.420
7:	0.259	0.629
8:	-0.057	0.509
9:	-0.284	0.382
10:	-0.558	0.399

X CENTROID: 0.022

Y CENTROID: 0.043

POA TO CENTROID: 0.048

HORZ SPREAD: 1.413

VERT SPREAD: 1.346

GROUP SPREAD: 1.578

MIN RADIUS: 0.341

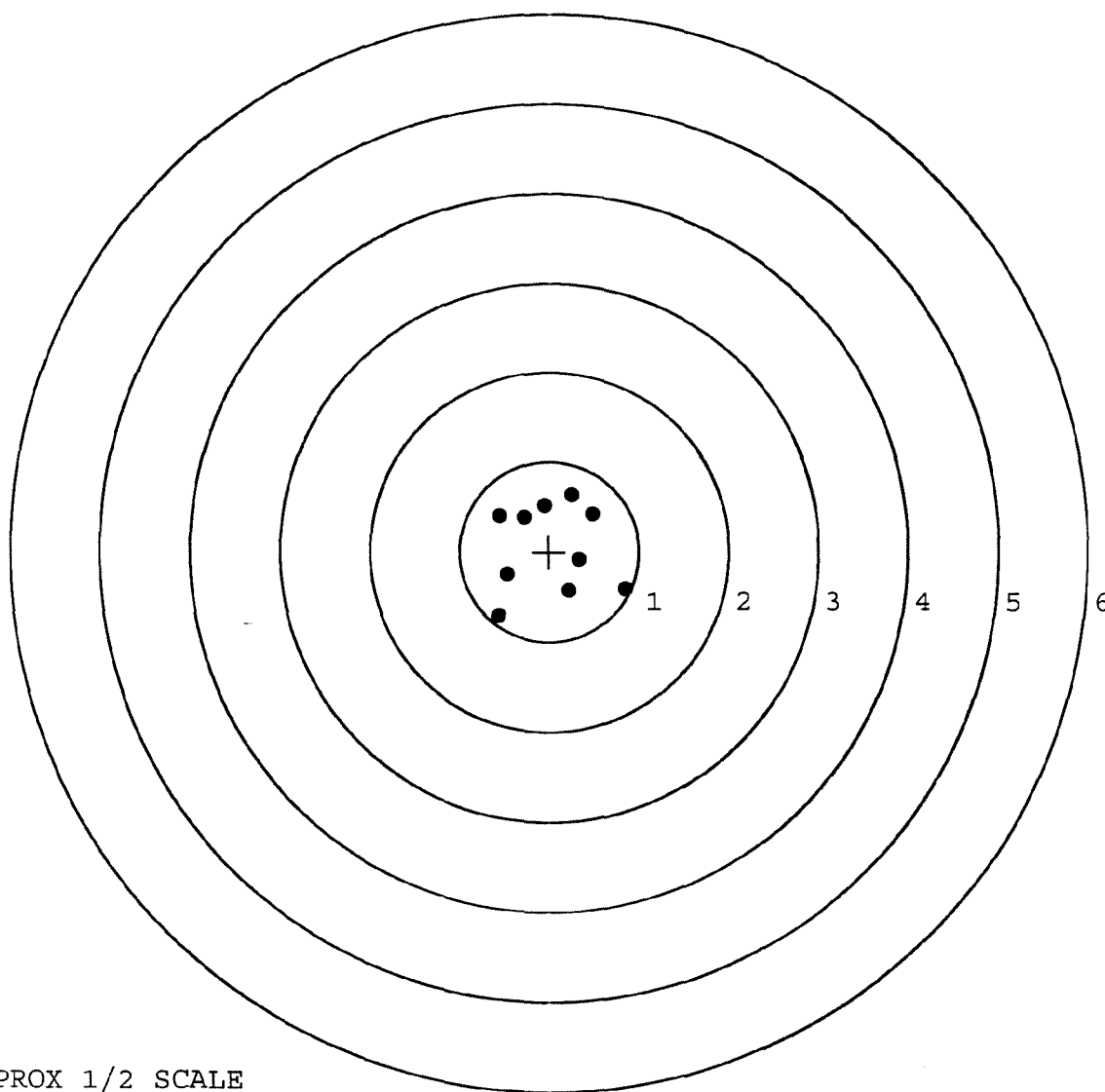
MAX RADIUS: 0.960

MEAN RADIUS: 0.618

IN 1 IN DIAMETER: 3

IN 2 IN DIAMETER: 10

in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

M-24 INSPECTION CHECKLIST
CONTRACT #: DAAE-20-02-C-0149

R & E NUMBER	133027		G6590107NW	
SERIAL NUMBER	G6225071			
LOG-IN DATE	8-22-07			
OPERATION #	OPERATION NAME		DATE	INITIAL
500	DIS-ASSEMBLE GUN		11-5-07	RTZ
505	RE-BARREL			
560	ASSEMBLE			
600	PROOF		11-7-07	TRW
605	CHECK HEADSPACE		11-7-07	TRW
610	DIS-ASSEMBLE GUN		11-08-07	TRW
612	MAGNAFLUX		11-14-07	JB
510	DRILL AND TAP		11-8-07	SD
615	ROLLMARK CALIBER		11-13-07	CW
618	ROTO-BLAST		11-14-07	YJ
620	APPLY COATINGS		11-27-07	FB
625	FINAL ASSEMBLY		11-29-07	RTZ
640	FUNCTION TEST AND	(PASS) FAIL	11-29-07	TRW
650	TARGET	(PASS) FAIL	11-29-07	TRW
	MALFUNCTION	CORRECTION		
	MALFUNCTION	CORRECTION		
	MALFUNCTION	CORRECTION		
	MALFUNCTION	CORRECTION		
670	FINAL INSPECTION		11-29-07	TRW
	A) HEADSPACE	(PASS) FAIL	11-30-07	RTZ
	B) TRIGGER PULL	+/- .5 LBS MIN 2.50 LBS MAX 4.0 LBS	2.17 2.15 2.25 2.25 2.32 11-30-07	RTZ
680	F) SAFETY ON FORCE	2 LBS MIN 10 LBS MAX	6.9 6.9 6.9 11-30-07	RTZ
	G) SAFETY OFF FORCE	2 LBS MIN	2.9 2.9 2.9 11-30-07	RTZ
	I) FIRING PIN INDENT	.020	.021 .021 .021 11-30-07	RTZ
690	PACK		11-30-07	RTZ

Repair
New Barrel**GFM**

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # *06325071*

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		<i>1/5/93</i>	<i>RW</i>
600	Proof		<i>1/5/93</i>	<i>RW</i>
607	Check Headspace		<i>1/5/93</i>	<i>RW</i>
610	Dis-assemble Gun		<i>1/5/93</i>	<i>RW</i>
612	Magnaflux Barrel Action			
	Magnaflux Bolt			
615	Rollmark Caliber			
617	Drill and Tap Sight Holes			
618	Polish Barrel			
620	Apply Coatings (Barrel Action)			
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		<i>1/12/93</i>	<i>RW</i>
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		<i>1/12/93</i>	<i>RW</i>
	C) Inspect Ejector Hole for Chamfer		<i>1/12/93</i>	<i>RW</i>
	D) Oil Firing Pin Ass'y		<i>1/12/93</i>	<i>RW</i>
	E) Adjust Trigger Pull to Min Setting and Stake			

BARBER - M24 0164684							DATE	INIT
op. #	OP. NAME	READINGS						
625 cont.	F) Safety On Force							
	G) Safety Off Force							
	H) Trigger Pull Test & Retainability							
	I) Firing Pin Indent							
	J) Assemble Stock							
	K) Assemble Swivel Studs							
	L) Attach Front and Rear Sight Assemblies							
	M) Iron Sight Alignment							
	N) Detach Front & Rear Sights & place in numbered container							
	O) Attach Scope to Rifle							
	P) Detach & Attach Scope 20 Times							
640	Gallery Target & Test						1/13/93	RW
	A) Time							
	B) Malfunctions							
	C) Pierced Primers							
	D) Optical Clarity of Scope							
645	Inspect for Live Ammo						1/13/93	RW
655	Final Inspection							
	A) Headspace						1/13/93	RW
	B) Trigger Pull	2.16	2.30	2.32	2.25	2.28	1/13/93	RW
	C) Function						1/13/93	RW
660	Pack							

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # 06225071
14 Jan 1993

CENTROIDAL DISTANCES

0 TO	1	.609161
1 TO	2	1.0858
1 TO	3	.767289
1 TO	4	1.05273
1 TO	5	1.8624

1
3 + <----POA
31
5

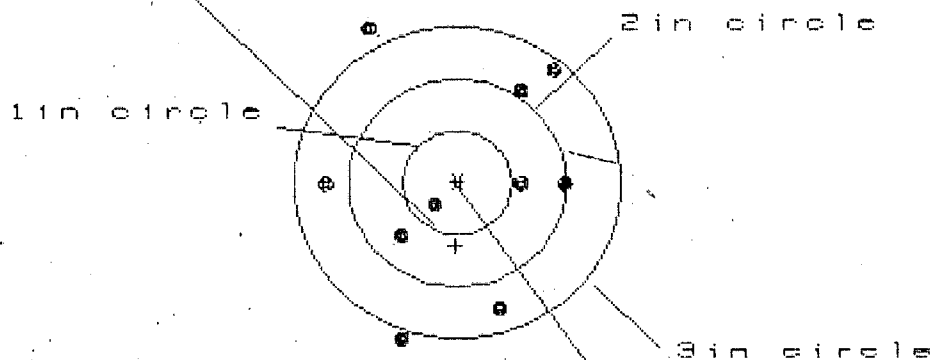
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.456
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.2164
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .504742
THE AMR FOR THIS RIFLE IS: .9744

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/C6225071

CENTERFIRE PATTERNS # 1

POR



OF SHOTS- 10

IN CIR

1in = 1

2in = 4

3in = 5

HS= 2.234

VS= 3.042

GS= 3.056

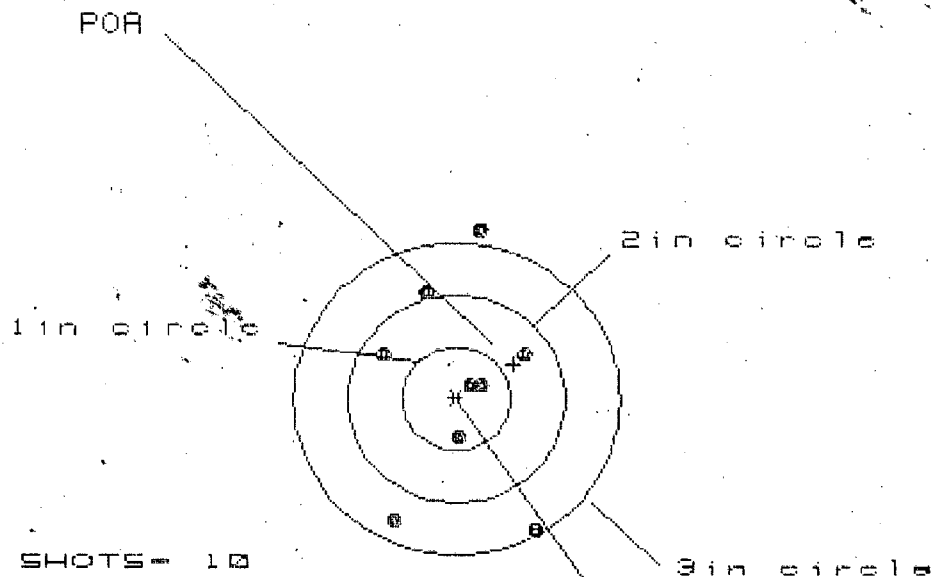
CENTROID #

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.995	.903	.823
MINIMUM X	-1.239	-1.331	-1.411
MAXIMUM Y	1.525	1.274	1.105
MINIMUM Y	-1.517	-1.347	-1.187
CENTROID X	.014	.106	.186
CENTROID Y	.609	.439	.608
POR TO CENTROID in.	.609	.452	.635
MIN RADIUS	.298	.282	.375
MEAN RADIUS	1.093	.998	.931
MAX RADIUS	1.738	1.493	1.411
HORIZONTAL SPREAD	2.234	2.234	2.234
VERTICAL SPREAD	3.042	2.621	2.292
EXTREME SPREAD	3.056	2.979	2.388
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	5		

14 Jan 1933

FILE:/PATTERNING/CENTERFIRE_PATT/06225071

CENTERFIRE PATTERNS # 2



OF SHOTS - 10

IN CIR

1 in = 3

2 in = 5

3 in = 9

HS = 1.394

VS = 2.906

GS = 2.951

CENTROID #

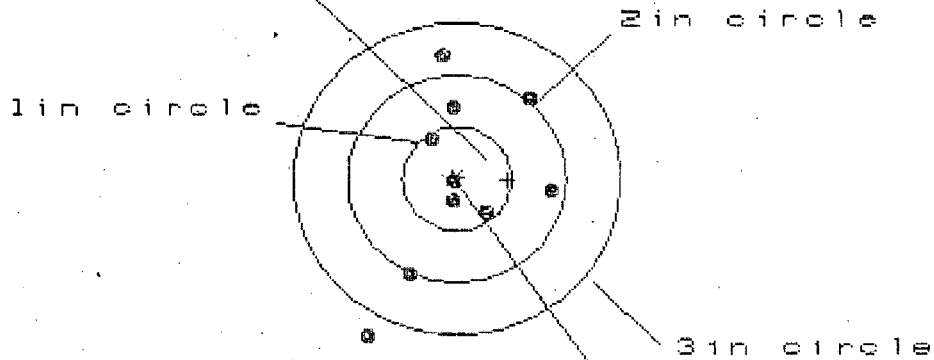
PATTERN #	10	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.764	.792	.718
MINIMUM X	-.630	-.602	-.503
MAXIMUM Y	1.677	1.254	1.123
MINIMUM Y	-1.229	-1.043	-1.099
CENTROID X	-.526	-.554	-.653
CENTROID Y	-.333	-.519	-.389
POA TO CENTROID in	.622	.759	.760
MIN RADIUS	.189	.186	.324
MEAN RADIUS	.909	.829	.765
MAX RADIUS	1.695	1.310	1.187
HORIZONTAL SPREAD	1.394	1.394	1.221
VERTICAL SPREAD	2.906	2.297	2.223
EXTREME SPREAD	2.951	2.519	2.244
NUMBER IN ONE INCH CIRCLE =	3	5	9
NUMBER IN TWO INCH CIRCLE =	5	9	9
NUMBER IN THREE INCH CIRCLE =	9	9	9

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/06225071

CENTERFIRE PATTERNS # 3

POA



OF SHOTS- 10

IN CIR

1in = 4

2in = 6

3in = 9

HS= 1.651

VS= 2.621

GS= 2.700

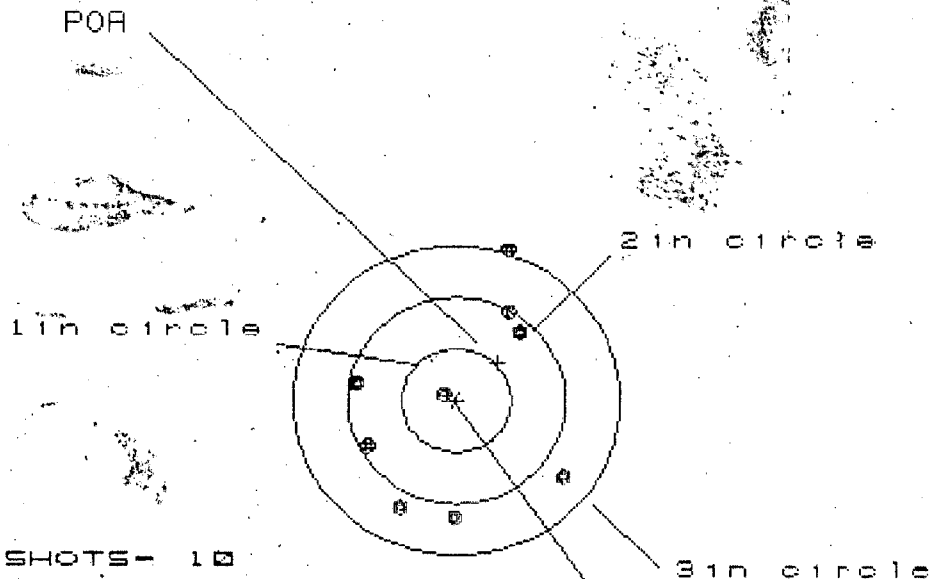
CENTROID *

PATTERN #	10	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.837	.746	.715
MINIMUM X	-.814	-.546	-.577
MAXIMUM Y	1.146	.982	.747
MINIMUM Y	-1.475	-1.094	-.971
CENTROID X	-.468	-.377	-.346
CENTROID Y	.012	.176	.053
POA TO CENTROID in.	.468	.417	.350
MIN RADIUS	.023	.201	.127
MEAN RADIUS	.748	.651	.587
MAX RADIUS	1.685	1.223	1.130
HORIZONTAL SPREAD	1.651	1.292	1.292
VERTICAL SPREAD	2.621	2.076	1.718
EXTREME SPREAD	2.700	2.096	2.028
NUMBER IN ONE INCH CIRCLE =		4	
NUMBER IN TWO INCH CIRCLE =		6	
NUMBER IN THREE INCH CIRCLE =		9	

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/C6225071

CENTERFIRE PATTERNS



OF SHOTS- 10

IN CIR

1 in = 2

2 in = 6

3 in = 10

HS= 1.843

VS= 2.526

GS= 2.680

CENTROID #

PATTERN

	10	9	8
SHOTS (REST OF)	10	9	8
MAXIMUM X	.940	.992	.937
MINIMUM X	-.903	-.851	-.906
MAXIMUM Y	1.425	1.030	.915
MINIMUM Y	-1.101	-.943	-1.058
CENTROID X	-.383	-.435	-.380
CENTROID Y	-.366	-.524	-.409
POA TO CENTROID in.	.530	.681	.558
MIN RADIUS	.095	.181	.115
MEAN RADIUS	.894	.832	.788
MAX RADIUS	1.498	1.141	1.156
HORIZONTAL SPREAD	1.843	1.843	1.843
VERTICAL SPREAD	2.526	1.973	1.973
EXTREME SPREAD	2.680	2.163	2.063
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	10		

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/06225071

CENTERFIRE PATTERNS # 5

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS- 10

IN CIR

1 in - 0

2 in - 4

3 in - 6

HS- 2.369

VS- 3.337

GS- 3.418

PATTERN #	10	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.531	1.456	1.455
MINIMUM X	-0.838	-0.913	-0.914
MAXIMUM Y	1.659	1.473	1.098
MINIMUM Y	-1.678	-1.651	-1.467
CENTROID X	-0.917	-0.842	-0.841
CENTROID Y	-1.004	-0.818	-1.002
POA TO CENTROID in.	1.360	1.174	1.308
MIN RADIUS	.661	.605	.714
MEAN RADIUS	1.228	1.138	1.102
MAX RADIUS	1.808	1.781	1.612
HORIZONTAL SPREAD	2.369	2.369	2.369
VERTICAL SPREAD	3.337	3.124	2.565
EXTREME SPREAD	3.418	3.192	2.868
NUMBER IN ONE INCH CIRCLE =	0		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	6		

[illegible]

CONTRACT # DAAA21-87-C-0086

INTERCHANGEABILITY

GUN SERIAL #

C6225071

OP. #	OP. NAME	READINGS	DATE	INITIAL
575 & 580	Assemble Action and Stock	QUALITY AUDIT	9 12 88	FB
600	Proof		9 19 88	RW
607	Check Headspace		9 19 88	RW
610	Dis-assemble Gun		9 19 88	RW
612	Magnaflux Barrel Action		9-22-88	Pf.
	Magnaflux Bolt		9-22-88	Pf.
615	Rollmark Caliber		10/12	WC
617	Drill and Tap Sight Holes		11/12	FB
618	Polish Barrel		10/20	WT
620	Apply Coatings (Barrel Action)		10-31-88	TJA
	Apply Coating (Bolt)		10-31-88	TJA
625	Final Assembly			
	A) Clean inside of Bolt Assembly		11/15/88	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		11/15/88	RW
	C) Inspect Ejector Hole for Chamfer		11/15/88	RW
	D) Oil Firing Pin Ass'y		11/15/88	RW
	E) Adjust Trigger Pull to Min Setting and Stake		11/15/88	JD

op. #	OP. NAME	READINGS					DATE	INITIAL
625 cont.	F) Safety On Force	5	5	5			16 NOV 88	JS
	G) Safety Off Force	4	3	3			16 NOV 88	JS
	H) Trigger Pull Test & Retainability						15 NOV 88	JS
	I) Firing Pin Indent	.021	.0205	.021			16 NOV 88	JS
	J) Assemble Stock						11/12/88	RW
	K) Assemble Swivel Studs						6 Dec 88	JS
	L) Attach Front and Rear Sight Assemblies						12/6/88	RW
	M) Iron Sight Alignment						12/6/88	RW
	N) Detach Front & Rear Sights & place in numbered container						12/6/88	RW
	O) Attach Scope to Rifle						11/28/88	RW
	P) Detach & Attach Scope 20 Times						11/28/88	WB
640	Gallery Target & Test	58 R	96 L				12/5/88	DH
	A) Time							
	B) Malfunctions							
	C) Pierced Primers							
	D) Optical Clarity of Scope						12/5/88	DH
645	Inspect for Live Ammo						12/5/88	DH
655	Final Inspection							
	A) Headspace						6 Dec 88	JS
	B) Trigger Pull	275	263	263	248	256	6 Dec 88	JS
	C) Function						6 Dec 88	JS
660	Pack						12/15/88	RW

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#

3.00# ± .75#

4.00# ± 1.00#

SERIAL NO. C625071DATE 15 NOV 88TESTER JS

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.27	2.22	2.37	2.75	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.14	2.20	2.27	2.63	
PULL #3	2.36	2.15	2.30	2.63	
PULL #4	2.30	2.20	2.28	2.48	
PULL #5	2.25	2.16	2.29	2.56	
TOTAL	11.32	10.93	11.52	13.05	
AVG.	2.264	2.186	2.304	2.61	

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.29	3.26		
PULL #2	3.31	3.22		
PULL #3	3.27	3.20		
PULL #4	3.11	3.25		
PULL #5	3.22	3.26		
TOTAL	16.20	16.19		
AVG.	3.24	3.238		

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.18	4.24		4.13
PULL #2	4.23	4.23		4.13
PULL #3	4.25	4.22		4.12
PULL #4	4.19	4.24		4.20
PULL #5	4.24	4.22		4.21
TOTAL	21.09	21.12		20.89
AVG.	4.218	4.224		4.178

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6225071

CENTROIDAL DISTANCES

0 TO	1	.642966
1 TO	2	.681534
1 TO	3	.648991
1 TO	4	.149372
1 TO	5	1.02532

$\begin{matrix} 5 \\ 3 \\ + \end{matrix} \begin{matrix} 4 \\ 2 \end{matrix} \leftarrow \text{FOR}$

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .5254
 THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .2688
 THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .590168
 THE AMR FOR THIS RIFLE IS: .9078

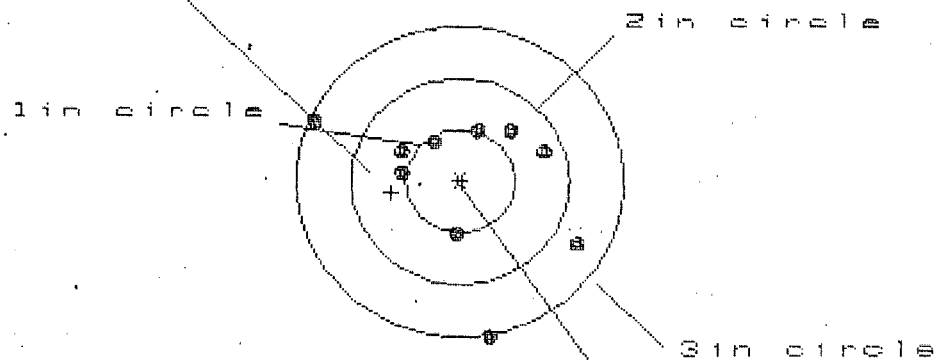
6 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/C8225071

CENTERFIRE PATTERNS

#. 1

POA



OF SHOTS - 10

IN CIR

1in = 2

2in = 7

3in = 9

HM = 2.402

VS = 2.087

GS = 2.681

PATTERN # :

10

SHOTS (BEST OF) :

10

9

8

MAXIMUM X :

1.041

1.066

.897

MINIMUM X :

-1.381

-1.356

-.716

MAXIMUM Y :

.569

.400

.360

MINIMUM Y :

-1.510

-.750

-.700

CENTROID X :

.634

.609

.778

CENTROID Y :

.107

.276

.225

POA TO CENTROID in.:

.643

.668

.810

MIN RADIUS :

.481

.338

.363

MEAN RADIUS :

.839

.730

.648

MAX RADIUS :

1.535

1.414

1.137

HORIZONTAL SPREAD :

2.422

2.422

1.613

VERTICAL SPREAD :

2.087

1.150

1.060

EXTREME SPREAD :

2.681

2.681

1.786

NUMBER IN ONE INCH CIRCLE =

2

NUMBER IN TWO INCH CIRCLE =

7

NUMBER IN THREE INCH CIRCLE =

9

5 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/08225071

CENTERFIRE PATTERNS # 2

FOR

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS= 10

IN CIR

1 in = 1

2 in = 6

3 in = 10

IS= 1.7988

VS= 2.607

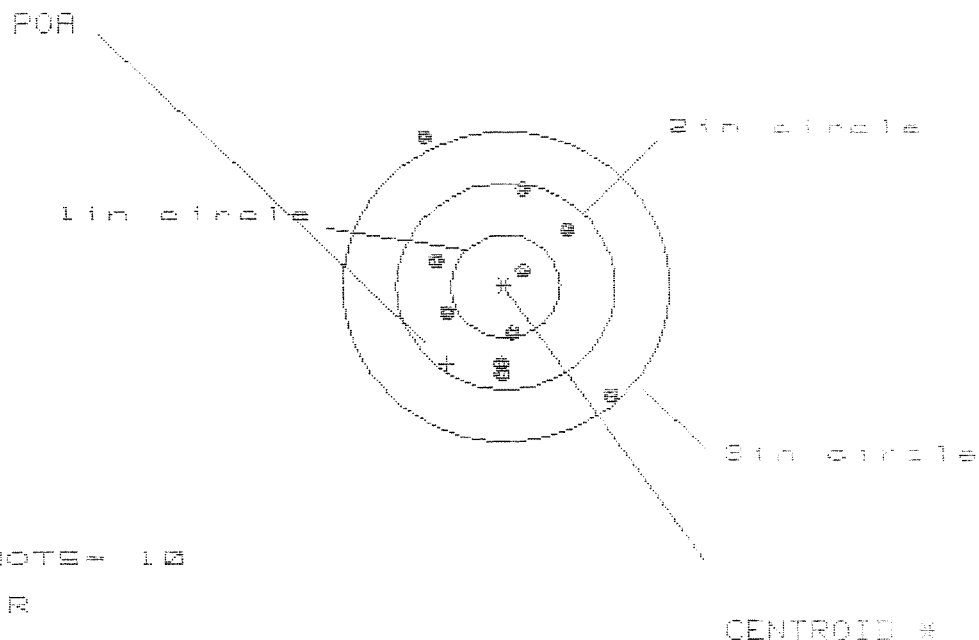
GS= 2.637

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.989	.956	.865
MINIMUM X	:	-.810	-.843	-.934
MAXIMUM Y	:	1.419	.842	.713
MINIMUM Y	:	-1.188	-1.030	-1.109
CENTROID X	:	.472	.505	.596
CENTROID Y	:	-.555	-.713	-.584
FOR TO CENTROID in.	:	.729	.874	.834
MIN RADIUS	:	.173	.245	.296
MEAN RADIUS	:	.877	.816	.740
MAX RADIUS	:	1.451	1.274	1.125
HORIZONTAL SPREAD	:	1.799	1.799	1.799
VERTICAL SPREAD	:	2.607	1.872	1.822
EXTREME SPREAD	:	2.637	2.517	2.186
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		10	

6 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/06285071

CENTERFIRE PATTERNS # 3



OF SHOTS = 10

IN CIR

1in = 2

2in = 8

3in = 0

HS = 1.759

VS = 2.490

GS = 3.049

PATTERN #	1	3	9	8
SHOTS (BEST OF)	10	9	9	8
MAXIMUM X	1.007	.924	.588	.588
MINIMUM X	-.752	-.704	-.589	-.589
MAXIMUM Y	1.439	1.092	.981	.981
MINIMUM Y	-1.051	-.891	-.766	-.766
CENTROID X	.539	.622	.507	.507
CENTROID Y	.749	.589	.700	.700
POA TO CENTROID in.	.923	.857	.865	.865
MIN RADIUS	.251	.265	.307	.307
MEAN RADIUS	.830	.726	.649	.649
MAX RADIUS	1.624	1.283	.998	.998
HORIZONTAL SPREAD	1.759	1.628	1.177	1.177
VERTICAL SPREAD	2.490	1.983	1.747	1.747
EXTREME SPREAD	3.049	2.158	1.733	1.733
NUMBER IN ONE INCH CIRCLE =	2	2	2	2
NUMBER IN TWO INCH CIRCLE =	8	8	8	8
NUMBER IN THREE INCH CIRCLE =	9	9	9	9

8 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/08225071

CENTERFIRE PATTERNS

4

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS= 10

IN CIR

1 in = 1

2 in = 5

3 in = 8

HS= 3.422

VS= 2.351

GS= 3.482

PATTERN #

:

4

SHOTS (BEST OF)

:

10

9

8

MAXIMUM X

:

1.441

1.220

1.319

MINIMUM X

:

-1.981

-.882

-.783

MAXIMUM Y

:

1.352

1.388

.939

MINIMUM Y

:

-.999

-.963

-.789

CENTROID X

:

.700

.921

.822

CENTROID Y

:

-.027

-.063

-.237

POA TO CENTROID in.

:

.701

.923

.855

MIN RADIUS

:

.252

.340

.172

MEAN RADIUS

:

1.088

1.004

.987

MAX RADIUS

:

2.008

1.598

1.324

HORIZONTAL SPREAD

:

3.422

2.102

2.102

VERTICAL SPREAD

:

2.351

2.351

1.728

EXTREME SPREAD

:

3.482

2.642

2.273

NUMBER IN ONE INCH CIRCLE =

1

NUMBER IN TWO INCH CIRCLE =

5

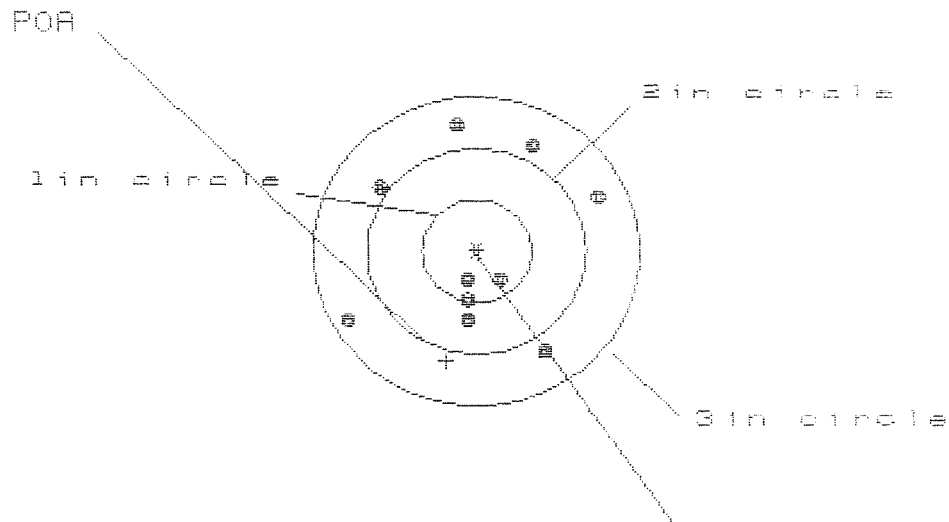
NUMBER IN THREE INCH CIRCLE =

8

6 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/C6225071

CENTERFIRE PATTERNS # 5



OF SHOTS = 10

IN CIR

1 in = 3

2 in = 4

3 in = 10

HS = 2.340

VS = 2.244

GS = 2.600

CENTROID *

PATTERN #	5
SHOTS (BEST OF)	10
MAXIMUM X	1.137
MINIMUM X	-1.203
MAXIMUM Y	1.239
MINIMUM Y	-1.005
CENTROID X	.282
CENTROID Y	1.070
POA TO CENTROID in.	1.106
MIN RADIUS	.305
MEAN RADIUS	.905
MAX RADIUS	1.373
HORIZONTAL SPREAD	2.340
VERTICAL SPREAD	2.244
EXTREME SPREAD	2.600
NUMBER IN ONE INCH CIRCLE =	3
NUMBER IN TWO INCH CIRCLE =	4
NUMBER IN THREE INCH CIRCLE =	10

INTERCHANGEABILITY

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6225071

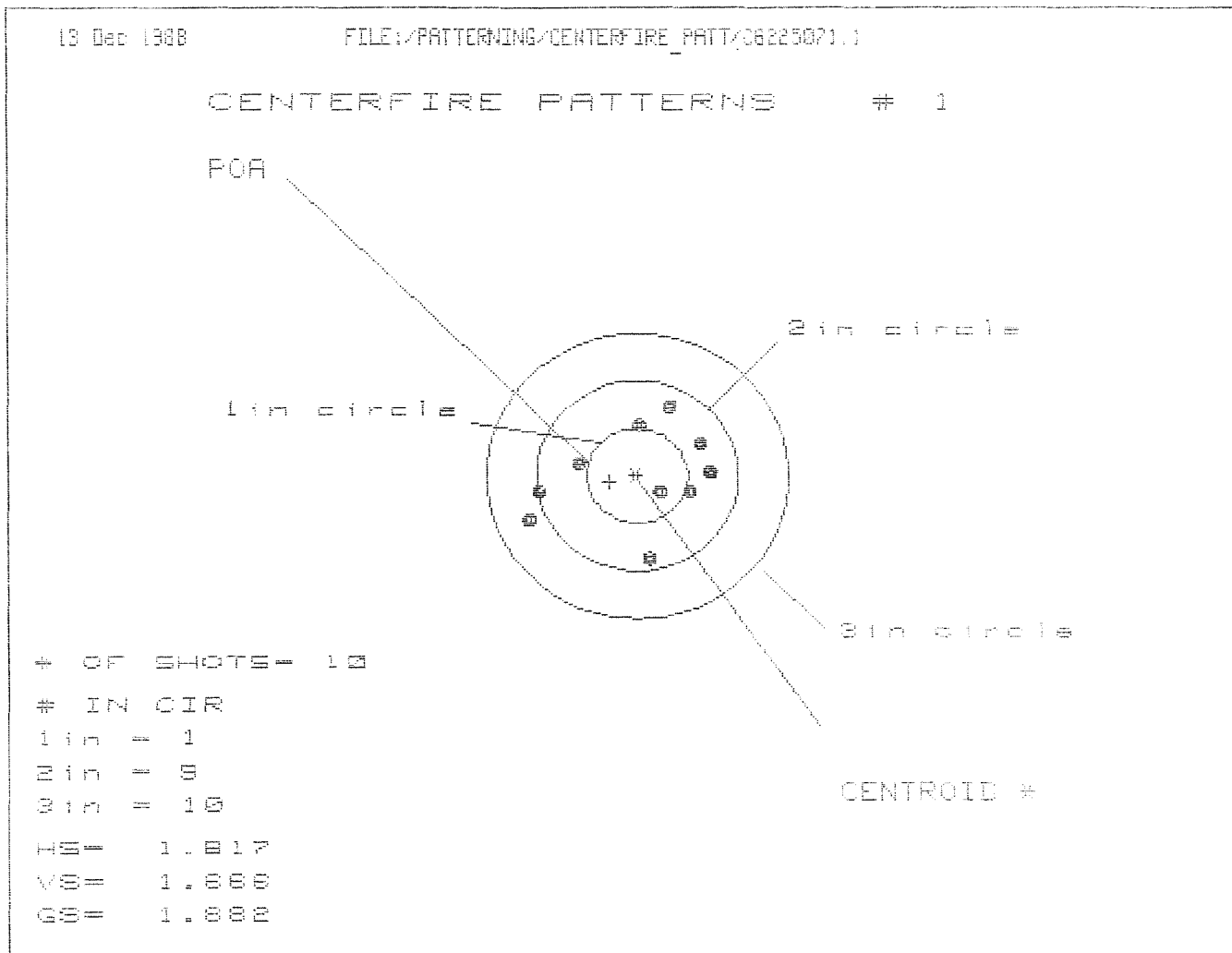
CENTROIDAL DISTANCES

0 TO 1	.282577
1 TO 2	.147299
1 TO 3	.21
1 TO 4	.273912
1 TO 5	.10959

✱ <----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .1516
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0458
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .158367
THE AMR FOR THIS RIFLE IS: .894

INTERCHANGEABILITY



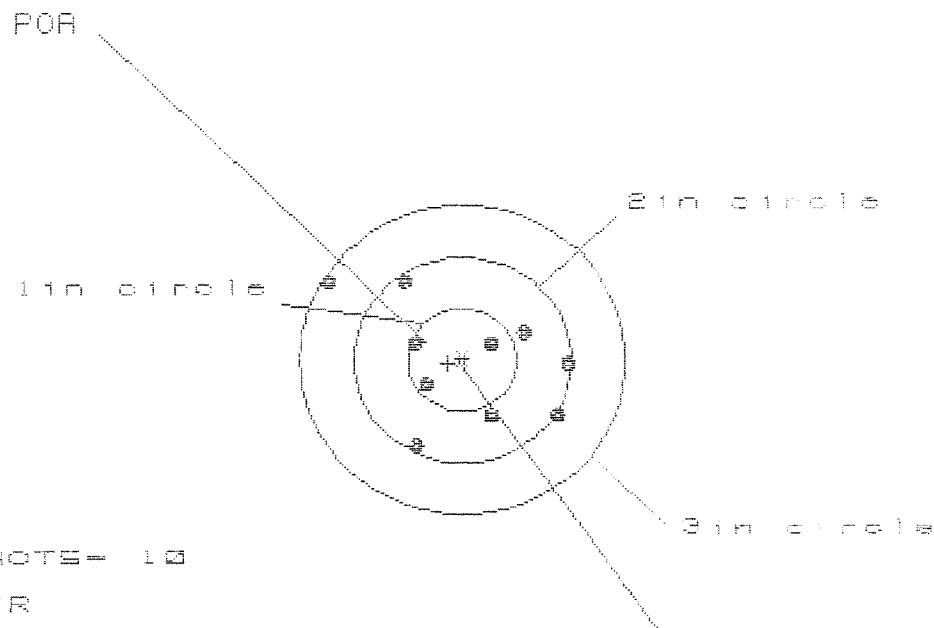
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.757	.639	.509
MINIMUM X	-1.066	-1.043	-.815
MAXIMUM Y	.770	.721	.700
MINIMUM Y	-.896	-.945	-.966
CENTROID X	.275	.393	.523
CENTROID Y	.065	.114	.135
POA TO CENTROID in.	.283	.409	.541
MIN RADIUS	.312	.285	.285
MEAN RADIUS	.723	.651	.573
MAX RADIUS	1.150	1.057	.979
HORIZONTAL SPREAD	1.817	1.682	1.323
VERTICAL SPREAD	1.556	1.666	1.666
EXTREME SPREAD	1.882	1.690	1.678
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	9		
NUMBER IN THREE INCH CIRCLE =	10		

INTERCHANGEABILITY

13 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/C8225071.1

CENTERFIRE PATTERNS # 2



OF SHOTS= 10

IN CIR

1in = 3

2in = 8

3in = 10

HS= 2.154

VS= 1.564

GS= 2.487

CENTROID *

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.949	.815	.912
MINIMUM X	:	-1.205	-.640	-.543
MAXIMUM Y	:	.775	.806	.752
MINIMUM Y	:	-.789	-.783	-.758
CENTROID X	:	.131	.265	.168
CENTROID Y	:	.034	-.052	.003
POR TO CENTROID in.	:	.136	.270	.168
MIN RADIUS	:	.324	.302	.315
MEAN RADIUS	:	.757	.668	.634
MAX RADIUS	:	1.433	1.030	.927
HORIZONTAL SPREAD	:	2.154	1.455	1.455
VERTICAL SPREAD	:	1.564	1.509	1.509
EXTREME SPREAD	:	2.487	1.889	1.619
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		10	

INTERCHANGEABILITY

19 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/08225071.1

CENTERFIRE PATTERNS

3

POR

1 in circle

2 in circle

3 in circle

OF SHOTS = 10

IN CIR

1 in = 1

2 in = 4

3 in = 8

HS = 2.484

VS = 2.858

GS = 3.242

CENTROID

PATTERN #

3

SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.172	1.096	1.027
MINIMUM X	:	-1.322	-1.398	-1.251
MAXIMUM Y	:	1.556	1.153	1.037
MINIMUM Y	:	-1.103	-.931	-1.039
CENTROID X	:	.107	.183	.046
CENTROID Y	:	.191	.019	.135
POR TO CENTROID in.	:	.219	.184	.142
MIN RADIUS	:	.292	.425	.249
MEAN RADIUS	:	1.105	1.037	.960
MAX RADIUS	:	1.699	1.466	1.460
HORIZONTAL SPREAD	:	2.494	2.494	2.288
VERTICAL SPREAD	:	2.659	2.084	2.076
EXTREME SPREAD	:	3.242	2.846	2.485
NUMBER IN ONE INCH CIRCLE	=	1		
NUMBER IN TWO INCH CIRCLE	=	4		
NUMBER IN THREE INCH CIRCLE	=	8		

INTERCHANGEABILITY

13 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/C6225071.1

CENTERFIRE PATTERNS # 4

POA

1 in circle

2 in circle

3 in circle

OF SHOTS- 10

IN CIR

1 in = 2

2 in = 5

3 in = 8

CENTROID *

HS= 2.761

VS= 2.084

GS= 2.853

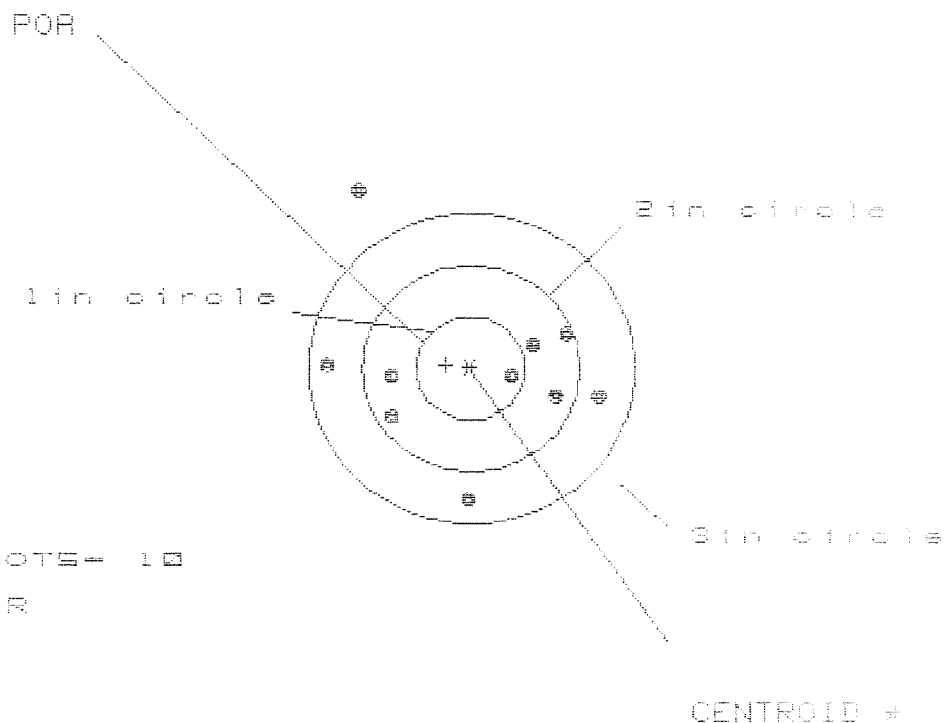
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.245	.966	.794
MINIMUM X	-1.516	-1.378	-.767
MAXIMUM Y	.955	1.032	1.075
MINIMUM Y	-1.129	-1.023	-.980
CENTROID X	.017	-.121	.051
CENTROID Y	-.027	-.133	-.176
POA TO CENTROID in.	.032	.180	.183
MIN RADIUS	.278	.142	.212
MEAN RADIUS	.884	.793	.706
MAX RADIUS	1.569	1.420	1.082
HORIZONTAL SPREAD	2.761	2.344	1.561
VERTICAL SPREAD	2.084	2.055	2.055
EXTREME SPREAD	2.853	2.535	2.085
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	8		

INTERCHANGEABILITY

13 Dec 1988

FILE:/PATTERNING/CENTERFIRE_PATT/C8225071.1

CENTERFIRE PATTERNS # 5



OF SHOTS- 10

IN CIR

1in = 1

2in = 5

3in = 9

HS= 2.520

VS= 3.008

GS= 3.169

CENTROID *

PATTERN #	5
SHOTS (BEST OF)	10
MAXIMUM X	1.192
MINIMUM X	-1.328
MAXIMUM Y	1.739
MINIMUM Y	-1.269
CENTROID X	.228
CENTROID Y	-.034
POA TO CENTROID in.	.230
MIN RADIUS	.383
MEAN RADIUS	1.001
MAX RADIUS	1.998
HORIZONTAL SPREAD	2.520
VERTICAL SPREAD	3.008
EXTREME SPREAD	3.169
NUMBER IN ONE INCH CIRCLE	1
NUMBER IN TWO INCH CIRCLE	5
NUMBER IN THREE INCH CIRCLE	9