

BARBER - M24 0102695

FOUO

UPC



0 47700 25716 7

C6665801

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

BARBER - M24 0102695 M2400102734

MODEL 700 TM M24

ORDER NO. 5716

BARREL LENGTH

CAPACITY*

*INCLUDES 1 IN CHAMBER

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: **RE00032507** Serial: C6665801 Model 700 Center Fire Caliber: 7 62 NATO M24 SWS WOG 25 of 25 Repairman: Status: New 9/14/01 3:03:10 PM

Verify Repair

Address Information

Customer: Received From Return To: Received From

Name: DEFENCE DIST DEPOT ANNISTON DEFENCE DIST DEPOT ANNISTON

Address 1: 7 FRANKFORD AVE 7 FRANKFORD AVE

Address 2: PO Box: PO Box:

City: ANNISTON ANNISTON

State: AL Zip Code: 36201 Country: US State: AL Zip Code: 36201 Country: US

FFL:

Contact / Condition Problems Estimate History / Status Shipping / Billing

Contact Information

Phone: Fax: Email: Comments:

Received Condition

Fair

Condition Notes: CSR Notes:

Accessories Received

Code	Desc	Qty
A006	Sling Strap	1
A007	With Stud	3
A008	With Swivel	2
A010	Hard Case	1
A026	Scope	1
X001	Scope Case	1
X002	Deployment Kit	1

Repair Search Refresh Close

naglej 9/17/01 7:52 AM CAPS NUM INS SCRL

Start Arms Services Repair & Es... 7:52 AM

Serial Number: **C6665801**

Model: **700**



RE00032507

Remington Test Lab, Ilion, N.Y.

Centroidal distance calculations for Rifle # c6665801
5 Oct 2001

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.203
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.2802
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .346007

THE AMR FOR THIS RIFLE IS: 1.305

CENTROIDAL DISTANCES

0	TO	1	.351411
1	TO	2	.16772
1	TO	3	.450682
1	TO	4	.230868
1	TO	5	.200569

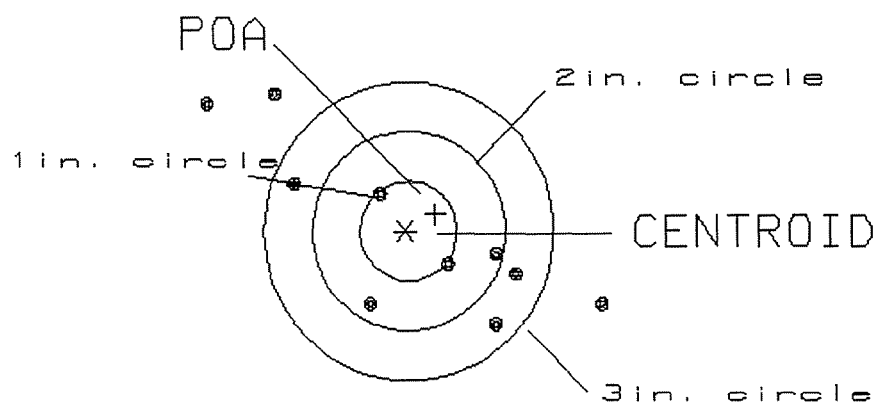
1 4 + <----POA
5 3

PATTERN #: ☐ 1 ☐
POA TO CENTROID: .352
MIN RADIUS : .459
MEAN RADIUS : 1.309
MAX RADIUS : 2.470
CENTROID X : -.307
CENTROID Y : -.171

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 4.16

1

VS= 2.30

4

GS= 4.63

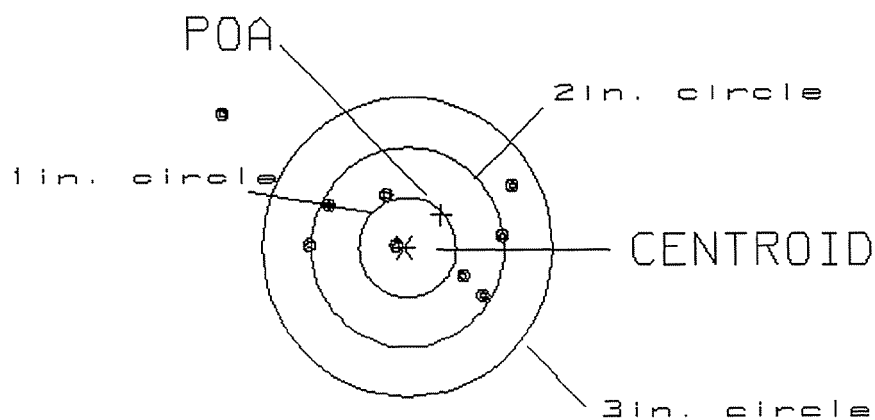
7

PATTERN #: ☐ 2 ☐
 POA TO CENTROID: .498
 MIN RADIUS : .141
 MEAN RADIUS : 1.119
 MAX RADIUS : 2.440
 CENTROID X : -.380
 CENTROID Y : -.322

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 2



OF SHOTS= 10

IN CIRCLE

HS= 2.95

1

VS= 3.66

6

GS= 4.52

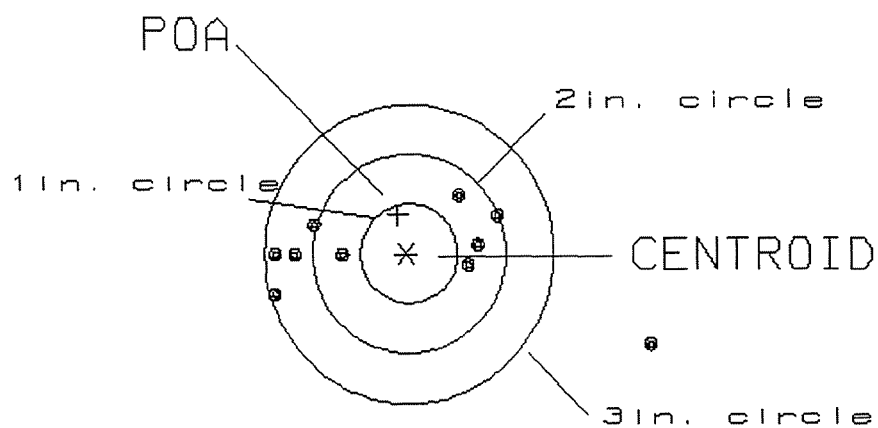
8

PATTERN #: ☐ 3 ☐
 POA TO CENTROID: .398
 MIN RADIUS : .645
 MEAN RADIUS : 1.150
 MAX RADIUS : 2.702
 CENTROID X : .088
 CENTROID Y : -.388

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 3



OF SHOTS= 10

IN CIRCLE

HS= 3.92

0

VS= 1.44

5

GS= 4.01

9

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 4 ☐

POA TO CENTROID: .169

MIN RADIUS : .317

MEAN RADIUS : 1.108

MAX RADIUS : 1.706

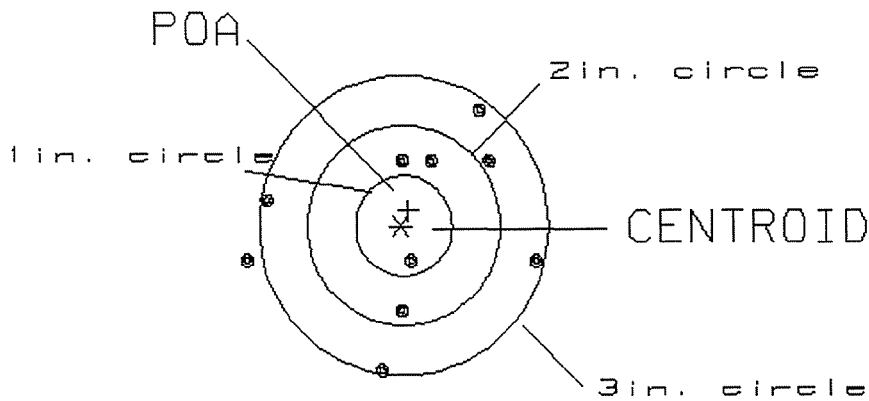
CENTROID X : -.077

CENTROID Y : -.151

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 4



OF SHOTS= 10

IN CIRCLE

HS= 3.04

1

VS= 2.66

4

GS= 3.04

9

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 5 ☐

POA TO CENTROID: .501

MIN RADIUS : 1.005

MEAN RADIUS : 1.801

MAX RADIUS : 2.972

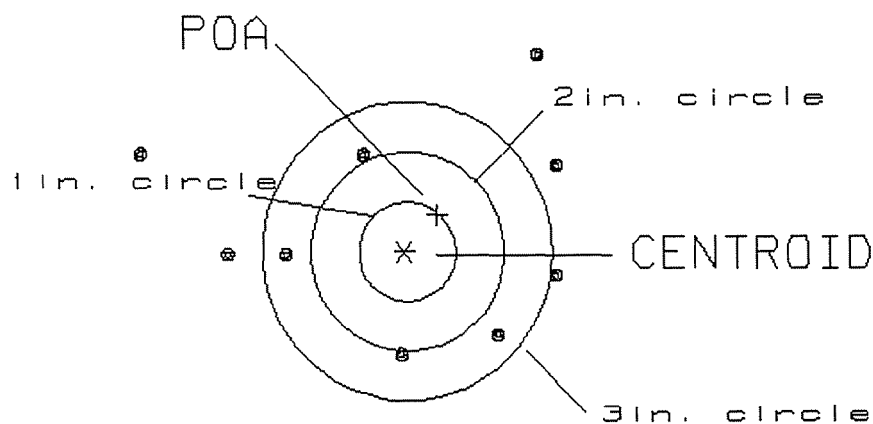
CENTROID X : -.339

CENTROID Y : -.369

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 5



OF SHOTS= 10

IN CIRCLE

HS= 4.37

0

VS= 4.71

0

GS= 5.35

4

Remington Test Lab, Ilion, N.Y.

Centroidal distance calculations for Rifle # c6665801
5 Oct 2001

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.203
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.2802
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0	TO	1	.351411
1	TO	2	.16772
1	TO	3	.450682
1	TO	4	.230868
1	TO	5	.200569

$\begin{matrix} & & + \\ 1 & 4 & \\ \overline{5} & & 3 \end{matrix}$
 <----POA

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

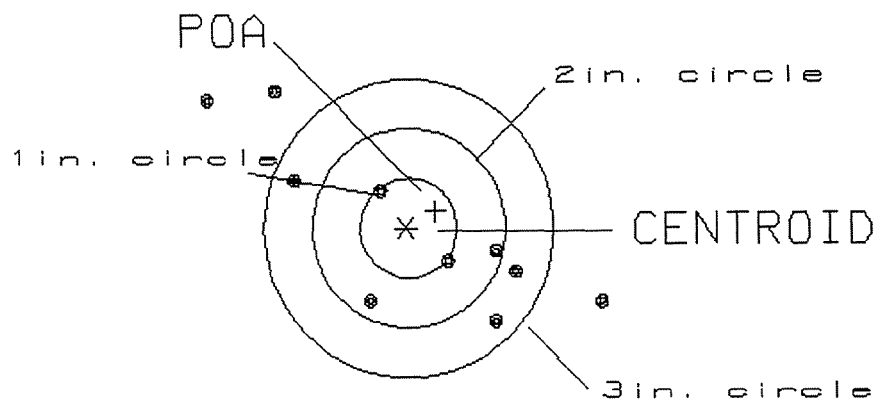
PATTERN #: ☐ 1 ☐

POA TO CENTROID: .352
MIN RADIUS : .459
MEAN RADIUS : 1.309
MAX RADIUS : 2.470
CENTROID X : -.307
CENTROID Y : -.171

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 4.16

1

VS= 2.30

4

GS= 4.63

7

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REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 2 ☐

POA TO CENTROID: .498

MIN RADIUS : .141

MEAN RADIUS : 1.119

MAX RADIUS : 2.440

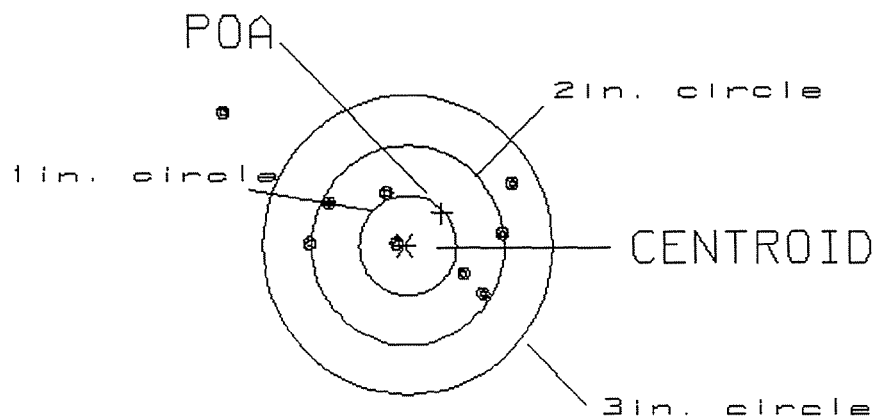
CENTROID X : -.380

CENTROID Y : -.322

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 2



OF SHOTS= 10

IN CIRCLE

HS= 2.95

1

VS= 3.66

6

GS= 4.52

8

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 3 ☐

POA TO CENTROID: .398

MIN RADIUS : .645

MEAN RADIUS : 1.150

MAX RADIUS : 2.702

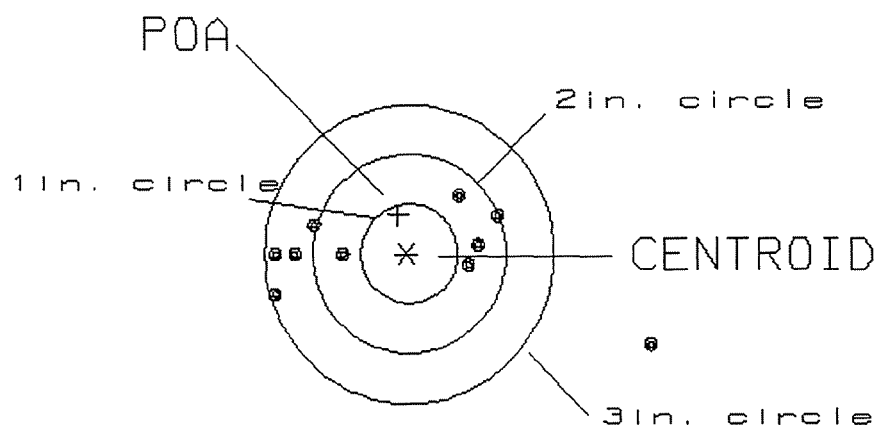
CENTROID X : .088

CENTROID Y : -.388

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 3



OF SHOTS= 10

IN CIRCLE

HS= 3.92

0

VS= 1.44

5

GS= 4.01

9

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

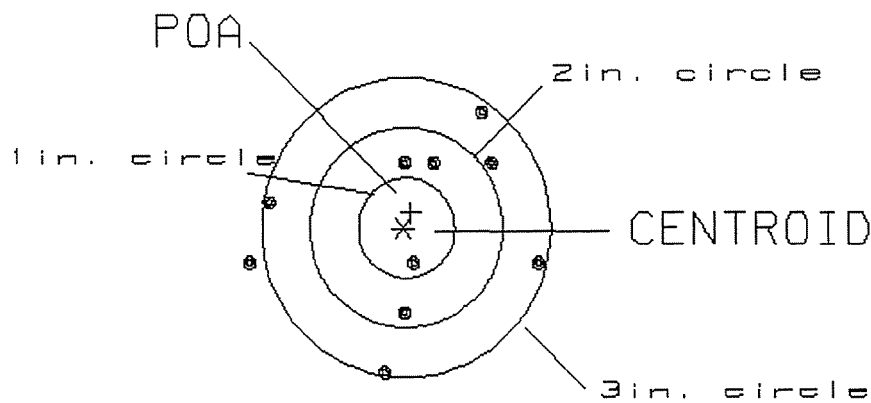
PATTERN #: ☐ 4 ☐

POA TO CENTROID: .169
MIN RADIUS : .317
MEAN RADIUS : 1.108
MAX RADIUS : 1.706
CENTROID X : -.077
CENTROID Y : -.151

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 4



OF SHOTS= 10

IN CIRCLE

HS= 3.04

1

VS= 2.66

4

GS= 3.04

9

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 5 ☐

POA TO CENTROID: .501

MIN RADIUS : 1.005

MEAN RADIUS : 1.801

MAX RADIUS : 2.972

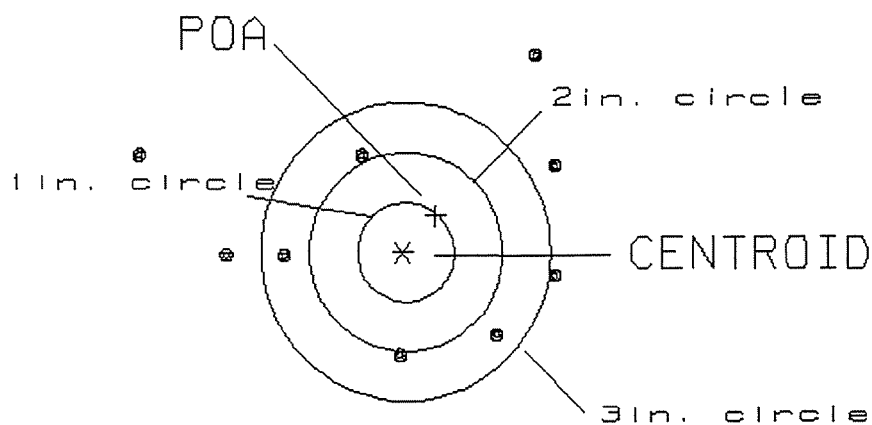
CENTROID X : -.339

CENTROID Y : -.369

5 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/c6665801

CENTERFIRE PATTERN # 5



OF SHOTS= 10

IN CIRCLE

HS= 4.37

0

VS= 4.71

0

GS= 5.35

4

Remington Test Lab, Ilion, N.Y.

Centroidal distance calculations for Rifle # C6665801
8 Oct 2001

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .1994
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.1264
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .236088

THE AMR FOR THIS RIFLE IS: .7718

CENTROIDAL DISTANCES

0	TO	1	.4278
1	TO	2	.0290689
1	TO	3	.207461
1	TO	4	.484322
1	TO	5	.480234

5 4
3 <----POA
2

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

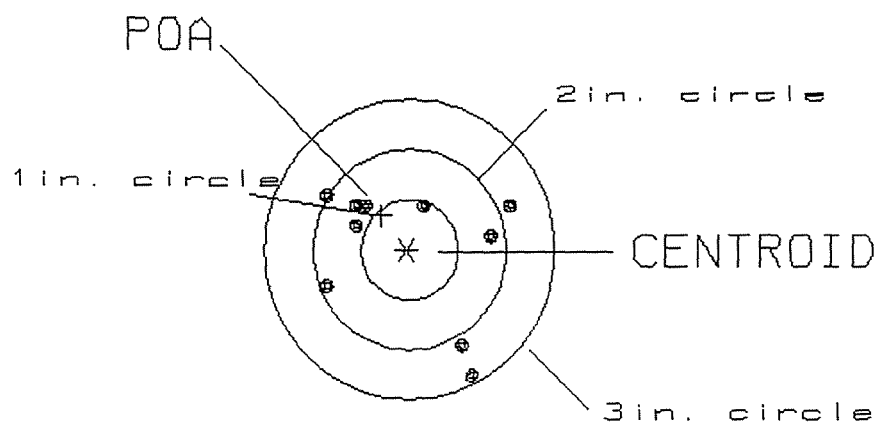
PATTERN #: ☐ 1 ☐

POA TO CENTROID: .428
 MIN RADIUS : .462
 MEAN RADIUS : .884
 MAX RADIUS : 1.462
 CENTROID X : .257
 CENTROID Y : -.342

8 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6665801.1

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 1.93

1

VS= 1.83

6

GS= 2.41

10

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

PATTERN #: ☐ 2 ☐

POA TO CENTROID: .407

MIN RADIUS : .463

MEAN RADIUS : .870

MAX RADIUS : 1.190

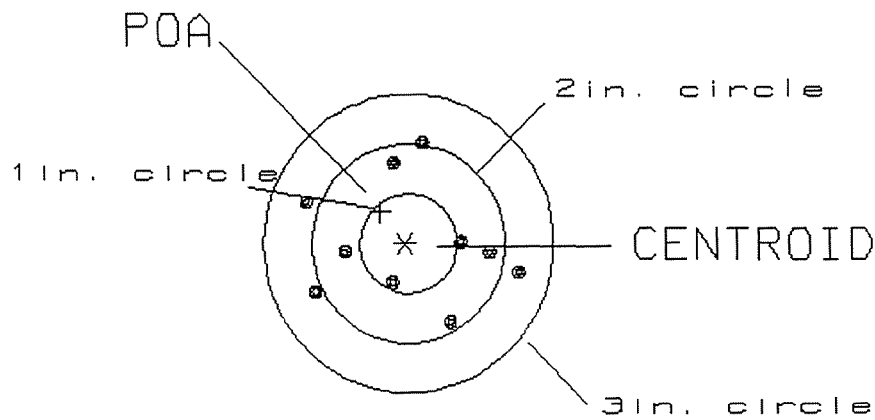
CENTROID X : .259

CENTROID Y : -.313

8 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6665801.1

CENTERFIRE PATTERN # 2



OF SHOTS= 10

IN CIRCLE

HS= 2.20

1

VS= 1.84

6

GS= 2.31

10

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

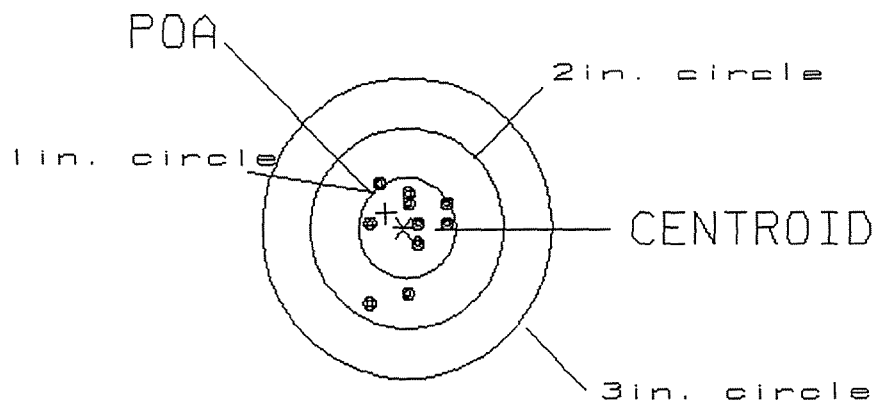
PATTERN #: ☐ 3 ☐

POA TO CENTROID: .239
MIN RADIUS : .139
MEAN RADIUS : .434
MAX RADIUS : .882
CENTROID X : .189
CENTROID Y : -.146

8 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6665801.1

CENTERFIRE PATTERN # 3



OF SHOTS= 10

IN CIRCLE

HS= .90

6

VS= 1.27

10

GS= 1.35

10

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

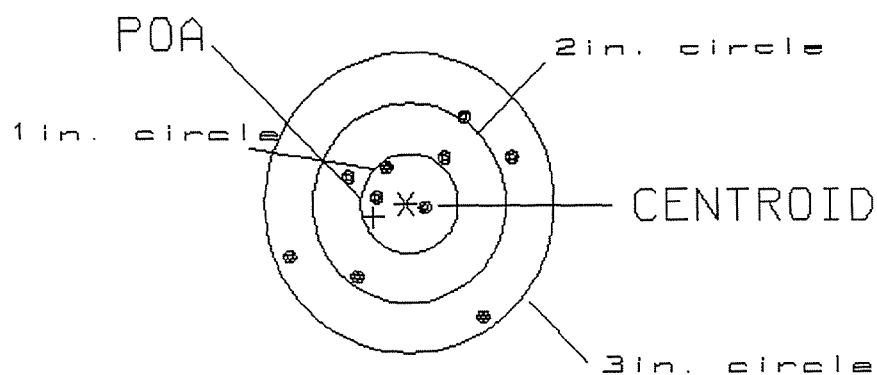
PATTERN #: ☐ 4 ☐

POA TO CENTROID: .361
 MIN RADIUS : .208
 MEAN RADIUS : .806
 MAX RADIUS : 1.354
 CENTROID X : .335
 CENTROID Y : .136

8 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6665801.1

CENTERFIRE PATTERN # 4



OF SHOTS= 10

IN CIRCLE

HS= 2.22

3

VS= 1.99

6

GS= 2.44

10

REMINGTON CENTERFIRE ACCURACY TEST

REMINGTON TEST LAB, ILION, N.Y.

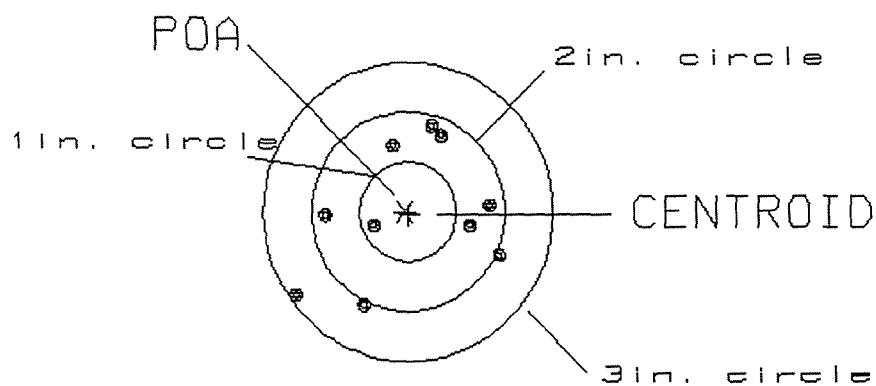
PATTERN #: ☐ 1 ☐

POA TO CENTROID: .054
 MIN RADIUS : .362
 MEAN RADIUS : .865
 MAX RADIUS : 1.400
 CENTROID X : -.043
 CENTROID Y : .033

8 Oct 2001

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6665801.15

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 2.13

1

VS= 1.79

7

GS= 2.18

10

M-24 INSPECTION CHECKLIST
CONTRACT #: DAAE-20-97-C-242

R & E NUMBER		32507	
SERIAL NUMBER		C6000 5801	
LOG-IN DATE		9-13-01	
INSPECT AND VERIFY:			
OPERATION #	OPERATION NAME	DATE	INITIAL
550	DIS-ASSEMBLE GUN	9-17-01	RTH
560 A	RE-BARREL AT CUSTOM SHOP	9/20/01	BWT
B	DRILL AND TAP	9/20/01	BWT
C	POLISH	9-20-01	RTH
575	ASSEMBLE	9-20-01	RTH
600	PROOF	9-21-01	RW
605	CHECK HEADSPACE	9-24-01	RTH
610	DIS-ASSEMBLE GUN	9-24-01	RTH
612	MAGNAFLUX		
615	ROLLMARK CALIBER	9-24-01	RTH
618	ROTO-BLAST	9/25	RTH
620	APPLY COATINGS	9/28	HP
625 A	FINAL ASSEMBLY	10-3-01	RTH
B	TRIGGER PULL TEST	N/A	
C	SAFETY "ON" FORCE	N/A	
D	SAFETY "OFF" FORCE	N/A	
E	FIRING PIN INDENT	N/A	
640	TARGET	10/4/01	RW
655	FINAL INSPECT	10-8-01	RW
660	PACK	10-9-01	DA
		SHIP DATE	
		QAR INSPECTION DATE	

Final Inspection

In: C660 5801

DATE REC'D: 9-13-01

DATE RET'D: 10-9-01

EDITOR: *PK*

Item:

Barrel Assy.

☒ BARREL☒ RECEIVER☒ FRONT SIGHT BLOCK☒ REAR SIGHT BLOCK☒ SCREWS☒ FINISH

Scope Assy.

☐ SCOPE☒ SCOPE RINGS☒ MOUNTING SCREWS☐ MOUNTING BASE☒ SCREWS☒ FINISH☒ LOOSENESS☒ CLARITY

Misc.

☐ DD-250☐ BAR CODE☐ PACKAGING

Item:

Stock Assy.

☒ STOCK☒ SLING SWIVEL STUDS☒ ADJUSTABLE BUTT PLATE☒ LOCK NUTS☒ BARREL CLEARANCE☒ COLOR/FINISH

Systems Case

☒ SCOPE CASE☒ IRON SIGHTS☐ DEPLOYMENT KIT

Trigger

☒ SAFETY OPERATION☒ SET

Comments:

RemingtonVERY IMPORTANT:
Instruction Book
enclosed to assure
safe use of this
firearm.**MODEL 700TM M24****SERIAL NO.****C6665801****ORDER NO.****5716**

20

MADE IN ILION, N.Y. U.S.A. Reg. U.S. Pat & Tm. Off, Marca Registrada Marque Deposee.



5716 C6665801

ORDER 5716MODEL 700TM M24**UPC**

0 47700 25716 7

ORDER 5716MODEL 700TM M24**UPC**

0 47700 25716 7

GFM

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6665801

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		9/24/91	KH
600	Proof		9/24/91	KH
607	Check Headspace		9/24/91	KH
610	Dis-assemble Gun		9/24/91	KH
612	Magnaflux Barrel Action		OCT 2 1991	KR
	Magnaflux Bolt		OCT 2 1991	KR
5	Rollmark Caliber		OCT 2 1991	LS
617	Drill and Tap Sight Holes		OCT 2 1991	LB
618	Polish Barrel		OCT 4 1991	WB
620	Apply Coatings (Barrel Action)		10-14-91	DA
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		10/18/91	KH
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		10/18/91	KH
	C) Inspect Ejector Hole for Chamfer		10/18/91	KH
	D) Oil Firing Pin Ass'y		10/18/91	KH
	E) Adjust Trigger Pull to Min Setting and Stake		10/22/91	JL

op. #	OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force	4	4	4			10/24/91	JH
	G) Safety Off Force	3	3	3			10/24/91	JH
	H) Trigger Pull Test & Retainability						10/24/91	JH
	I) Firing Pin Indent	.022	.022	.022			10/24/91	JH
	J) Assemble Stock						10/25/91	JH
	K) Assemble Swivel Studs						10-30-91	K
	L) Attach Front and Rear Sight Assemblies						10/25/91	JH
	M) Iron Sight Alignment						10/25/91	JH
	N) Detach Front & Rear Sights & place in numbered container						10/25/91	JH
	O) Attach Scope to Rifle						10/25/91	JH
	P) Detach & Attach Scope 20 Times						10/25/91	JH
640	Gallery Target & Test						10-28-91	AC
	A) Time						10-28-91	AC
	B) Malfunctions						10-28-91	AC
	C) Pierced Primers						10-28-91	AC
	D) Optical Clarity of Scope						10-28-91	AC
645	Inspect for Live Ammo						10-28-91	AC
655	Final Inspection							
	A) Headspace						10-30-91	K
	B) Trigger Pull	259	262	263	266	266	10-29-91	DH
	C) Function						10-30-91	AC
660	Pack						10-25-92	N

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#

3.00# ± .75#

4.00# ± 1.00#

SERIAL NO. C-6665801DATE 10-22-91TESTER JH

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.24	2.34	2.35	259	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.21	2.35	2.38	262	
PULL #3	2.36	2.35	2.36	263	
PULL #4	2.32	2.32	2.28	266	
PULL #5	2.33	2.36	2.36	266	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.39	3.40		
PULL #2	3.45	3.42		
PULL #3	3.46	3.33		
PULL #4	3.46	3.36		
PULL #5	3.48	3.36		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.61	4.53		4.55
PULL #2	4.57	4.57		4.59
PULL #3	4.51	4.59		4.60
PULL #4	4.54	4.55		4.60
PULL #5	4.55	4.55		4.63
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6665801
28 Oct 1991

CENTROIDAL DISTANCES

0 TO	1	.71787
1 TO	2	.439602
1 TO	3	.601348
1 TO	4	.920214
1 TO	5	1.35483

45
46 1 <----POR

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .0856
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.0072
THE RESULTING AVERAGE POL-RADIUS FOR THIS RIFLE IS: .0859023
THE RMV FOR THIS RIFLE IS: .9942

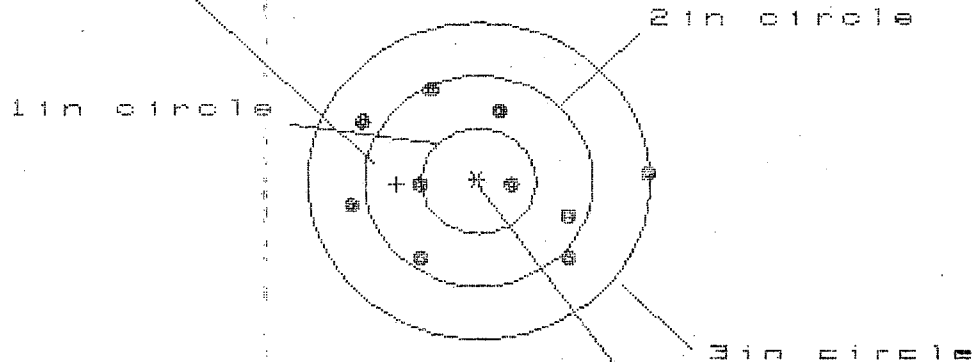
25 Oct 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6665881

CENTERFIRE PATTERNS

1

POA



OF SHOTS- 10

IN CIR

1in = 2

2in = 5

3in = 10

HS= 2.510

VS= 1.682

GD= 2.627

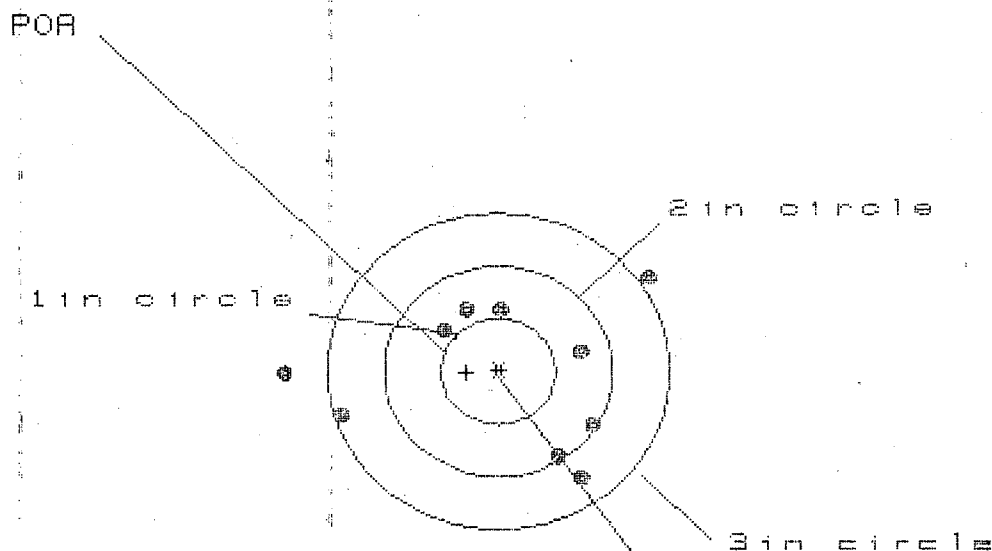
CENTROID *

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.488	.973	.853
MINIMUM X	-1.122	-.957	-.935
MAXIMUM Y	.906	.916	.891
MINIMUM Y	-.776	-.766	-.791
CENTROID X	.717	.552	.671
CENTROID Y	.031	.021	.046
POA TO CENTROID in.	.718	.552	.673
MIN RADIUS	.314	.311	.360
MEAN RADIUS	.908	.831	.806
MAX RADIUS	1.490	1.197	1.124
HORIZONTAL SPREAD	2.610	1.930	1.789
VERTICAL SPREAD	1.682	1.682	1.682
DIAGNOSIS SPREAD	2.627	2.165	2.165
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	10		

28 Oct 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8665801

CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1in = 0

2in = 6

3in = 8

HE = 3.185

VS = 1.943

GS = 3.318

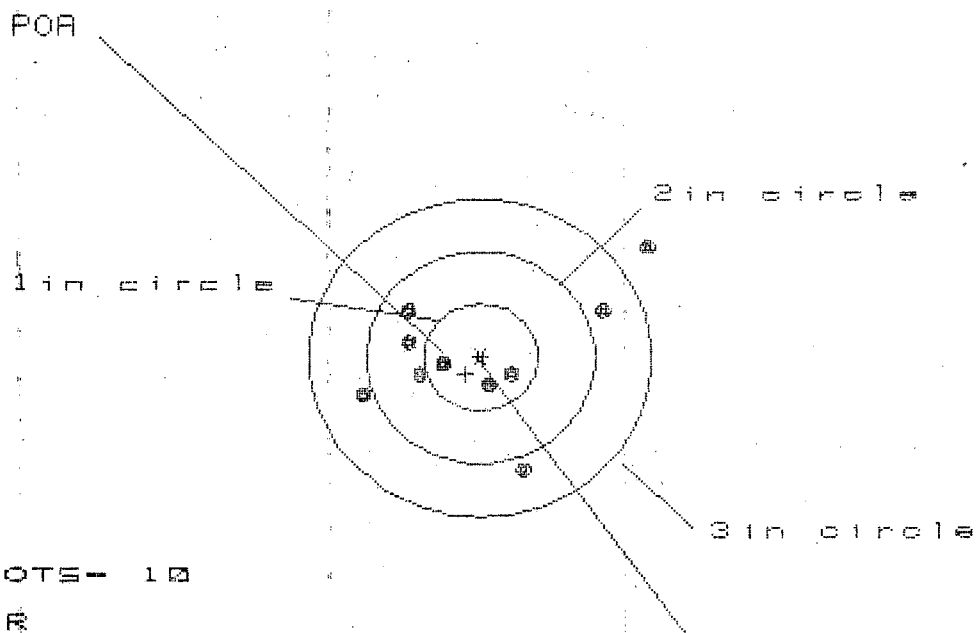
CENTROID #

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.277	1.065	.754
MINIMUM X	-1.908	-1.634	-1.501
MAXIMUM Y	.929	.928	.750
MINIMUM Y	-1.014	-1.015	-.898
CENTROID X	.278	.490	.357
CENTROID Y	.008	.009	-.108
POR TO CENTROID in.	.279	.491	.373
MIN RADIUS	.568	.542	.703
MEAN RADIUS	1.080	.965	.916
MAX RADIUS	1.908	1.685	1.530
VERTICAL SPREAD	3.185	2.699	2.255
HORIZONTAL SPREAD	1.943	1.943	1.648
EXTREME SPREAD	3.318	3.013	2.273
SHOTS IN ONE INCH CIRCLE =	0		
SHOTS IN TWO INCH CIRCLE =	6		
SHOTS IN THREE INCH CIRCLE =	8		

28 Oct 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8665881

CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1 in - 3

2 in - 6

3 in - 9

X = 2.341

Y = 2.041

Z = 2.919

CENTROID #

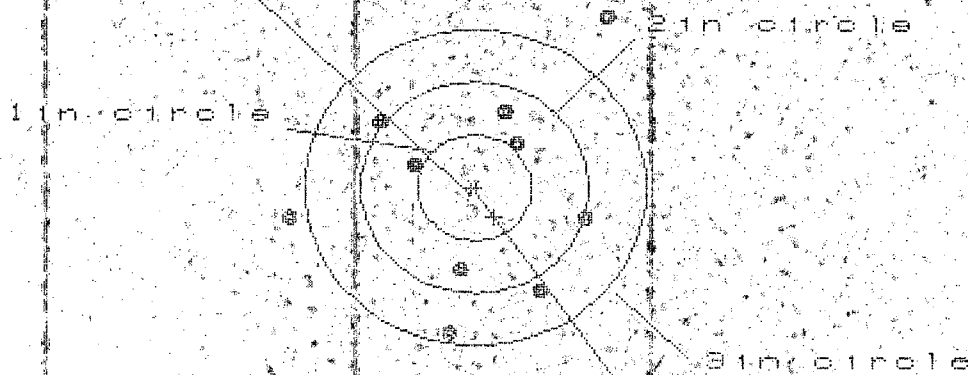
PATTERN #				
1	1.493	1.196	.672	
2	-1.048	-.882	-.733	
3	1.030	.594	.595	
4	-1.010	-.896	-.822	
5	.129	-.037	-.186	
6	.157	.043	-.031	
7	.204	.056	.189	
8	.275	.170	.143	
9	.801	.641	.534	
10	1.814	1.335	1.062	
11	2.541	2.078	1.405	
12	2.041	1.490	1.417	
13	2.919	2.259	1.703	
14		3		
15		6		
16		9		

28 Oct 1991

FILE: /PATTERNING/CENTERFIRE_PATT/08665801

CENTERFIRE PATTERNS # 4

FOR



OF SHOTS- 10

IN CIR

1 IN 1 5

2 IN 1 5

3 IN 1 5

1 IN 2.726

2 IN 2.935

3 IN 3.305

CENTROID #

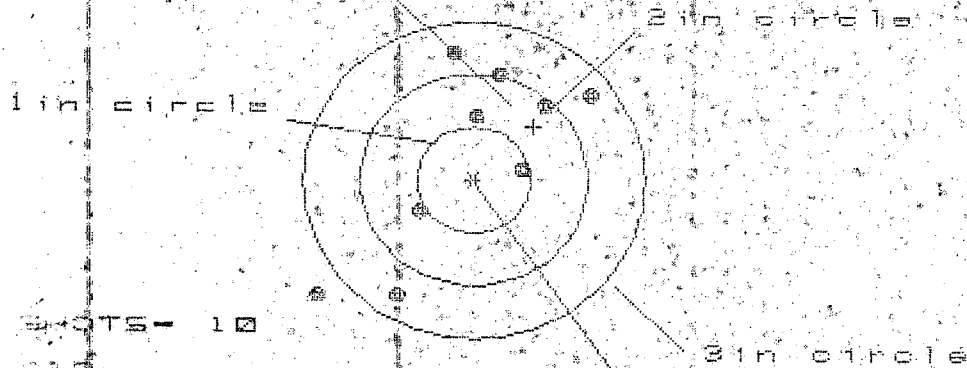
PATTERN #	1	2	3
SHOTS (BLK OF)	10	9	8
MAXIMUM X	1.137	1.084	.961
MINIMUM X	-1.589	-1.462	-1.558
MAXIMUM Y	1.601	.941	.930
MINIMUM Y	-1.834	-1.157	-1.168
CENTROID X	-1.170	-.297	-.114
CENTROID Y	.276	.099	.110
POI TO CENTROID in.	.325	.313	.158
MIN RADIUS	.564	.566	.612
MAX RADIUS	1.075	.969	.892
MR RADIUS	1.963	1.465	1.201
HORIZONTAL SPREAD	2.726	2.546	1.759
VERTICAL SPREAD	2.935	2.098	2.098
EXTREME SPREAD	3.305	2.547	2.162
NUMBER IN ONE INCH CIRCLE =	0	5	8
NUMBER IN TWO INCH CIRCLE =	5	5	8
NUMBER IN THREE INCH CIRCLE =	8	8	8

28 Oct 1991

FILE: /PATTERNING/CENTERFIRE_PATT/06665801

CENTERFIRE PATTERNS # 5

FOR



OF SHOTS - 10

IN C1

IN C2

IN C3

IN C4

IN C5

IN C6

IN C7

IN C8

IN C9

IN C10

CENTROID *

5

	10	9	8
MEAN X	1.050	1.103	.938
MEAN Y	-1.350	-1.314	-1.024
STD. DEV. X	1.240	1.029	.860
STD. DEV. Y	1.349	1.355	1.428
COV. CORR. X	-.526	-.571	-.406
COV. CORR. Y	-.500	-.291	-.122
MEAN TO CENTROID DISTANCE	.701	.641	.424
MEAN RADIUS	.484	.360	.182
MEAN RADIUS	1.107	.964	.777
MEAN RADIUS	1.569	1.887	1.648
MEAN RADIUS	2.417	2.417	1.762
MEAN RADIUS	3.194	2.384	2.288
MEAN RADIUS	3.247	3.090	2.540
MEAN RADIUS		1	
MEAN RADIUS		4	
MEAN RADIUS		6	

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6348959

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock	7 21 89		RW
600	Proof	7 21 89		RW
607	Check Headspace	7 21 89		RW
610	Dis-assemble Gun	7 21 89		RW
612	Magnaflux Barrel Action		7/25/89	KR
	Magnaflux Bolt		7/25/89	KR
615	Rollmark Caliber		7/25/89	JS
7	Drill and Tap Sight Holes		7/27/89	WC
618	Polish Barrel <i>RB</i>		7/31/89	WCB
620	Apply Coatings (Barrel Action)		8/7/89	JH
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		8/7/89	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		8/7/89	RW
	C) Inspect Ejector Hole for Chamfer		8/7/89	RW
	D) Oil Firing Pin Ass'y		8/7/89	RW
	E) Adjust Trigger Pull to Min Setting and Stake		8/11/89	J.u.

op. #	OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force	5	5	5			8/11/89	JK
	G) Safety Off Force	4	4	4			8/11/89	JK
	H) Trigger Pull Test & Retainability						8/11/89	JK
	I) Firing Pin Indent	.20	.20	.20			8/11/89	JK
	J) Assemble Stock						8/15/89	RW
	K) Assemble Swivel Studs						23 Aug 89	JS
	L) Attach Front and Rear Sight Assemblies						8/15/89	RW
	M) Iron Sight Alignment						8/15/89	RW
	N) Detach Front & Rear Sights & place in numbered container						8/15/89	RW
	O) Attach Scope to Rifle						8/15/89	JK
	P) Detach & Attach Scope 20 Times						8/14/89	JK
640	Gallery Target & Test	68 R 83 L					8-21-89	AC
	A) Time						8-21-89	AC
	B) Malfunctions						8-21-89	AC
	C) Pierced Primers						8-21-89	AC
	D) Optical Clarity of Scope						8-21-89	AC
645	Inspect for Live Ammo						8-21-89	AC
655	Final Inspection							
	A) Headspace						23 Aug 89	JS
	B) Trigger Pull	2.71	2.75	2.82	2.76	2.80	23 Aug 89	JS
	C) Function						23 Aug 89	JS
660	Pack							

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#
3.00# ± .75#
4.00# ± 1.00#

SERIAL NO. C6348959DATE 11 Aug 89TESTER JEL

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.49	2.53	2.63	2.71	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.56	2.51	2.47	2.75	
PULL #3	2.50	2.47	2.53	2.82	
PULL #4	2.60	2.55	2.50	2.76	
PULL #5	2.45	2.50	2.60	2.80	
TOTAL	12.60	12.56	12.73	13.84	
AVG.	2.52	2.512	2.546	2.768	

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.31	3.44		
PULL #2	3.27	3.39		
PULL #3	3.27	3.39		
PULL #4	3.40	3.41		
PULL #5	3.36	3.28		
TOTAL	16.61	16.89		
AVG.	3.322	3.378		

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.44	4.51		3.91
PULL #2	4.31	4.37		4.27
PULL #3	4.40	4.44		4.21
PULL #4	4.41	4.40		4.30
PULL #5	4.37	4.47		4.16
TOTAL	21.93	22.19		20.85
AVG.	4.386	4.438		4.17

SERIAL NO. 6348959 SHOOTER DH & AC DATE Aug 31, 1989

BARBER - M24 010293202771

SWS ENDURANCE TEST REPORT

SERIAL NO C6348959 SHOOTER JU+DH DATE 9-1-89

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	60	OK	NONE
	7.62	60	OK	11
	7.62	60	OK	11
	7.62	60	OK	11
	7.62	60 *	OK	NONE
	11	60	11	11
	11	60	11	11
	11	60	11	11
	11	60	11	11
	11	60	11	11
	11	60	11	11
	11	40	11	11
TOTAL	(700)		PAGE 3	
	(840)		PAGE 2	
	(960)		PAGE 1	
TOTAL	<u>2500</u>		9-1-89	

SWS ENDURANCE TEST REPORT

 SERIAL NO. C6348959 SHOOTER AC + DH DATE Sept 5 1989

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	60	OK	NONE
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	30	"	"
	TOTAL	270		
	7.62	60	OK	NONE
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	TOTAL	480		
	TOTAL	750	9-5-89	

SWS ENDURANCE TEST REPORT

SERIAL NO. C6348959 SHOOTER AC & DH DATE 9-6-89

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	60	OK	NONE
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	TOTAL	420		
	7.62	60	OK	NONE
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	60	"	"
	"	10	"	"
	TOTAL	430	9-6-89	
		850		

SWS ENDURANCE TEST REPORT

SERIAL NO. CG348959 SHOOTER AC & DH DATE 9-7-89

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	60	OK	NONE
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	60	"	"
	7.62	40	"	"
	Total	400		
	Page 1	960		
	Page 2	840		
	Page 3	700		
	Page 4	750		
	Page 5	850		
	Total	4500		
	TARGET	60	OK	NONE
	TOTAL	4560	9-8-89	

SWS ENDURANCE TEST REPORT

SERIAL NO. C6348959 SHOOTER ACJ DIT DATE 9-12-89

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	100	OK	NONE
	"	100	"	"
	"	100	"	"
	"	100	"	"
	"	100	"	"
	"	100	"	"
	"	100	"	"
	"	60	"	"
		760		
	7.62	40	OK	NONE 9/13/89
	"	100	"	"
	"	100	"	"
	TOTAL	1000		
		5000		
		<u>6000</u>	9-13-89	

SWS ENDURANCE TEST REPORT

SERIAL NO. C6348959 SHOOTER AK & DH DATE Sept. 14, 1989

AMMO CODE	AMMO TYPE	RDS.	RESULTS	OBSERVATIONS
	7.62	100	OK	NONE
	7.62	100	"	"
	7.62	100	"	"
	7.62	100	"	"
	7.62	100	"	"
	7.62	100	9-14-89	"
	11	100	11	11
	11	100	11	11
	11	100	11	11
	11	100	11	11
	11	100	11	11
	TOTAL	1000		
		6000		
		7000		

SERIAL NO. CG3489.59 SHOOTER DH + AC DATE 9-18-89

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER

(1)

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6348959
21 Aug 1989

0 ROUNDS

CENTROIDAL DISTANCES

0 TO	1	.296892
1 TO	2	.42518
1 TO	3	.382126
1 TO	4	.938186
1 TO	5	.348941

$\frac{5^3}{1^2}$ <----POA
4

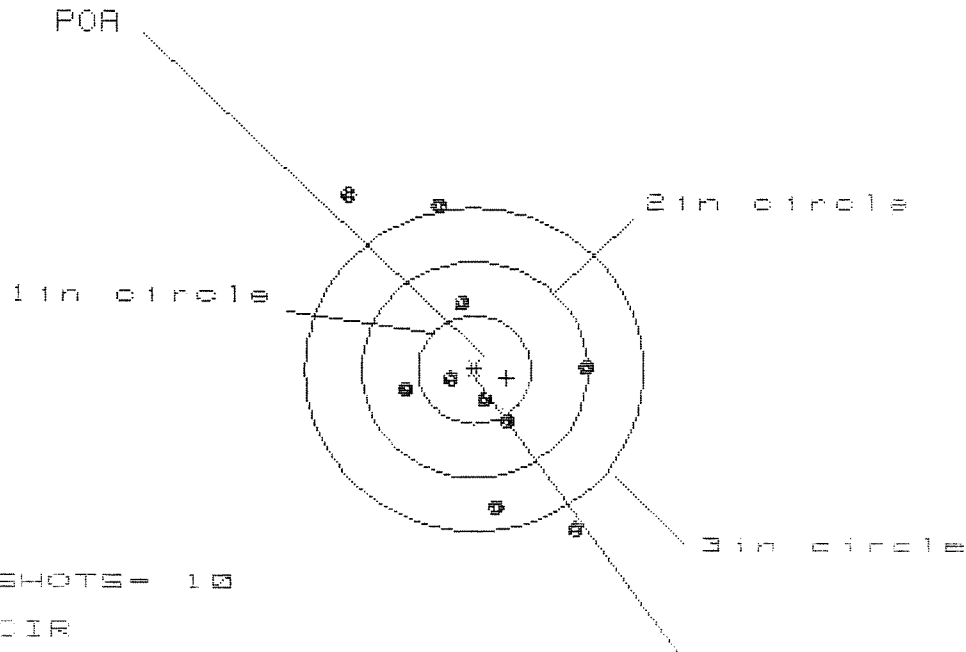
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.4836
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0584
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .407803
THE AMR FOR THIS RIFLE IS: 1.048

21 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C634B959

CENTERFIRE PATTERNS

1



OF SHOTS= 10

IN CIR

1in = 2

2in = 6

3in = 7

HS= 2.044

VS= 3.061

GS= 3.651

CENTROID *

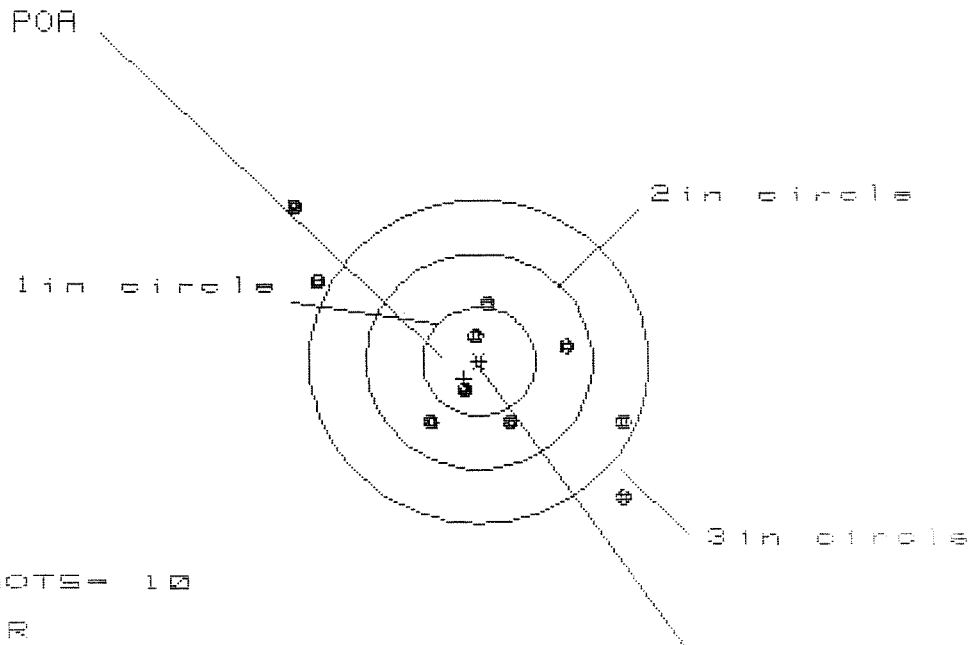
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.945	.823	.919
MINIMUM X	-1.099	-.712	-.616
MAXIMUM Y	1.612	1.718	1.560
MINIMUM Y	-1.449	-1.270	-1.236
CENTROID X	-.287	-.165	-.261
CENTROID Y	.076	-.103	.055
POA TO CENTROID in.	.297	.194	.267
MIN RADIUS	.243	.080	.246
MEAN RADIUS	.974	.831	.759
MAX RADIUS	1.951	1.780	1.603
HORIZONTAL SPREAD	2.044	1.535	1.535
VERTICAL SPREAD	3.061	2.988	2.796
EXTREME SPREAD	3.651	3.233	2.850
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	7		

21 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/06348959

CENTERFIRE PATTERNS

2



OF SHOTS = 10

IN CIR

1 in = 2

2 in = 6

3 in = 7

HS = 3.865

VS = 2.613

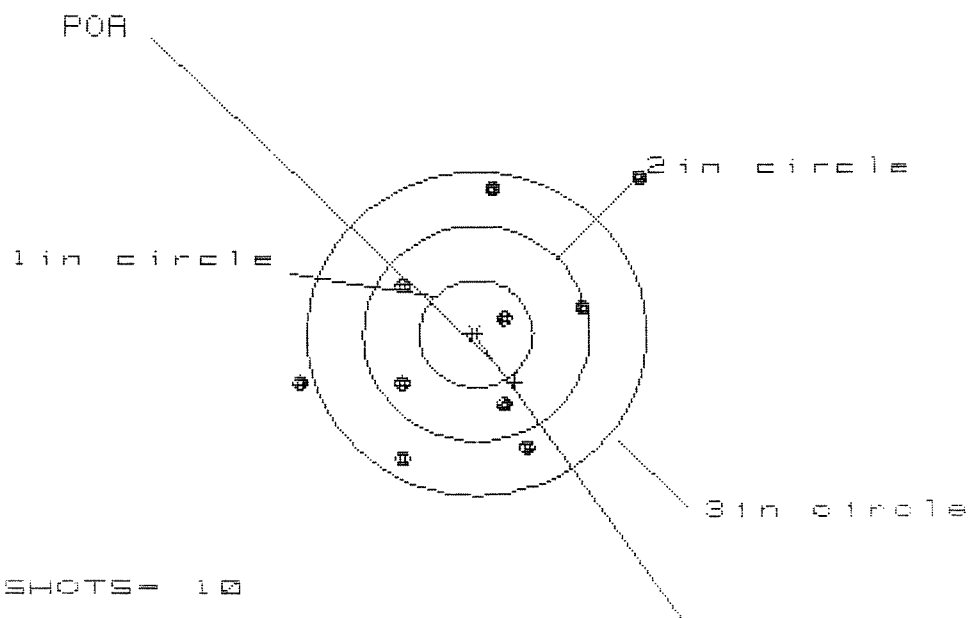
GS = 3.878

PATTERN #	2	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.266	1.088	1.183
MINIMUM X	-1.599	-1.594	-1.458
MAXIMUM Y	1.399	.934	.801
MINIMUM Y	-1.214	-1.058	-.556
CENTROID X	.130	.308	.172
CENTROID Y	.159	.003	.136
POA TO CENTROID in.	.205	.308	.219
MIN RADIUS	.237	.278	.257
MEAN RADIUS	.997	.857	.760
MAX RADIUS	2.125	1.847	1.664
HORIZONTAL SPREAD	2.865	2.682	2.641
VERTICAL SPREAD	2.613	1.992	1.357
EXTREME SPREAD	3.878	3.341	2.945
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	7		

21 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/06348959

CENTERFIRE PATTERNS # 3



OF SHOTS= 10

IN CIR

1 in = 1

2 in = 4

3 in = 8

HS= 2.997

VS= 2.587

GS= 3.536

CENTROID #

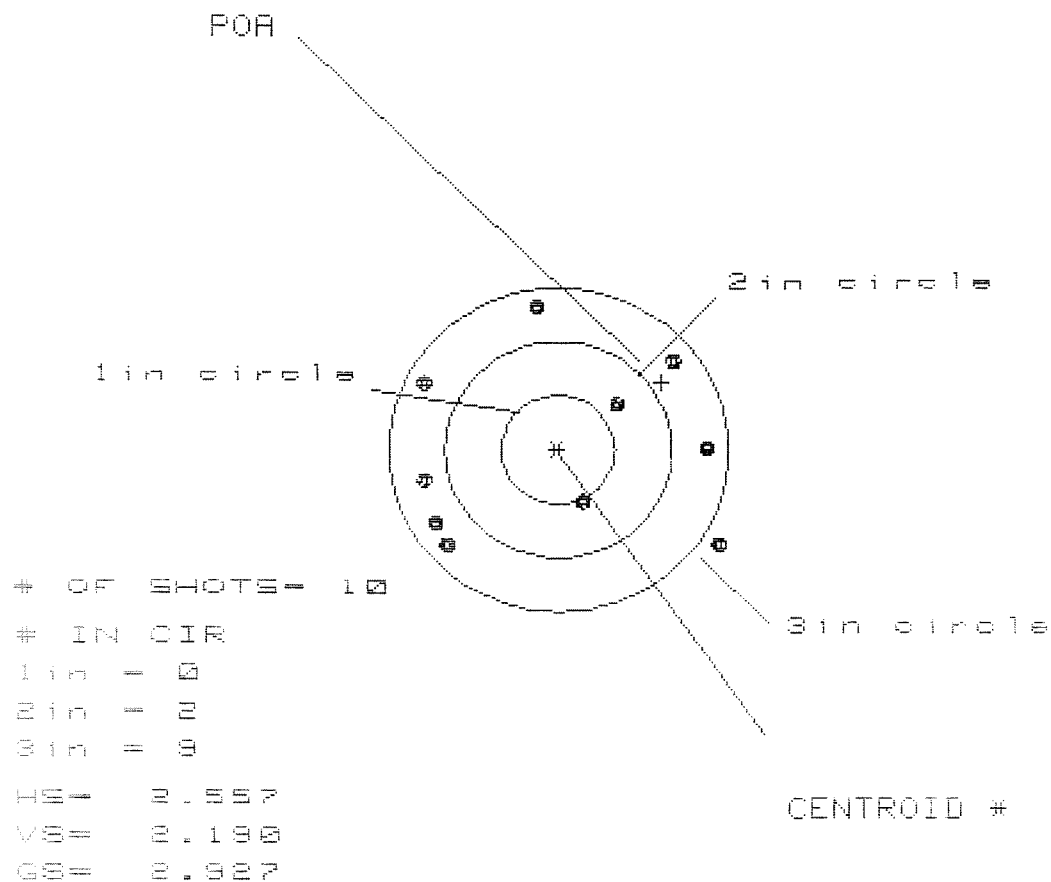
PATTERN #	3	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.465	1.134	.963
MINIMUM X	-1.532	-1.369	-.686
MAXIMUM Y	1.431	1.548	1.513
MINIMUM Y	-1.156	-.997	-1.032
CENTROID X	-.343	-.506	-.335
CENTROID Y	.454	.295	.330
POA TO CENTROID in.	.569	.586	.471
MIN RADIUS	.274	.493	.336
MEAN RADIUS	1.107	.984	.917
MAX RADIUS	2.048	1.575	1.517
HORIZONTAL SPREAD	2.997	2.503	1.649
VERTICAL SPREAD	2.587	2.545	2.545
EXTREME SPREAD	3.536	2.667	2.667
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	8		

21 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348959

CENTERFIRE PATTERNS

4



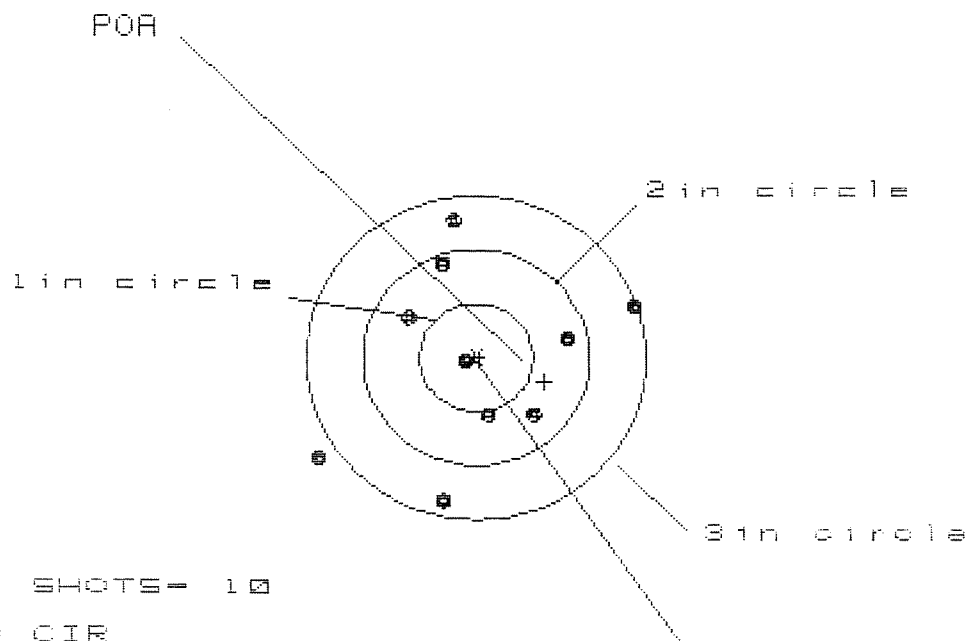
PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.401	1.506	1.393
MINIMUM X	:	-1.157	-1.001	-.813
MAXIMUM Y	:	1.322	1.229	1.220
MINIMUM Y	:	-.868	-.961	-.970
CENTROID X	:	-.915	-1.071	-1.259
CENTROID Y	:	-.621	-.528	-.519
POA TO CENTROID in.	:	1.106	1.194	1.362
MIN RADIUS	:	.570	.730	.859
MEAN RADIUS	:	1.199	1.145	1.084
MAX RADIUS	:	1.630	1.508	1.559
HORIZONTAL SPREAD	:	2.557	2.507	2.206
VERTICAL SPREAD	:	2.190	2.190	2.190
EXTREME SPREAD	:	2.927	2.662	2.662
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		2	
NUMBER IN THREE INCH CIRCLE	=		9	

21 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/CG348959

CENTERFIRE PATTERNS

5



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 6

3 in = 8

HS= 2.858

VS= 2.605

GS= 3.196

PATTERN #	5	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.437	1.279	.845
MINIMUM X	-1.421	-.735	-.575
MAXIMUM Y	1.316	1.211	1.259
MINIMUM Y	-1.289	-1.394	-1.346
CENTROID X	-.603	-.445	-.605
CENTROID Y	.224	.329	.281
POA TO CENTROID in.	.644	.554	.667
MIN RADIUS	.108	.296	.137
MEAN RADIUS	.965	.890	.808
MAX RADIUS	1.704	1.451	1.368
HORIZONTAL SPREAD	2.858	2.014	1.420
VERTICAL SPREAD	2.605	2.605	2.605
EXTREME SPREAD	3.196	2.605	2.605
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	8		

500 ROUNDS

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6348959
31 Aug 1989

CENTROIDAL DISTANCES

0 TO	1	.403838
1 TO	2	.482271
1 TO	3	.751394
1 TO	4	.610551
1 TO	5	.345984

3
1
4

<----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0862
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0002
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .0862002
THE ANR FOR THIS RIFLE IS: .8452

30 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C834B959.1

CENTERFIRE PATTERNS

1

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS= 10

IN CIR

1 in = 6

2 in = 8

3 in = 8

HS= 1.076

VS= 3.518

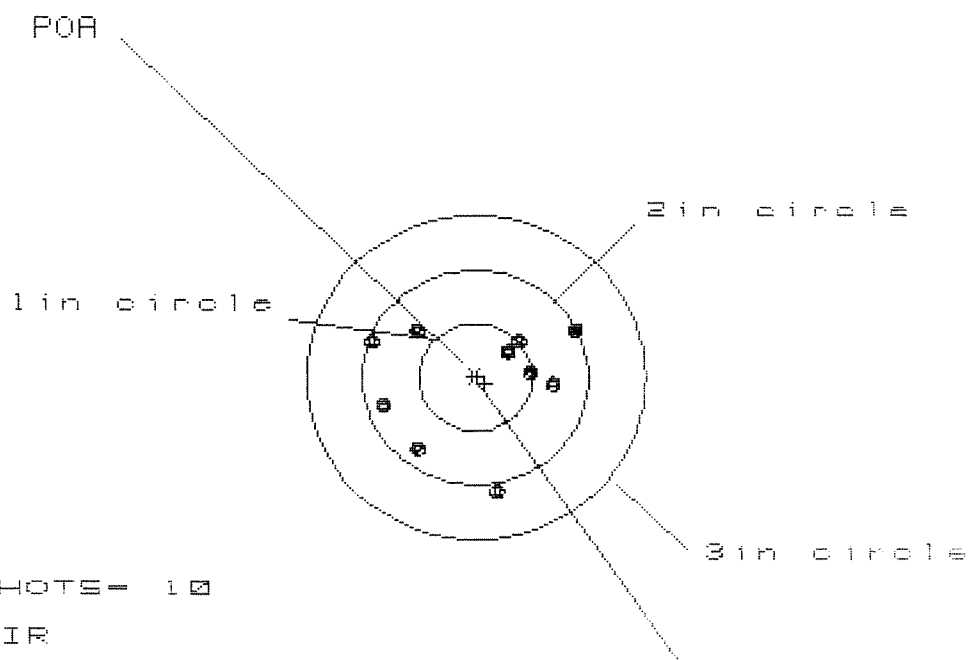
GS= 3.547

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.445	.375	.344
MINIMUM X	-.631	-.442	-.473
MAXIMUM Y	1.791	1.599	.480
MINIMUM Y	-1.727	-1.094	-.894
CENTROID X	.074	.144	.175
CENTROID Y	-.397	-.205	-.405
POA TO CENTROID in.	.404	.250	.441
MIN RADIUS	.166	.249	.235
MEAN RADIUS	.713	.585	.424
MAX RADIUS	1.839	1.617	.895
HORIZONTAL SPREAD	1.076	.817	.817
VERTICAL SPREAD	3.518	2.693	1.374
EXTREME SPREAD	3.547	2.704	1.425
NUMBER IN ONE INCH CIRCLE =	6		
NUMBER IN TWO INCH CIRCLE =	8		
NUMBER IN THREE INCH CIRCLE =	8		

30 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348353.1

CENTERFIRE PATTERNS # 2



OF SHOTS= 10

IN CIR

1 in = 1

2 in = 8

3 in = 10

HS= 1.814

VS= 1.515

GS= 1.864

CENTROID #

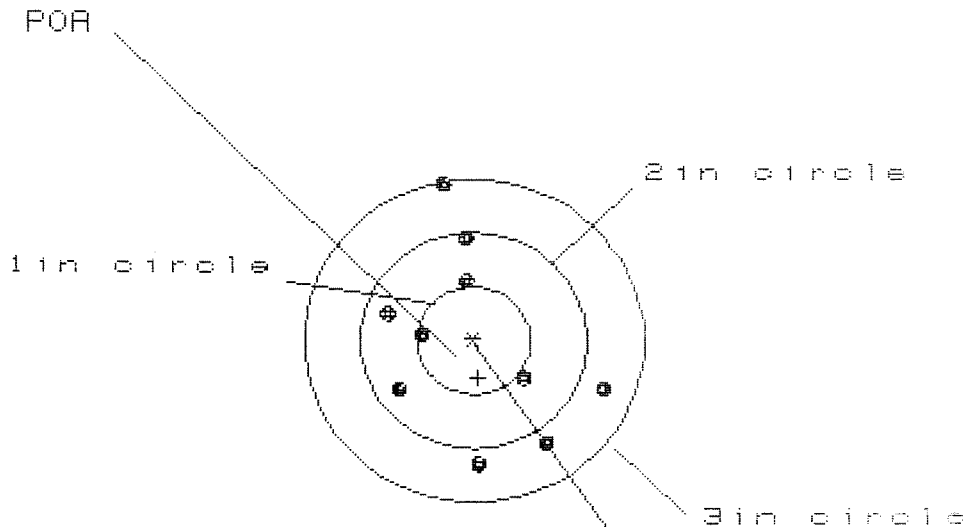
PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.889	.909	.791
MINIMUM X	:	-.925	-.905	-.791
MAXIMUM Y	:	.475	.359	.402
MINIMUM Y	:	-1.040	-.745	-.702
CENTROID X	:	-.083	-.103	-.217
CENTROID Y	:	.059	.175	.132
POA TO CENTROID in.	:	.102	.203	.254
MIN RADIUS	:	.348	.294	.415
MEAN RADIUS	:	.758	.712	.689
MAX RADIUS	:	1.056	.972	.843
HORIZONTAL SPREAD	:	1.814	1.814	1.582
VERTICAL SPREAD	:	1.515	1.104	1.104
EXTREME SPREAD	:	1.864	1.864	1.648
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		10	

30 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C834B959.1

CENTERFIRE PATTERNS

3



OF SHOTS= 10

IN CIR

1 in = 1

2 in = 6

3 in = 10

HS= 1.877

VS= 2.571

GS= 2.593

CENTROID *

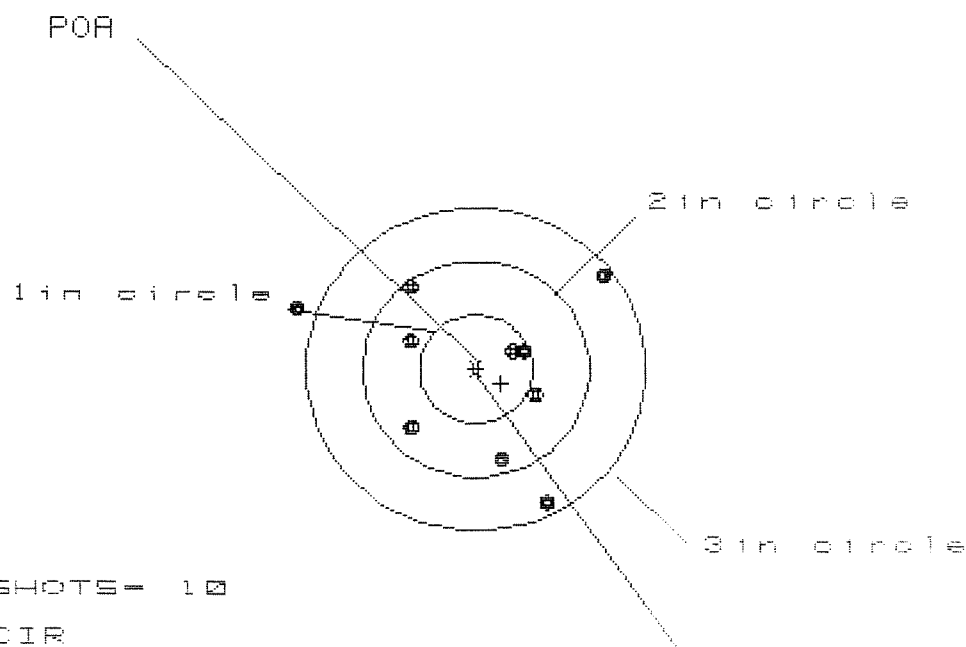
PATTERN #	3		
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.108	1.079	.755
MINIMUM X	-.769	-.798	-.663
MAXIMUM Y	1.433	1.089	1.048
MINIMUM Y	-1.138	-.979	-1.020
CENTROID X	-.038	-.009	-.144
CENTROID Y	.346	.187	.228
POA TO CENTROID in.	.348	.187	.269
MIN RADIUS	.460	.447	.394
MEAN RADIUS	.911	.846	.791
MAX RADIUS	1.456	1.127	1.119
HORIZONTAL SPREAD	1.877	1.877	1.418
VERTICAL SPREAD	2.571	2.068	2.068
EXTREME SPREAD	2.593	2.070	2.070
NUMBER IN ONE INCH CIRCLE =		1	
NUMBER IN TWO INCH CIRCLE =		6	
NUMBER IN THREE INCH CIRCLE =		10	

30 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C634B353.1

CENTERFIRE PATTERNS

4



OF SHOTS= 10

IN CIR

1 in = 2

2 in = 7

3 in = 9

HS= 2.659

VS= 2.016

GS= 2.816

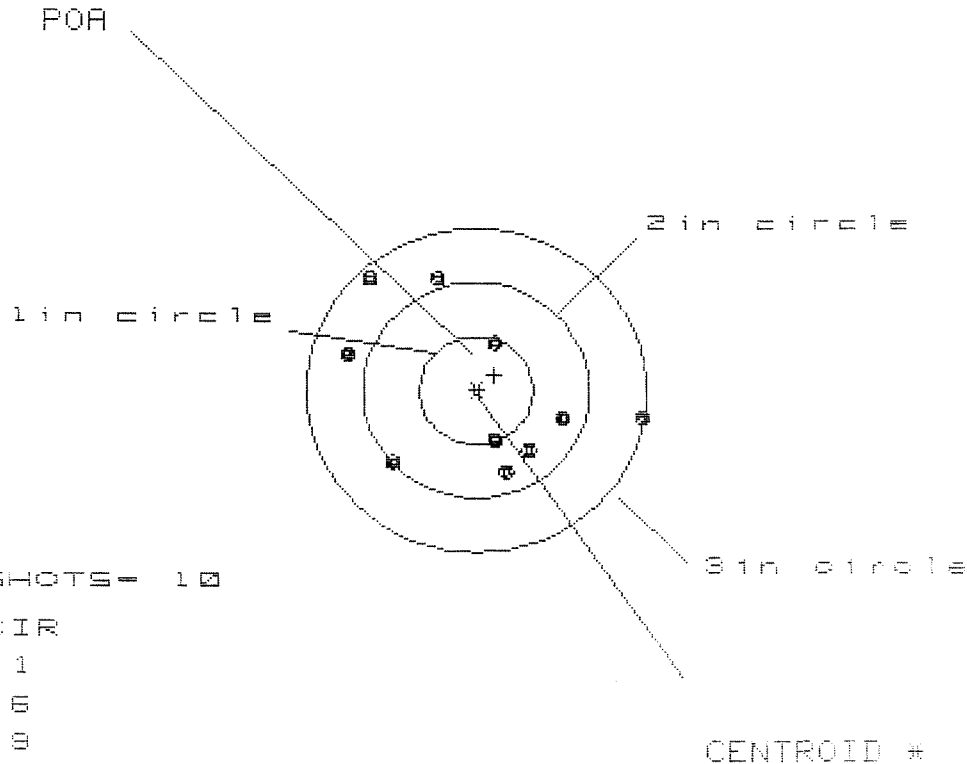
CENTROID #

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.113	.941	.607
MINIMUM X	:	-1.546	-.721	-.604
MAXIMUM Y	:	.817	.878	.961
MINIMUM Y	:	-1.199	-1.138	-1.028
CENTROID X	:	-.222	-.050	-.167
CENTROID Y	:	.137	.076	-.034
POA TO CENTROID in.	:	.260	.091	.171
MIN RADIUS	:	.393	.303	.435
MEAN RADIUS	:	.890	.779	.724
MAX RADIUS	:	1.641	1.287	1.194
HORIZONTAL SPREAD	:	2.659	1.662	1.211
VERTICAL SPREAD	:	2.016	2.016	1.989
EXTREME SPREAD	:	2.816	2.329	2.329
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

30 Aug 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348959.1

CENTERFIRE PATTERNS # 5



OF SHOTS= 10

IN CIR

1 in = 1

2 in = 6

3 in = 9

HS= 2.672

VS= 1.751

GS= 2.788

PATTERN #	5		
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.489	.957	.856
MINIMUM X	-1.183	-1.018	-1.119
MAXIMUM Y	1.036	1.005	1.097
MINIMUM Y	-.715	-.746	-.620
CENTROID X	-.162	-.327	-.226
CENTROID Y	-.144	-.113	-.239
POA TO CENTROID in.	.216	.346	.329
MIN RADIUS	.458	.563	.404
MEAN RADIUS	.954	.900	.818
MAX RADIUS	1.514	1.288	1.201
HORIZONTAL SPREAD	2.672	1.975	1.975
VERTICAL SPREAD	1.751	1.751	1.717
EXTREME SPREAD	2.788	2.180	2.061
NUMBER IN ONE INCH CIRCLE =		1	
NUMBER IN TWO INCH CIRCLE =		6	
NUMBER IN THREE INCH CIRCLE =		9	

4500# Rou

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6348959
8 Sep 1989

CENTROIDAL DISTANCES

0 TO	1	.0756637
1 TO	2	.20412
1 TO	3	.277115
1 TO	4	.605483
1 TO	5	.0663099

$\frac{4}{24}$ <----FOR

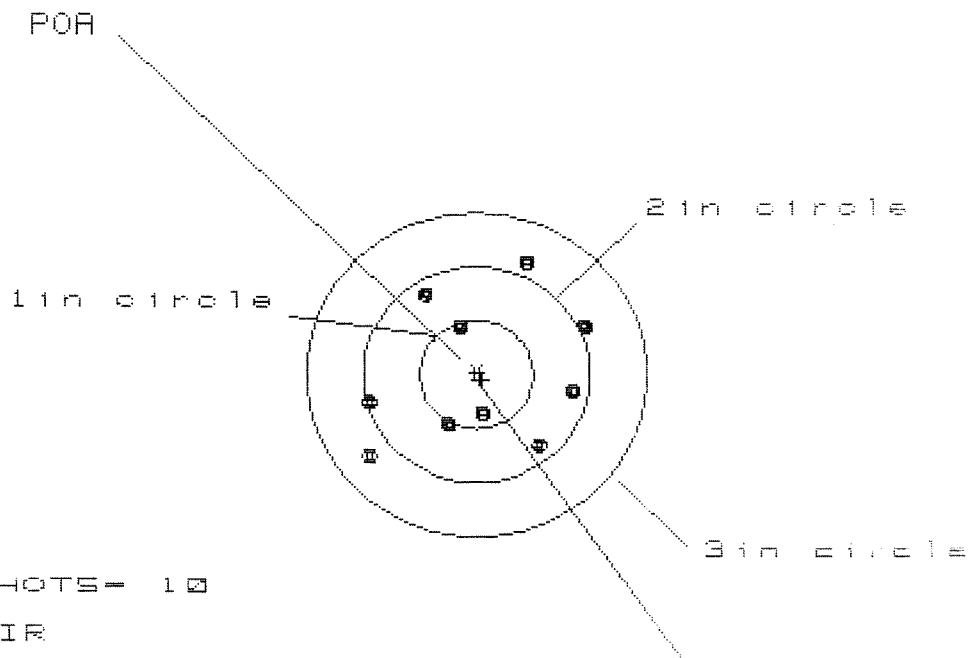
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.1442
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .1974
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .244459
THE AMR FOR THIS RIFLE IS: .7882

8 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/CG34B959.1.1

CENTERFIRE PATTERNS

1



OF SHOTS- 10

IN CIR

1in = 3

2in = 6

3in = 10

HS= 1.920

VS= 1.745

GS= 2.224

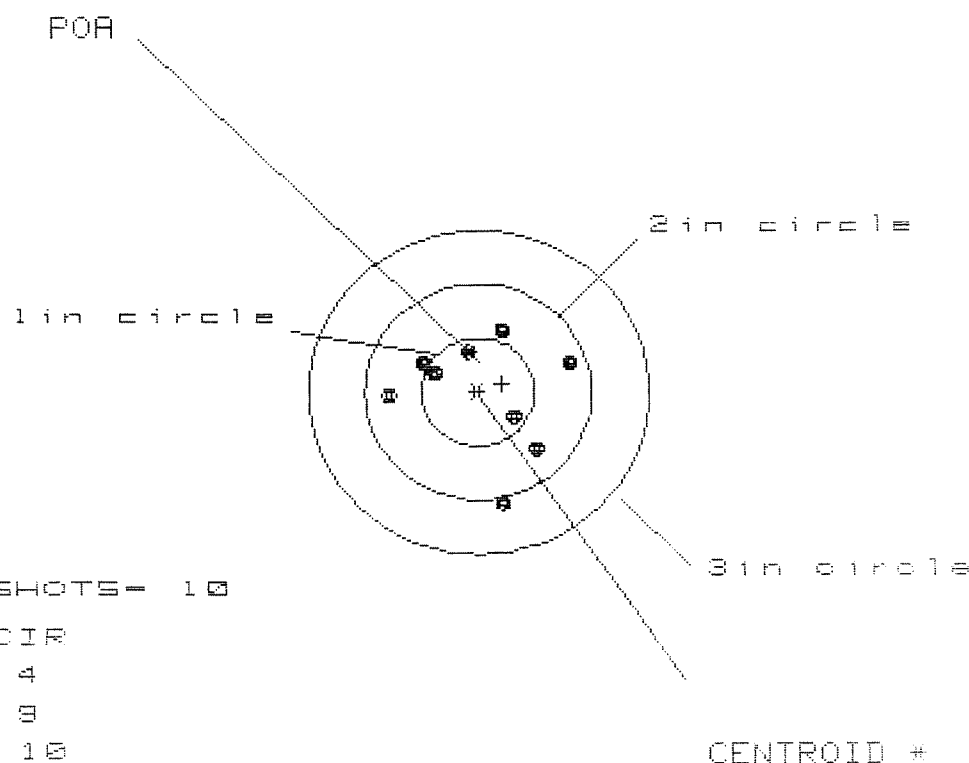
CENTROID *

PATTERN #	:	1	9	8
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.941	.834	.871
MINIMUM X	:	-.980	-1.086	-1.049
MAXIMUM Y	:	.997	.913	.784
MINIMUM Y	:	-.748	-.778	-.663
CENTROID X	:	-.053	.054	.017
CENTROID Y	:	.054	.138	.023
POA TO CENTROID in.	:	.076	.148	.029
MIN RADIUS	:	.357	.428	.314
MEAN RADIUS	:	.823	.777	.737
MAX RADIUS	:	1.218	1.128	1.067
HORIZONTAL SPREAD	:	1.920	1.920	1.920
VERTICAL SPREAD	:	1.745	1.691	1.447
EXTREME SPREAD	:	2.224	2.020	2.020
NUMBER IN ONE INCH CIRCLE	=	3		
NUMBER IN TWO INCH CIRCLE	=	6		
NUMBER IN THREE INCH CIRCLE	=	10		

8 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/06348359.1.1

CENTERFIRE PATTERNS # 2



OF SHOTS = 10

IN CIR

1 in = 4

2 in = 9

3 in = 10

HS = 1.588

VS = 1.569

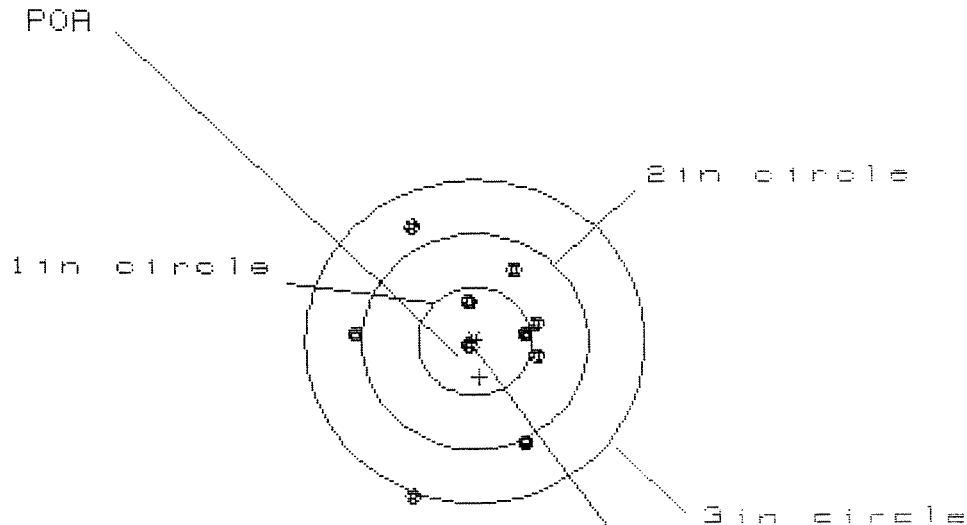
GS = 1.616

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.839	.863	.653
MINIMUM X	:	-.749	-.725	-.617
MAXIMUM Y	:	.546	.432	.457
MINIMUM Y	:	-1.023	-.679	-.654
CENTROID X	:	-.212	-.236	-.344
CENTROID Y	:	-.074	.040	.015
POA TO CENTROID in.	:	.224	.240	.345
MIN RADIUS	:	.370	.266	.226
MEAN RADIUS	:	.619	.548	.482
MAX RADIUS	:	1.047	.886	.925
HORIZONTAL SPREAD	:	1.588	1.588	1.270
VERTICAL SPREAD	:	1.569	1.111	1.111
EXTREME SPREAD	:	1.616	1.616	1.394
NUMBER IN ONE INCH CIRCLE	=		4	
NUMBER IN TWO INCH CIRCLE	=		9	
NUMBER IN THREE INCH CIRCLE	=		10	

8 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C634B959.1.1

CENTERFIRE PATTERNS # 3



OF SHOTS = 10

IN CIR

1 in = 3

2 in = 7

3 in = 9

HS = 1.693

VS = 2.513

GS = 2.513

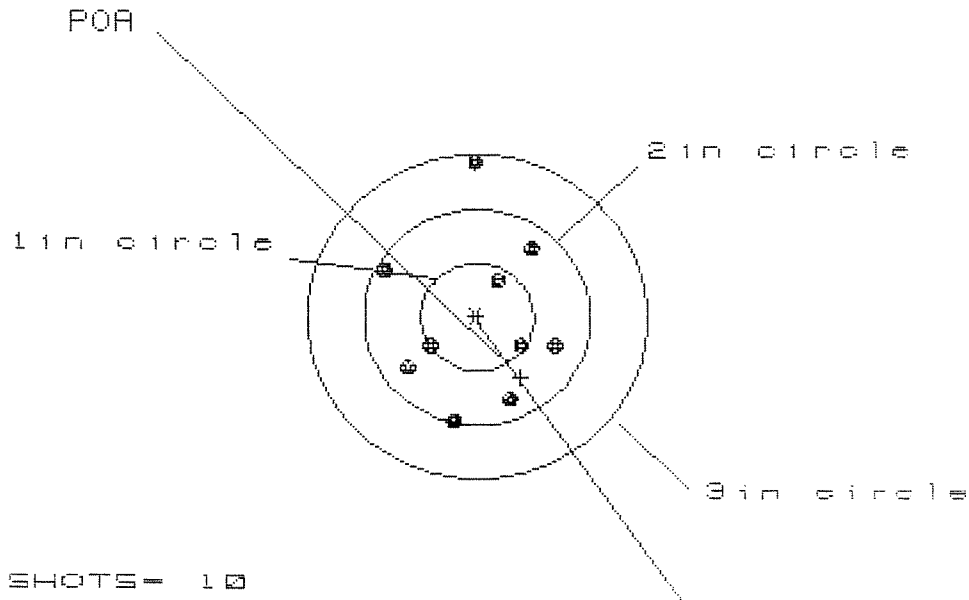
PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.589	.525	.448
MINIMUM X	:	-1.104	-1.168	-1.245
MAXIMUM Y	:	1.051	.889	.643
MINIMUM Y	:	-1.462	-1.048	-.937
CENTROID X	:	-.045	.019	.096
CENTROID Y	:	.331	.493	.382
POA TO CENTROID in.	:	.334	.493	.394
MIN RADIUS	:	.057	.203	.204
MEAN RADIUS	:	.771	.657	.590
MAX RADIUS	:	1.572	1.170	1.246
HORIZONTAL SPREAD	:	1.693	1.693	1.693
VERTICAL SPREAD	:	2.513	1.937	1.580
EXTREME SPREAD	:	2.513	2.179	1.849
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

8 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C634B959.1.1

CENTERFIRE PATTERNS

4



OF SHOTS= 10

IN CIR

1 in = 3

2 in = 9

3 in = 10

HS= 1.525

VS= 2.375

GS= 2.392

CENTROID *

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.699	.703	.671
MINIMUM X	:	-.826	-.822	-.854
MAXIMUM Y	:	1.452	.819	.724
MINIMUM Y	:	-.923	-.762	-.666
CENTROID X	:	-.384	-.388	-.356
CENTROID Y	:	.561	.400	.495
POA TO CENTROID in.	:	.680	.557	.610
MIN RADIUS	:	.367	.403	.414
MEAN RADIUS	:	.782	.688	.671
MAX RADIUS	:	1.452	1.002	.978
HORIZONTAL SPREAD	:	1.525	1.525	1.525
VERTICAL SPREAD	:	2.375	1.581	1.390
EXTREME SPREAD	:	2.392	1.765	1.650
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		9	
NUMBER IN THREE INCH CIRCLE	=		10	

8 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/0634B959.1.1

CENTERFIRE PATTERNS # 5

POA

1in circle

2in circle

3in circle

OF SHOTS= 10

IN CIR

1in = 0

2in = 5

3in = 10

HS= 2.126

VS= 2.147

GS= 2.537

CENTROID #

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.152	.752	.712
MINIMUM X	:	-.974	-.846	-.886
MAXIMUM Y	:	1.010	.919	.765
MINIMUM Y	:	-1.137	-1.228	-1.121
CENTROID X	:	-.027	-.155	-.115
CENTROID Y	:	.115	.206	.360
POA TO CENTROID in.	:	.118	.258	.378
MIN RADIUS	:	.558	.528	.380
MEAN RADIUS	:	.946	.876	.793
MAX RADIUS	:	1.415	1.270	1.282
HORIZONTAL SPREAD	:	2.126	1.598	1.598
VERTICAL SPREAD	:	2.147	2.147	1.886
EXTREME SPREAD	:	2.537	2.193	2.085
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		10	

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6348959
11 Sep 1989

5000
~~4150~~ ROUNDS

CENTROIDAL DISTANCES

0 TO	1	.922338
1 TO	2	.32966
1 TO	3	.387363
1 TO	4	.458813
1 TO	5	.842639

$\frac{S}{\sum_{i=1}^5}$ <----FOR

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .634
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .1132
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .644827
THE AMR FOR THIS RIFLE IS: .6874

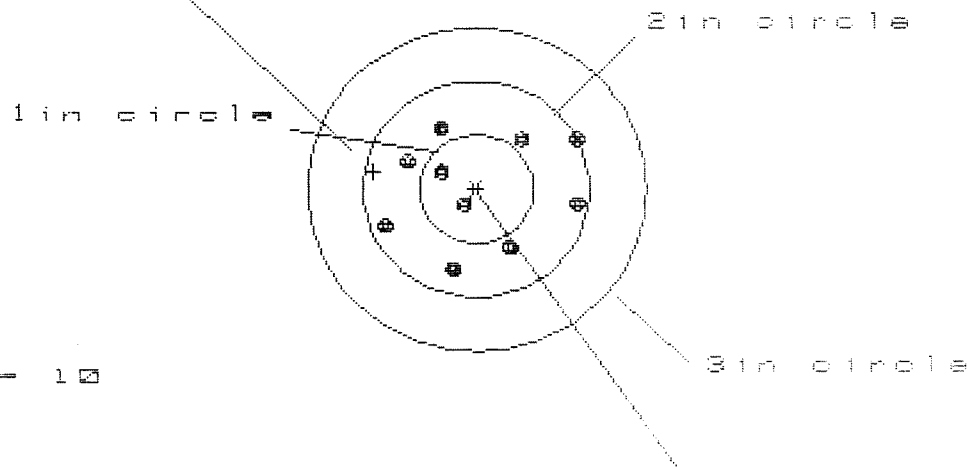
11 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C634B959.1.1.1

CENTERFIRE PATTERNS

1

POA



OF SHOTS- 10

IN CIR

1in = 2

2in = 10

3in = 10

HS= 1.679

VS= 1.284

GS= 1.804

PATTERN #

1

SHOTS (BEST OF)	10	9	8
MAXIMUM X	.879	.973	.639
MINIMUM X	-.800	-.706	-.585
MAXIMUM Y	.561	.611	.600
MINIMUM Y	-.723	-.673	-.684
CENTROID X	.908	.814	.693
CENTROID Y	-.162	-.212	-.201
POA TO CENTROID in.	.922	.841	.721
MIN RADIUS	.203	.130	.174
MEAN RADIUS	.658	.606	.543
MAX RADIUS	.957	.977	.828
HORIZONTAL SPREAD	1.679	1.679	1.224
VERTICAL SPREAD	1.284	1.284	1.284
EXTREME SPREAD	1.804	1.686	1.451
NUMBER IN ONE INCH CIRCLE =		2	
NUMBER IN TWO INCH CIRCLE =		10	
NUMBER IN THREE INCH CIRCLE =		10	

11 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348959.1.1.1

CENTERFIRE PATTERNS

2

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS- 10

IN CIR

1 in = 4

2 in = 9

3 in = 9

HS= 1.195

VS= 2.383

GS= 2.393

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.497	.550	.589
MINIMUM X	:	-.698	-.645	-.606
MAXIMUM Y	:	.934	.773	.534
MINIMUM Y	:	-1.449	-.494	-.398
CENTROID X	:	.668	.615	.576
CENTROID Y	:	.064	.225	.129
POA TO CENTROID in.	:	.671	.655	.590
MIN RADIUS	:	.093	.216	.119
MEAN RADIUS	:	.617	.520	.463
MAX RADIUS	:	1.526	.834	.786
HORIZONTAL SPREAD	:	1.195	1.195	1.195
VERTICAL SPREAD	:	2.383	1.267	.932
EXTREME SPREAD	:	2.393	1.495	1.495
NUMBER IN ONE INCH CIRCLE	=		4	
NUMBER IN TWO INCH CIRCLE	=		9	
NUMBER IN THREE INCH CIRCLE	=		9	

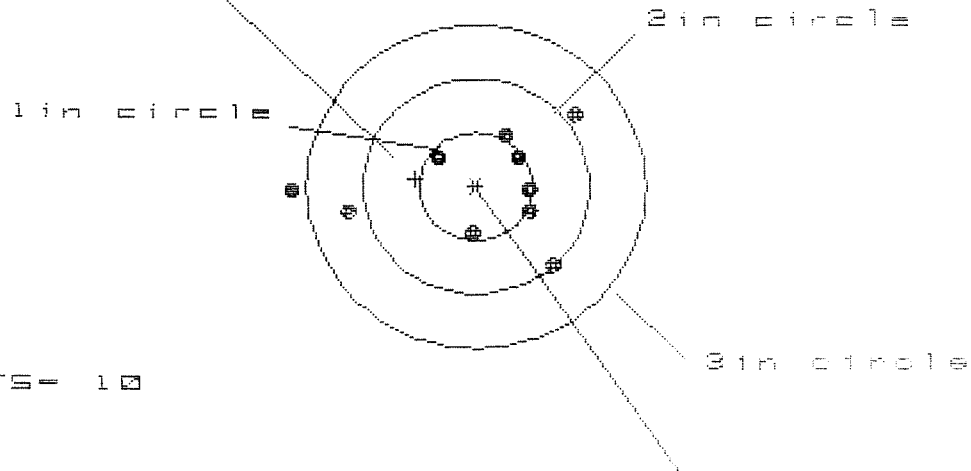
11 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6346959.1.1.1

CENTERFIRE PATTERNS

3

POA



OF SHOTS = 10

IN CIR

1 in = 3

2 in = 7

3 in = 9

HS = 2.546

VS = 1.413

GS = 2.641

CENTROID *

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.907	.725	.557
MINIMUM X	:	-1.639	-1.348	-.701
MAXIMUM Y	:	.669	.666	.641
MINIMUM Y	:	-.744	-.747	-.772
CENTROID X	:	.531	.713	.881
CENTROID Y	:	-.073	-.070	-.045
POA TO CENTROID in.	:	.536	.716	.883
MIN RADIUS	:	.419	.315	.152
MEAN RADIUS	:	.784	.646	.523
MAX RADIUS	:	1.639	1.362	.849
HORIZONTAL SPREAD	:	2.546	2.073	1.258
VERTICAL SPREAD	:	1.413	1.413	1.413
EXTREME SPREAD	:	2.641	2.246	1.434
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

11 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348359.1.1.1

CENTERFIRE PATTERNS

4

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS= 10

IN CIR

1 in = 3

2 in = 7

3 in = 9

HS= 2.264

VS= 2.261

GS= 2.643

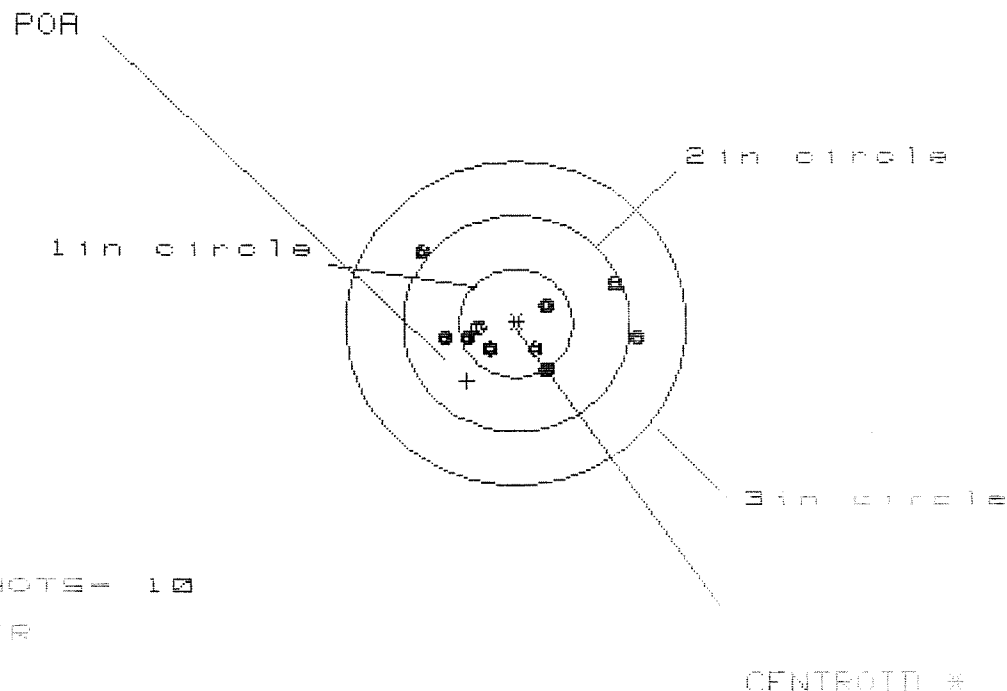
PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.820	.659	.662
MINIMUM X	:	-1.444	-.572	-.569
MAXIMUM Y	:	1.180	1.080	.633
MINIMUM Y	:	-1.081	-1.181	-1.046
CENTROID X	:	.630	.791	.788
CENTROID Y	:	.203	.303	.168
POA TO CENTROID in.	:	.662	.847	.805
MIN RADIUS	:	.302	.287	.391
MEAN RADIUS	:	.779	.662	.611
MAX RADIUS	:	1.702	1.197	1.064
HORIZONTAL SPREAD	:	2.264	1.231	1.231
VERTICAL SPREAD	:	2.261	2.261	1.679
EXTREME SPREAD	:	2.643	2.267	1.776
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

11 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/06348959.1.1.1

CENTERFIRE PATTERNS

5



OF SHOTS- 10

IN CIR

1 in = 0

2 in = 5

3 in = 10

HS= 1.896

VS= 1.057

GS= 2.038

PATTERN #	5	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.022	.925	.920
MINIMUM X	-.874	-.758	-.643
MAXIMUM Y	.659	.456	.454
MINIMUM Y	-.398	-.324	-.326
CENTROID X	.433	.530	.415
CENTROID Y	.534	.460	.462
POA TO CENTROID in.	.687	.702	.621
MIN RADIUS	.242	.126	.208
MEAN RADIUS	.599	.534	.470
MAX RADIUS	1.895	.925	1.026
HORIZONTAL SPREAD	1.896	1.683	1.563
VERTICAL SPREAD	1.057	.780	.780
EXTREME SPREAD	2.038	1.684	1.653
NUMBER IN ONE INCH CIRCLE =		6	
NUMBER IN TWO INCH CIRCLE =		8	
NUMBER IN THREE INCH CIRCLE =		10	

QP 0041

MAGNETIC PARTICLE INSPECTION

PART NAME Final Bbl.Assem.MATERIAL Bbl. Rem.Spec.#155-Rec.Spec.4137M

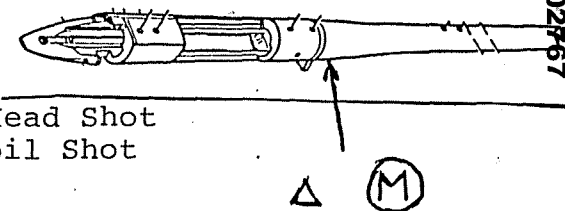
OPERATION NUMBER 615

METHOD	SINGLE PARTS			MULTIPLE PARTS		
	HEAD SHOT	CENTRAL	COIL SHOT	HEAD SHOT	CENTRAL	COIL SHOT
	HEAD SHOT	CONDUCTOR	COIL SHOT	CONDUCTOR	IN BASKET	AMPERES

SKETCH AND/OR REMARKS

NON-FLUORESCENT
CONTINUOUS WETFLUORESCENT
CONTINUOUS WET Yes

Yes (2 Overlapping)

900-1100-Head Shot
600-800-Coil ShotNON-FLUORESCENT
RESIDUAL WETFLUORESCENT
RESIDUAL WET

APPROVAL:

INSP. _____ LEV III

DATE: _____ DATE: _____

STAMPING

STEEL STAMP ON. Triangular stamp (A) and letter "M" circled

OTHER Location-right side near Receiver.

ACCEPTANCE STANDARD

PROCEDURE:

1. All parts must be cleaned before testing.
2. All parts shall be satisfactorily demagnetized after all magnetization has been completed.
3. The magnetic substance shall be completely removed from all parts after inspection and demagnetization.
4. All accepted parts must be marked with a mangafux stamp, acid etch, or ink stamp (If the part is too small or is a critical part, contact inspection supervisor).
5. Parts having indications not acceptable shall be segregated and identified, and are to be reviewed by Metallurgy and inspection groups.
6. All areas to be inspected 100%.
7. Inspection to be performed by a certified Level I, acceptance or rejection of product will be done by a certified Level II, or Level III.

No Indications acceptable in the
Locking Lug area of Receiver or
chamber area of Bbl.

USE BACK SIDE OF THIS CARD TO RECORD EACH LOT INSPECTED.

ALL BLOCKS MUST BE PROPERLY FILLED IN.

LEV III.

INSP. Karl C. Rice

8158-8096

FORM QP-0041-1

"B" STAMP

QP 0041

ENDOKANCE
BBL & BOLT
C-634 8959

DATE	MFG. ORDER NO.	QUANTITY	SERIAL #	QUANTITY OF PARTS	
				ACCEPTED	REJECTED
9/5/89	2,500	Rds		OK	
9/12/89	5,000	Rds		OK	
9/13/89	6,000	Rds		OK	
9/14/89	7,000	Rds		OK	
9/15/89	8,000	Rds		OK - Blt worn in	
9/19/89	9,000	Rds		OK	
9/20/89	10,000	Rds		OK -	

Karl Rice
8158-8096
'B" STAMP

CENTROIDAL DISTANCE CALCULATIONS
 FOR RIFLE # C6348959
 20 Sep 1989

CENTROIDAL DISTANCES

0 TO	1	.339638
1 TO	2	.305247
1 TO	3	.186553
1 TO	4	.491423
1 TO	5	.561957

2.7
 ft --- POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0792
 THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .2028
 THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .217717

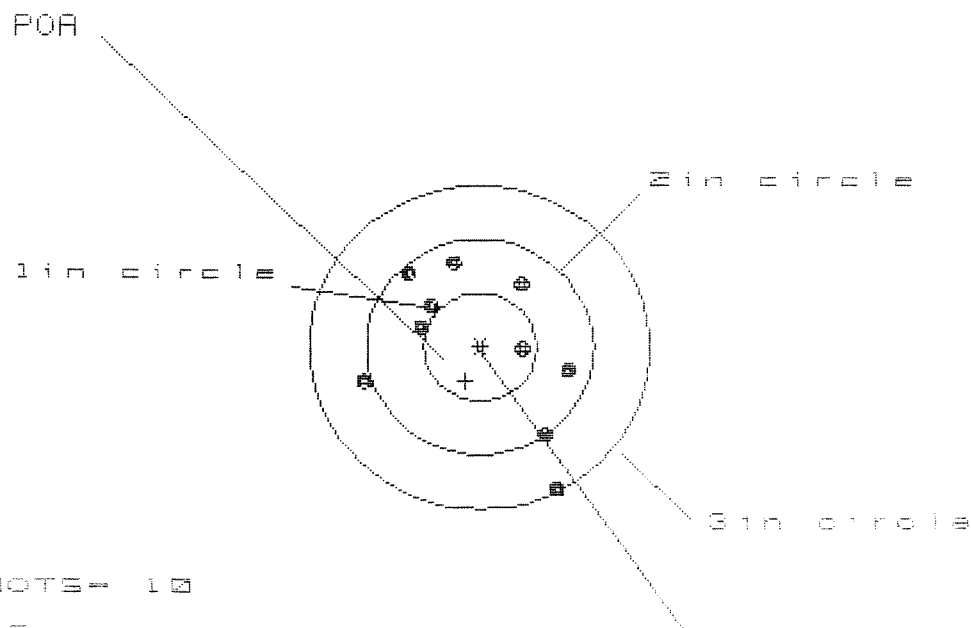
THE AMR FOR THIS RIFLE IS: 8502

After 10,000 Rls

20 Sep 1989

FILE:/PATTERNING/CENTERFIRE_PATT/C6348959.1.1.1.1

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 8

3 in = 10

HS= 1.801

VS= 2.128

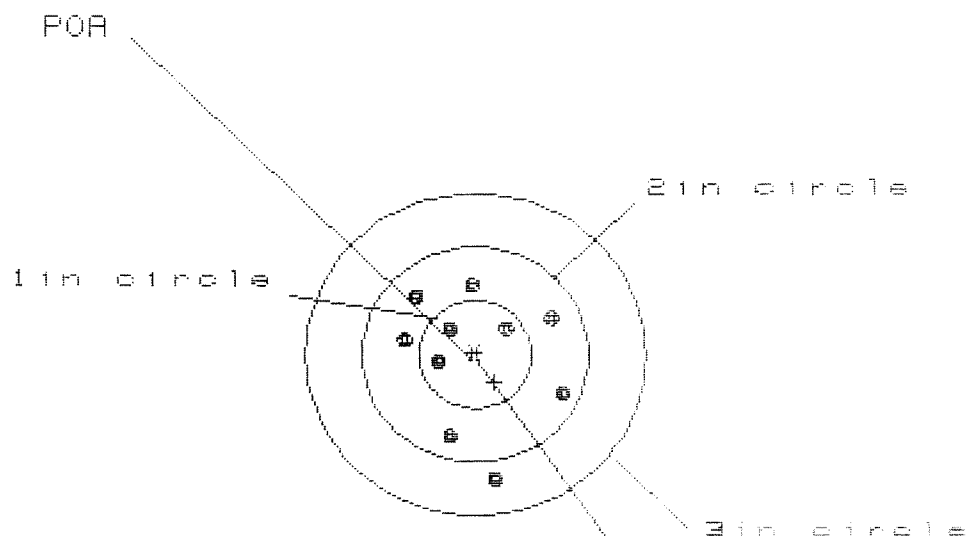
GS= 2.352

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.766	.845	.726
MINIMUM X	-1.036	-.956	-.636
MAXIMUM Y	.819	.674	.612
MINIMUM Y	-1.309	-.932	-.994
CENTROID X	.127	.047	.166
CENTROID Y	.315	.460	.522
POA TO CENTROID in.	.339	.462	.548
MIN RADIUS	.376	.404	.386
MEAN RADIUS	.826	.721	.665
MAX RADIUS	1.493	1.141	1.131
HORIZONTAL SPREAD	1.801	1.801	1.362
VERTICAL SPREAD	2.128	1.606	1.606
EXTREME SPREAD	2.352	1.849	1.849
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	8		
NUMBER IN THREE INCH CIRCLE =	10		

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CENTERFIRE PATTERNS # 2



OF SHOTS= 10

IN CIR

1 in = 3

2 in = 8

3 in = 10

HS= 1.329

VS= 1.784

GS= 1.882

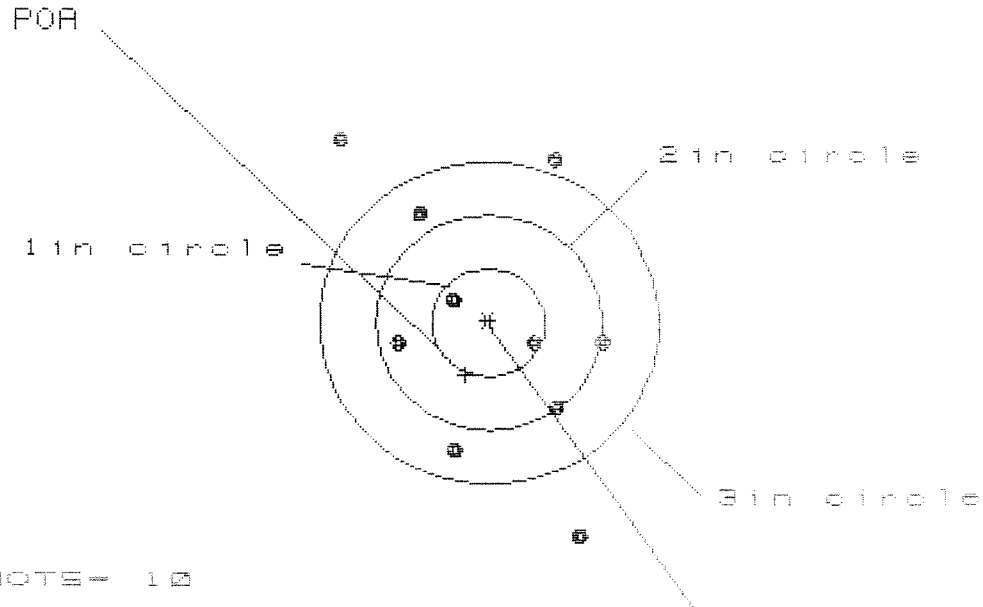
PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.748	.771	.863
MINIMUM X	:	-.581	-.558	-.466
MAXIMUM Y	:	.673	.549	.583
MINIMUM Y	:	-1.111	-.886	-.852
CENTROID X	:	-.173	-.196	-.288
CENTROID Y	:	.256	.380	.346
POA TO CENTROID in.	:	.309	.427	.451
MIN RADIUS	:	.296	.285	.234
MEAN RADIUS	:	.668	.593	.552
MAX RADIUS	:	1.130	.914	.962
HORIZONTAL SPREAD	:	1.329	1.329	1.329
VERTICAL SPREAD	:	1.784	1.435	1.435
EXTREME SPREAD	:	1.882	1.545	1.545
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		9	
NUMBER IN THREE INCH CIRCLE	=		10	

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CENTERFIRE PATTERNS

3



OF SHOTS- 10

IN CIR

1 in = 2

2 in = 4

3 in = 7

HS= 2.288

VS= 3.640

GS= 4.200

CENTROID #

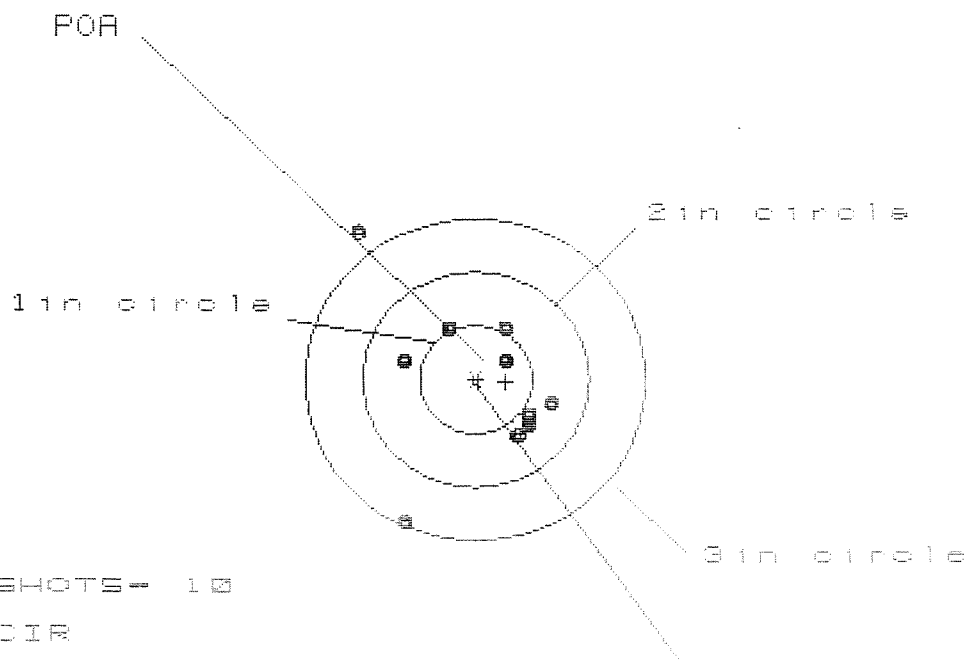
PATTERN #	3	3	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.946	.797	.874
MINIMUM X	-1.342	-.941	-.863
MAXIMUM Y	1.685	1.688	1.467
MINIMUM Y	-1.955	-1.768	-1.227
CENTROID X	.206	.355	.278
CENTROID Y	.484	.297	.518
POA TO CENTROID in.	.526	.463	.588
MIN RADIUS	.406	.295	.422
MEAN RADIUS	1.188	1.061	.953
MAX RADIUS	2.154	1.874	1.568
HORIZONTAL SPREAD	2.288	1.738	1.738
VERTICAL SPREAD	3.640	3.456	2.694
EXTREME SPREAD	4.200	3.459	2.864
NUMBER IN ONE INCH CIRCLE =		2	
NUMBER IN TWO INCH CIRCLE =		4	
NUMBER IN THREE INCH CIRCLE =		7	

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CENTERFIRE PATTERNS

4



OF SHOTS- 10

IN CIR

1in = 1

2in = 8

3in = 9

HS= 1.662

VS= 2.697

GS= 2.731

CENTROID #

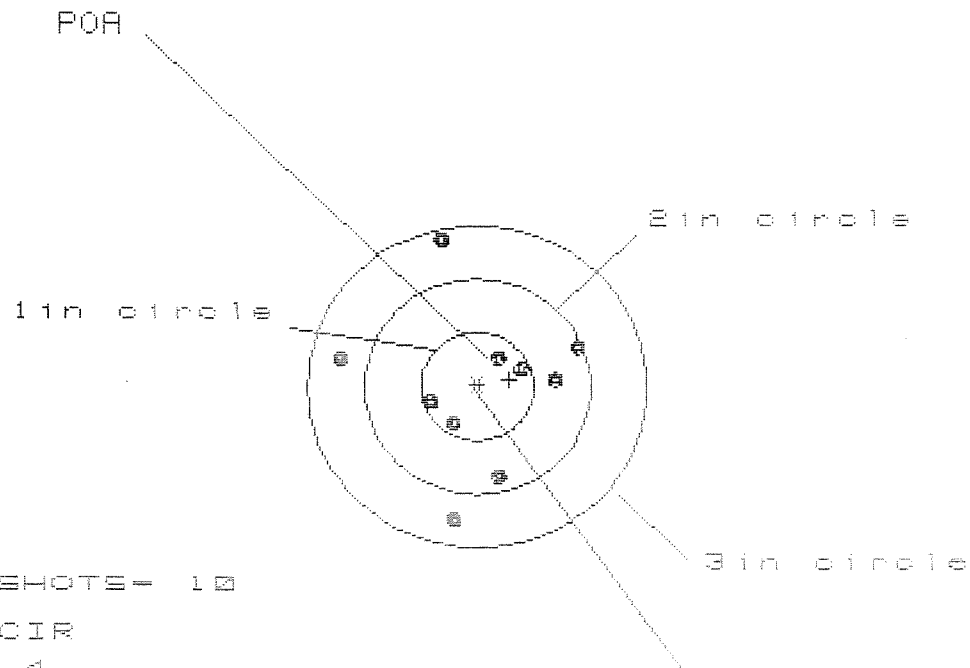
PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.637	.523	.434
MINIMUM X	:	-1.025	-.761	-.850
MAXIMUM Y	:	1.367	.673	.526
MINIMUM Y	:	-1.330	-1.178	-.549
CENTROID X	:	-.269	-.155	-.066
CENTROID Y	:	.024	-.128	.019
POA TO CENTROID in.	:	.270	.201	.068
MIN RADIUS	:	.341	.393	.223
MEAN RADIUS	:	.782	.651	.526
MAX RADIUS	:	1.709	1.377	.875
HORIZONTAL SPREAD	:	1.662	1.284	1.284
VERTICAL SPREAD	:	2.697	1.851	1.075
EXTREME SPREAD	:	2.731	2.036	1.342
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		9	

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CENTERFIRE PATTERNS

5



OF SHOTS- 10

IN CIR

1 in = 4

2 in = 7

3 in = 10

HS= 2.070

VS= 2.571

GS= 2.574

CENTROID *

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.884	.846	.693
MINIMUM X	:	-1.186	-1.224	-.566
MAXIMUM Y	:	1.382	.492	.547
MINIMUM Y	:	-1.189	-1.035	-.980
CENTROID X	:	-.287	-.249	-.096
CENTROID Y	:	-.065	-.219	-.274
POA TO CENTROID in.	:	.295	.332	.290
MIN RADIUS	:	.372	.313	.381
MEAN RADIUS	:	.787	.706	.625
MAX RADIUS	:	1.426	1.300	1.062
HORIZONTAL SPREAD	:	2.070	2.070	1.259
VERTICAL SPREAD	:	2.571	1.527	1.527
EXTREME SPREAD	:	2.574	2.071	1.883
NUMBER IN ONE INCH CIRCLE	=		4	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		10	