

C6636034

MODEL 700TM M24

Model **SMS** TM

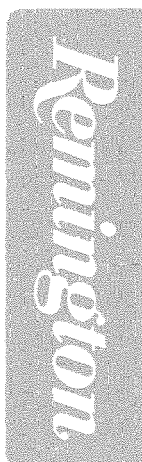
Action

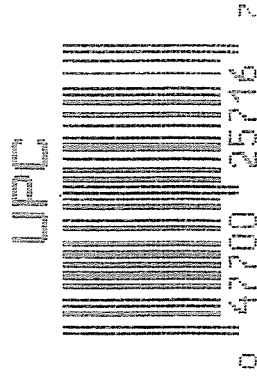
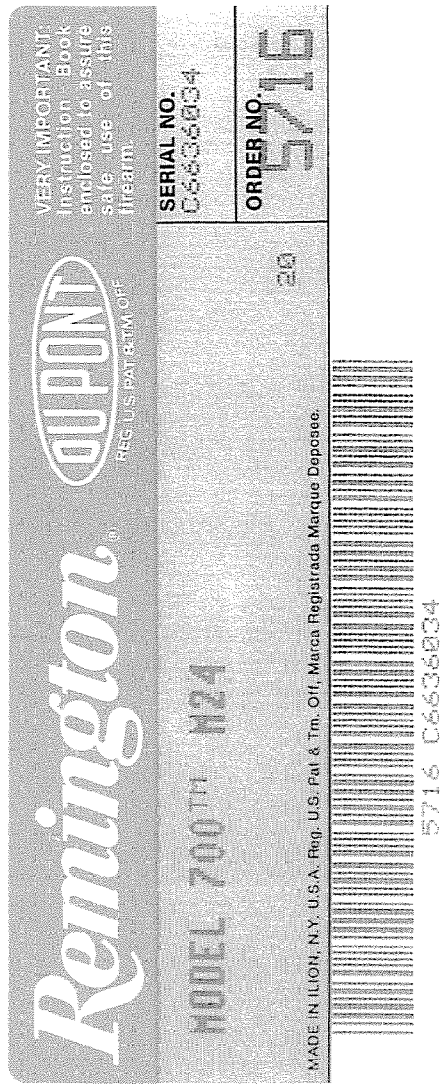
Barrel Length

Capacity

Order No. **5715**

*Includes 1 in chamber.





CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6636034

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		5/1/91	KS
600	Proof		5/1/91	KS
607	Check Headspace		5/1/91	KS
610	Dis-assemble Gun		5/1/91	KS
612	Magnaflux Barrel Action	5 8 9 1		KCR
	Magnaflux Bolt	5 8 9 1		KCR
615	Rollmark Caliber		01	68.
617	Drill and Tap Sight Holes	5 15 9 1		FA
618	Polish Barrel	5 15 9 1		W.B.
620	Apply Coatings (Barrel Action)		5/31/91	DA
	Apply Coating (Bolt)		5/31/91	DA
625	Final Assembly A) Clean inside of Bolt Assembly		7/17/91	KS
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		7/17/91	KS
	C) Inspect Ejector Hole for Chamfer		7/17/91	KS
	D) Oil Firing Pin Ass'y		7/17/91	KS
	E) Adjust Trigger Pull to Min Setting and Stake		7-18-91	CS

op. #	BARBER - M24 0036921	READINGS					DATE	INIT
625 cont.	F) Safety On Force	6	6	6			7/18/91	JS
	G) Safety Off Force	4	4	4			7-18-91	JS
	H) Trigger Pull Test & Retainability						7-18-91	JS
	I) Firing Pin Indent	.0225	.0225	.0225			7-18-91	JS
	J) Assemble Stock						7/18/91	KS
	K) Assemble Swivel Studs						7-26-91	D/K
	L) Attach Front and Rear Sight Assemblies						7/18/91	KS
	M) Iron Sight Alignment						7/18/91	KS
	N) Detach Front & Rear Sights & place in numbered container						7/18/91	KS
	O) Attach Scope to Rifle						7/18/91	KS
	P) Detach & Attach Scope 20 Times						7/18/91	KS
640	Gallery Target & Test						7/22/91	KT
	A) Time							KT
	B) Malfunctions							KT
	C) Pierced Primers							KT
	D) Optical Clarity of Scope							KT
645	Inspect for Live Ammo						7/22/91	KT
655	Final Inspection							
	A) Headspace						7-26-91	D/K
	B) Trigger Pull	2.65	2.67	2.67	2.68	2.65	7-26-91	JS
	C) Function						7-26-91	JS
660	Pack						9-19-91	JS

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS
2.50# ± .50#
3.00# ± .75#
4.00# ± 1.00#

SERIAL NO. C-6636034DATE 7-18-91TESTER SM

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.34	2.66	2.54	2.65	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.24	2.67	2.50	2.69	
PULL #3	2.57	2.65	2.49	2.67	
PULL #4	2.42	2.30	2.60	2.68	
PULL #5	2.33	2.61	2.63	2.65	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.37	3.38		
PULL #2	3.43	3.40		
PULL #3	3.20	3.26		
PULL #4	3.35	3.38		
PULL #5	3.38	3.42		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.25	4.40		4.43
PULL #2	4.55	4.55		4.40
PULL #3	4.40	4.60		4.48
PULL #4	4.58	4.48		4.40
PULL #5	4.48	4.40		4.43
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6636034
22 Jul 1991

CENTROIDAL DISTANCES

0 TO 1	.244205
1 TO 2	.153056
1 TO 3	.347071
1 TO 4	.0566039
1 TO 5	.319581

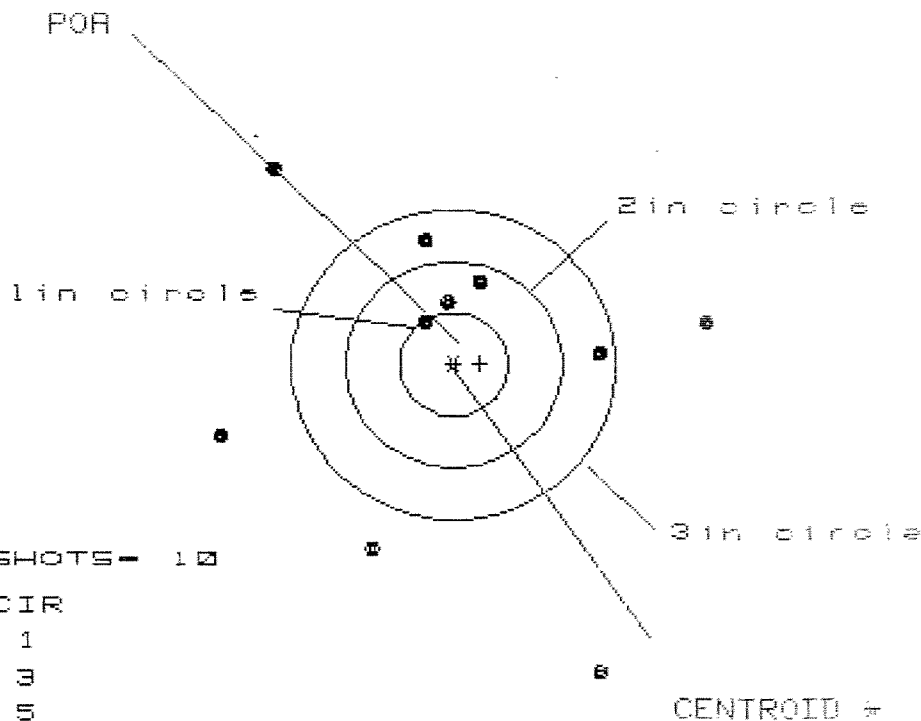
~~3~~
4 <----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.1588
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .114
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .195483
THE AMR FOR THIS RIFLE IS: 1.331

22 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C853B034

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1in = 1

2in = 3

3in = 5

HS= 4.515

VS= 4.869

GS= 5.717

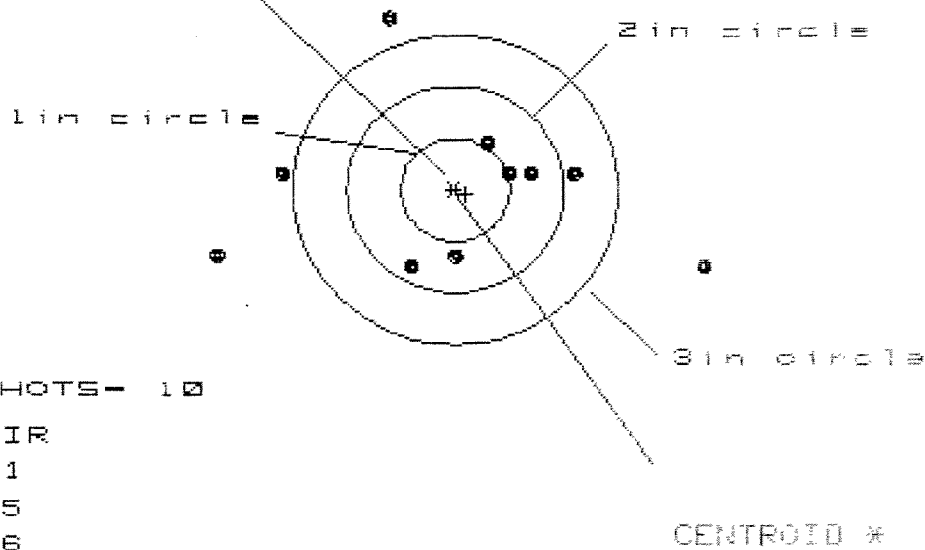
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	2.328	2.472	2.278
MINIMUM X	-2.187	-2.043	-2.237
MAXIMUM Y	1.928	1.601	1.046
MINIMUM Y	-2.941	-2.115	-1.914
CENTROID X	-.244	-.388	-.194
CENTROID Y	-.016	.317	.116
POR TO CENTROID in.	.244	.501	.226
MIN RADIUS	.479	.160	.427
MEAN RADIUS	1.685	1.403	1.345
MAX RADIUS	3.214	2.475	2.378
HORIZONTAL SPREAD	4.515	4.515	4.515
VERTICAL SPREAD	4.869	3.716	2.960
EXTREME SPREAD	5.717	4.652	4.652
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	3		
NUMBER IN THREE INCH CIRCLE =	5		

22 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636034

CENTERFIRE PATTERNS # 2

POR



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 5

3 in = 6

HS= 4.506

VS= 2.372

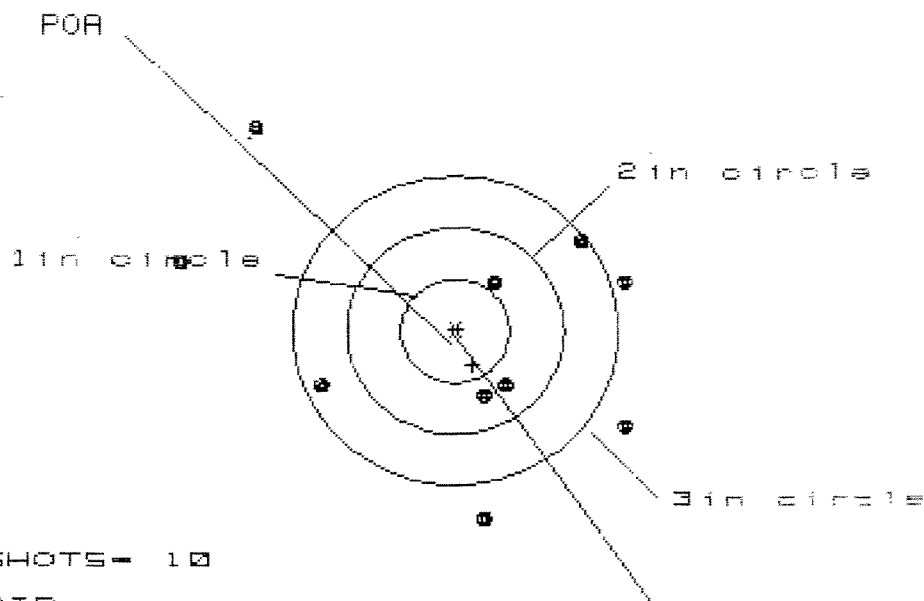
GS= 4.507

PATTERN #	2
SHOTS (BEST OF)	10
MAXIMUM X	2.292
MINIMUM X	-2.214
MAXIMUM Y	1.627
MINIMUM Y	-.745
CENTROID X	-.099
CENTROID Y	.039
POR TO CENTROID in.	.107
MIN RADIUS	.489
MEAN RADIUS	1.229
MAX RADIUS	2.410
HORIZONTAL SPREAD	4.506
VERTICAL SPREAD	2.372
EXTREME SPREAD	4.507
NUMBER IN ONE INCH CIRCLE =	1
NUMBER IN TWO INCH CIRCLE =	5
NUMBER IN THREE INCH CIRCLE =	6

22 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6536034

CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1in = 0

2in = 3

3in = 5

HS= 4.073

VS= 3.884

GS= 4.455

CENTROID *

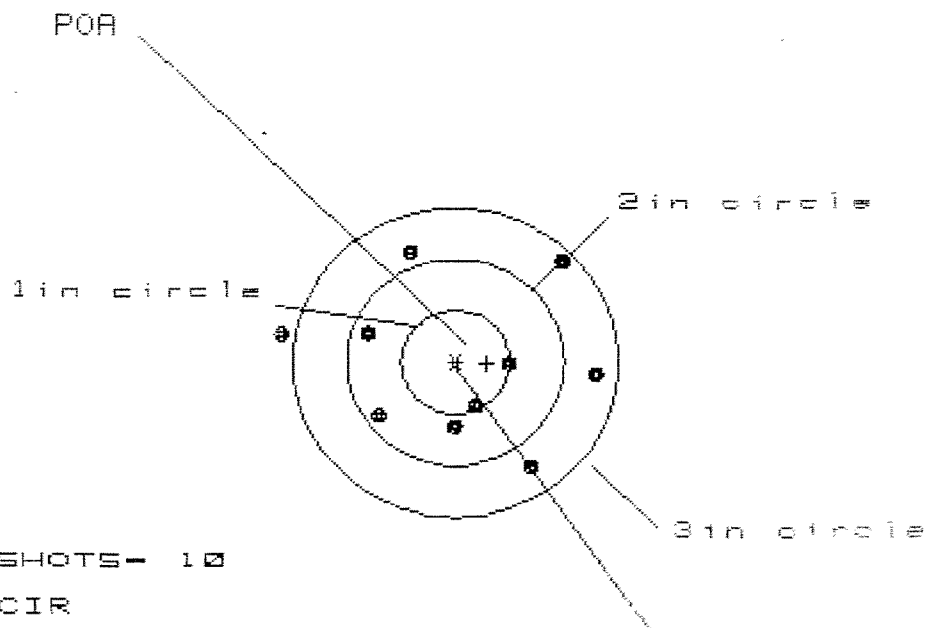
PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.538	1.332	.990
MINIMUM X	:	-2.535	-2.741	-1.737
MAXIMUM Y	:	2.010	1.064	1.173
MINIMUM Y	:	-1.874	-1.651	-1.542
CENTROID X	:	-.161	.045	.397
CENTROID Y	:	.327	.104	-.005
POA TO CENTROID in.	:	.365	.113	.287
MIN RADIUS	:	.560	.337	.287
MEAN RADIUS	:	1.525	1.310	1.053
MAX RADIUS	:	2.732	2.876	1.750
HORIZONTAL SPREAD	:	4.073	4.073	2.727
VERTICAL SPREAD	:	3.884	2.715	2.715
EXTREME SPREAD	:	4.455	4.345	2.899
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		3	
NUMBER IN THREE INCH CIRCLE	=		5	

22 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6836034

CENTERFIRE PATTERNS

4



OF SHOTS- 10

IN CIR

1 in - 2

2 in - 5

3 in - 9

HS- 2.913

VS- 2.067

GS- 2.942

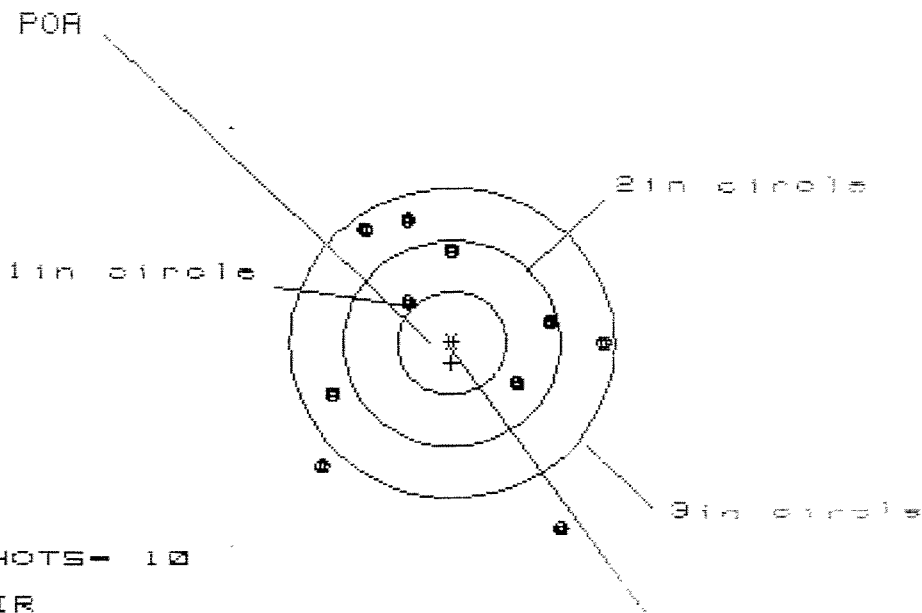
CENTROID *

PATTERN #	4
SHOTS (BEST OF)	10
MAXIMUM X	1.279
MINIMUM X	-1.634
MAXIMUM Y	1.030
MINIMUM Y	-1.037
CENTROID X	-.292
CENTROID Y	.020
POA TO CENTROID in.	.292
MIN RADIUS	.457
MEAN RADIUS	.996
MAX RADIUS	1.665
HORIZONTAL SPREAD	2.913
VERTICAL SPREAD	2.067
EXTREME SPREAD	2.942
NUMBER IN ONE INCH CIRCLE	= 2
NUMBER IN TWO INCH CIRCLE	= 5
NUMBER IN THREE INCH CIRCLE	= 9

22 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/08636034

CENTERFIRE PATTERNS # 5



OF SHOTS - 10

IN CIR

1 in - 0

2 in - 4

3 in - 8

HS - 2.562

VS - 3.083

GS - 3.424

CENTROID *

PATTERN #	5
SHOTS (BEST OF)	10
MAXIMUM X	1.390
MINIMUM X	-1.172
MAXIMUM Y	1.254
MINIMUM Y	-1.829
CENTROID X	.002
CENTROID Y	.194
POA TO CENTROID in.	.194
MIN RADIUS	.601
MEAN RADIUS	1.218
MAX RADIUS	2.065
HORIZONTAL SPREAD	2.562
VERTICAL SPREAD	3.083
EXTREME SPREAD	3.424
NUMBER IN ONE INCH CIRCLE =	0
NUMBER IN TWO INCH CIRCLE =	4
NUMBER IN THREE INCH CIRCLE =	8

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6636034
25 Jul 1991

CENTROIDAL DISTANCES

0 TO	1	.152742
1 TO	2	.290062
1 TO	3	.369935
1 TO	4	.366706
1 TO	5	.184567

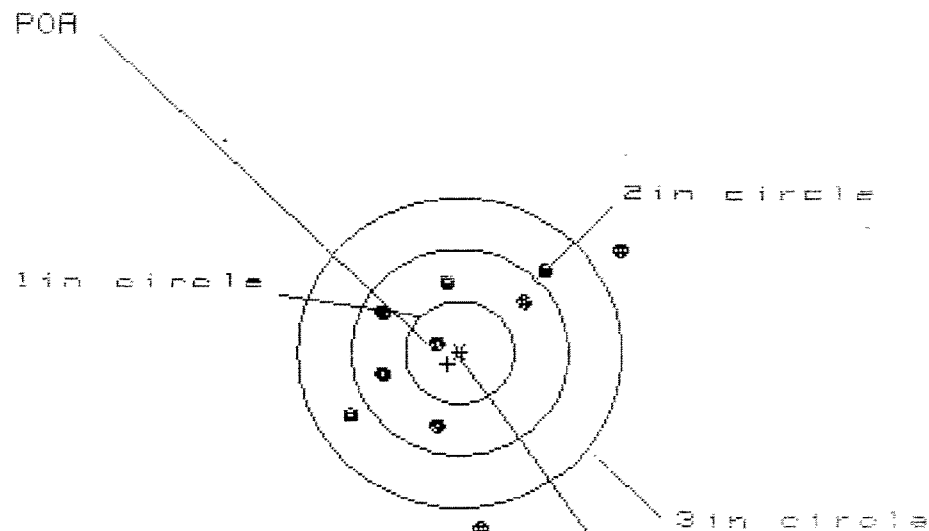
24 4 <----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0378
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.0058
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .9392494
THE AMR FOR THIS RIFLE IS: .8998

25 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636034.1

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1in = 1

2in = 6

3in = 8

HS= 2.449

VS= 2.724

GS= 3.015

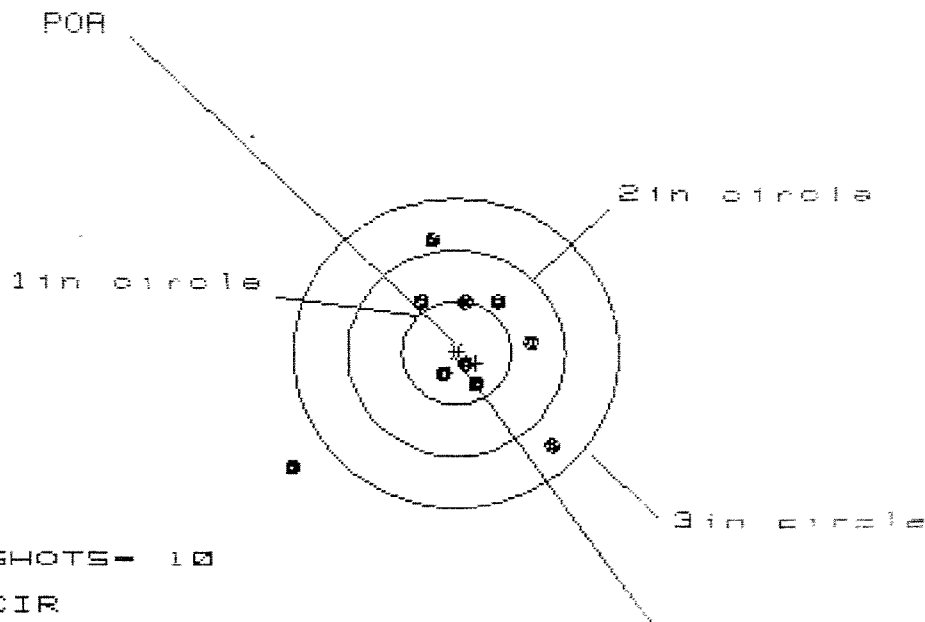
CENTROID +

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.471	.967	1.010
MINIMUM X	-.978	-.815	-.772
MAXIMUM Y	.992	.895	.693
MINIMUM Y	-1.732	-1.622	-.811
CENTROID X	.109	-.054	-.097
CENTROID Y	.107	-.003	.199
FOR TO CENTROID in.	.153	.054	.222
MIN RADIUS	.250	.174	.064
MEAN RADIUS	.981	.862	.725
MAX RADIUS	1.774	1.657	1.225
HORIZONTAL SPREAD	2.449	1.782	1.792
VERTICAL SPREAD	2.724	2.517	1.584
EXTREME SPREAD	3.015	2.593	2.261
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	8		

25 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8636034.1

CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1in = 4

2in = 7

3in = 9

HS= 2.425

VS= 2.193

GS= 2.516

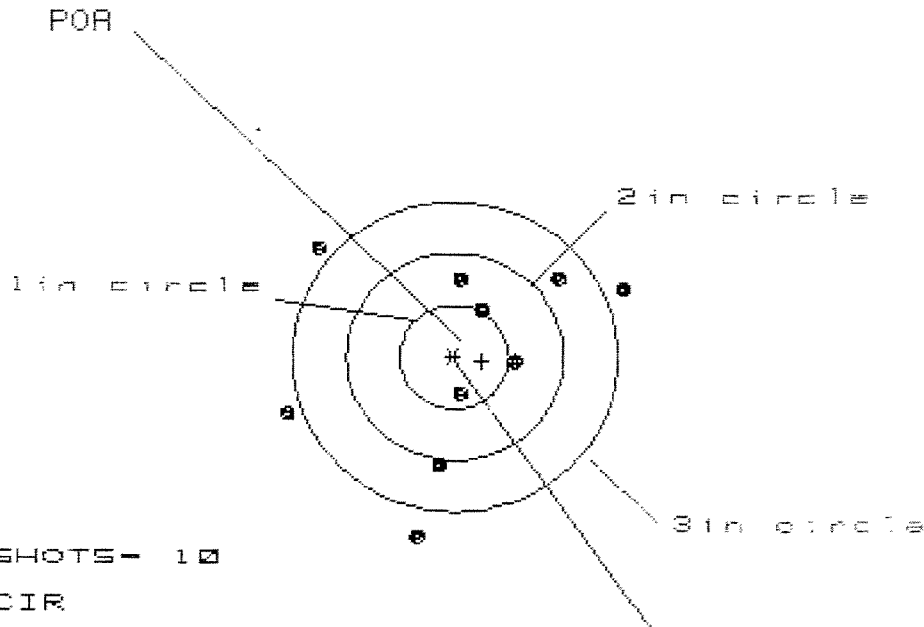
CENTROID #

PATTERN #	2
SHOTS (BEST OF)	10
MAXIMUM X	.926
MINIMUM X	-1.499
MAXIMUM Y	1.139
MINIMUM Y	-1.054
CENTROID X	-.181
CENTROID Y	.101
POA TO CENTROID in.	.207
MIN RADIUS	.136
MEAN RADIUS	.744
MAX RADIUS	1.832
HORIZONTAL SPREAD	2.425
VERTICAL SPREAD	2.193
EXTREME SPREAD	2.516
NUMBER IN ONE INCH CIRCLE =	4
NUMBER IN TWO INCH CIRCLE =	7
NUMBER IN THREE INCH CIRCLE =	9

25 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8696094.1

CENTERFIRE PATTERNS # 3



OF SHOTS - 10

IN CIR

1in = 1

2in = 4

3in = 6

HS = 3.161

VS = 2.847

GS = 3.369

CENTROID *

PATTERN #	3
SHOTS (BEST OF)	10
MAXIMUM X	1.591
MINIMUM X	-1.570
MAXIMUM Y	1.070
MINIMUM Y	-1.777
CENTROID X	-.255
CENTROID Y	.041
POA TO CENTROID in.	.258
MIN RADIUS	.338
MEAN RADIUS	1.123
MAX RADIUS	1.812
HORIZONTAL SPREAD	3.161
VERTICAL SPREAD	2.847
EXTREME SPREAD	3.369
NUMBER IN ONE INCH CIRCLE =	1
NUMBER IN TWO INCH CIRCLE =	4
NUMBER IN THREE INCH CIRCLE =	6

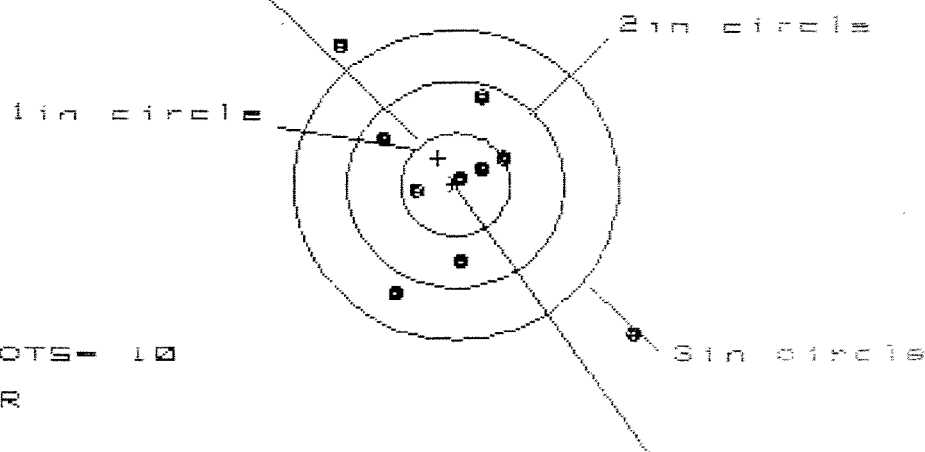
25 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8636034.1

CENTERFIRE PATTERNS

4

FOR



OF SHOTS- 10

IN CIR

1 in = 4

2 in = 7

3 in = 8

HS= 2.732

VS= 2.811

GS= 3.920

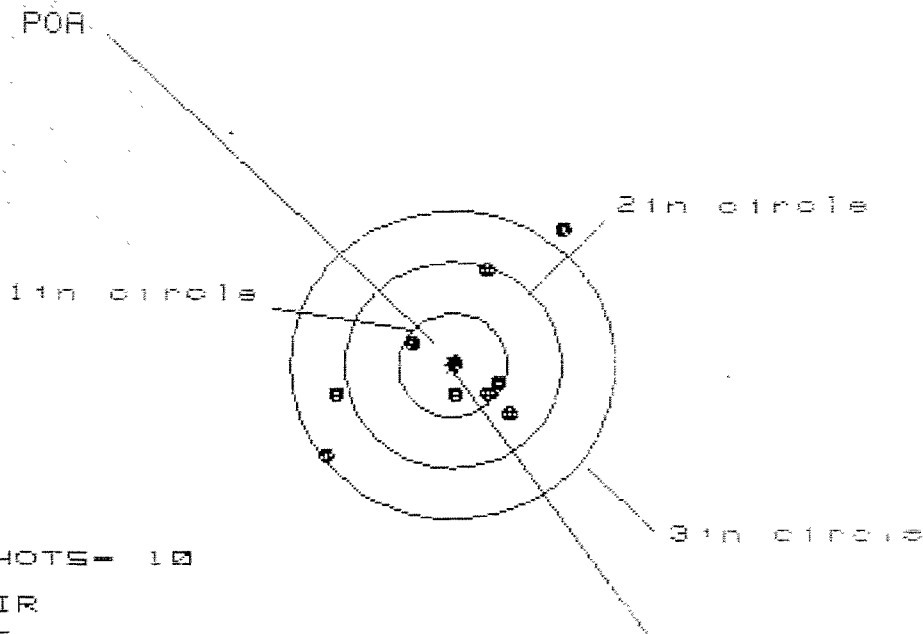
CENTROID #

PATTERN #	4	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.650	.604	.482
MINIMUM X	-1.082	-.899	-.582
MAXIMUM Y	1.405	1.249	.888
MINIMUM Y	-1.406	-1.235	-1.079
CENTROID X	.161	-.022	.090
CENTROID Y	-.256	-.100	-.256
FOR TO CENTROID in.	.303	.103	.272
MIN RADIUS	.105	.227	.145
MEAN RADIUS	.884	.742	.617
MAX RADIUS	2.168	1.539	1.167
HORIZONTAL SPREAD	2.732	1.503	1.054
VERTICAL SPREAD	2.811	2.484	1.907
EXTREME SPREAD	3.920	2.548	2.112
NUMBER IN ONE INCH CIRCLE =	4		
NUMBER IN TWO INCH CIRCLE =	7		
NUMBER IN THREE INCH CIRCLE =	8		

25 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636034.1

CENTERFIRE PATTERNS # 5



OF SHOTS- 10

IN CIR

1in = 5

2in = 7

3in = 9

HS= 2.199

VS= 2.260

GS= 3.153

CENTROID *

PATTERN #	5
SHOT# (BEST OF)	10
MAXIMUM X	1.038
MINIMUM X	-1.161
MAXIMUM Y	1.347
MINIMUM Y	-0.913
CENTROID X	-0.023
CENTROID Y	-0.022
POR TO CENTROID in.	0.022
MIN RADIUS	0.019
MEAN RADIUS	0.767
MAX RADIUS	1.701
HORIZONTAL SPREAD	2.199
VERTICAL SPREAD	2.260
EXTREME SPREAD	3.153
NUMBER IN ONE INCH CIRCLE =	5
NUMBER IN TWO INCH CIRCLE =	7
NUMBER IN THREE INCH CIRCLE =	9