

C6636331

MODEL 780TM M24

Model SMSTM

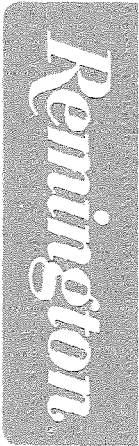
Action

Barrel Length

Capacity

Order No. 5716

*Includes 1 in chamber.



TEST INIT. ACTION TO CORRECT		ASSEM. #
PROOF	100RB short OK 73491 DH	
TEST		
TGT		
PROOF		
TEST		
TGT		
PROOF	ENGINEER	
TEST		
TGT		
PROOF	ENGINEER	
TEST		
TGT		

MOD. _____		GA. CAL. _____	GUN # <u>6331</u>
# TEST	DATE	MALFUNCTION/DEFECT	ASSEM. #
	1st		
	7/29	Shave BRASS	RW
	2nd		
	7/31/91	Reamed Ejector hole & Polish Ejector	RW
	3rd		
	4th		
		FUNCTION	RD 6654 Rev 1

Remington
MODEL 700TH M24

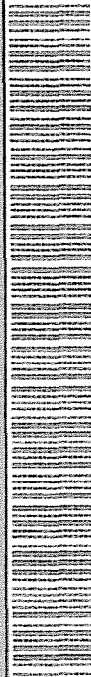
VERY IMPORTANT:
Instruction Book
enclosed to assure
safe use of this
firearm.

REG. U.S. PAT. & TM. OFF.

SERIAL NO.
C6606331

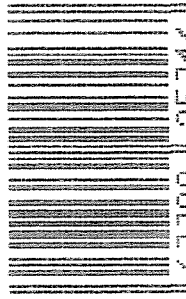
ORDER NO.
5716

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



5716 C6606331

UPC



0 47700 25716

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6636331

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock	4 30 91		RW
600	Proof	4 30 91		RW
607	Check Headspace	4 30 91		RW
610	Dis-assemble Gun	4 30 91		RW
612	Magnaflux Barrel Action	5 6 0 1		KCK
	Magnaflux Bolt	5 6 9 1		KCK
615	Rollmark Caliber	5 6 9 1		GB
617	Drill and Tap Sight Holes	5 10 9 1		FB
618	Polish Barrel	5 10 9 1		WB
620	Apply Coatings (Barrel Action)		5-20-91	TH
	Apply Coating (Bolt)			P
625	Final Assembly A) Clean inside of Bolt Assembly		7/19	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		7/19	RW
	C) Inspect Ejector Hole for Chamfer		7/19	RW
	D) Oil Firing Pin Ass'y		7/19	RW
	E) Adjust Trigger Pull to Min Setting and Stake		7-18-91	TH

op. #	BARBER M24 0033129	READINGS					DATE	INIT
625 cont.	F) Safety On Force	6	6	6			7-18-91	JH
	G) Safety Off Force	4	4	4			7-18-91	JH
	H) Trigger Pull Test & Retainability						7-18-91	JH
	I) Firing Pin Indent	10225	10225	10225			7-18-91	JH
	J) Assemble Stock						7/20/91	
	K) Assemble Swivel Studs						8/4/91	OH
	L) Attach Front and Rear Sight Assemblies						7/20	RW
	M) Iron Sight Alignment						7/20	RW
	N) Detach Front & Rear Sights & place in numbered container						7/20	RW
	O) Attach Scope to Rifle						7/20	RW
	P) Detach & Attach Scope 20 Times						7/20	RW
640	Gallery Target & Test						7/29	AC
	A) Time						7/29	AC
	B) Malfunctions						7/29	AC
	C) Pierced Primers						7/29	AC
	D) Optical Clarity of Scope						7/29	AC
645	Inspect for Live Ammo						7/29	OH
655	Final Inspection						8-5-91	A
	A) Headspace						8-5-91	JH
	B) Trigger Pull	2.30	2.29	2.35	2.33	2.39	8-5-91	JH
	C) Function						8-5-91	AC
660	Pack						7-17-91	OH

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#

3.00# ± .75#

4.00# ± 1.00#

SERIAL NO. C-6636331

DATE 7-18-91

TESTER [Signature]

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.56	2.47	2.48	2.30	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.47	2.50	2.46	2.29	
PULL #3	2.52	2.49	2.50	2.35	
PULL #4	2.53	2.46	2.50	2.33	
PULL #5	2.48	2.50	2.48	2.39	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.55	3.47		
PULL #2	3.47	3.57		
PULL #3	3.45	3.52		
PULL #4	3.45	3.48		
PULL #5	3.52	3.60		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.32	4.20		4.22
PULL #2	4.52	4.27		4.24
PULL #3	4.60	4.26		4.27
PULL #4	4.20	4.30		4.20
PULL #5	4.20	4.20		4.17
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # 06636331
29 Jul 1991

CENTROIDAL DISTANCES

0 TO 1	.187043
1 TO 2	.304015
1 TO 3	.344819
1 TO 4	.327416
1 TO 5	.295513

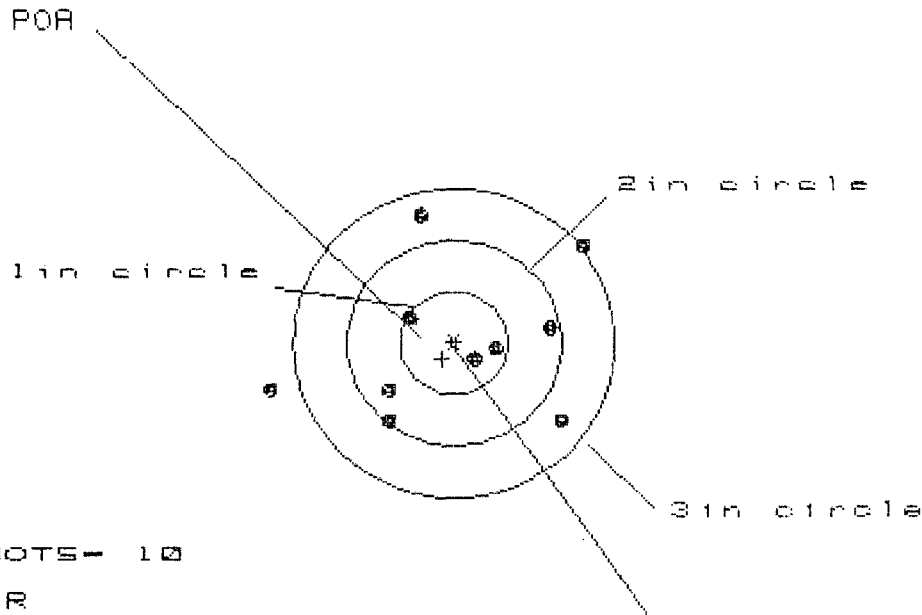
<----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .0944
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .1614
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .186979
THE AMR FOR THIS RIFLE IS: .9092

29 Jul 1991

FILE://PATTERNING/CENTERFIRE_PATT/C6636331

CENTERFIRE PATTERNS # 1



OF SHOTS - 10

IN CIR

1in = 3

2in = 6

3in = 9

HS = 2.911

VS = 2.027

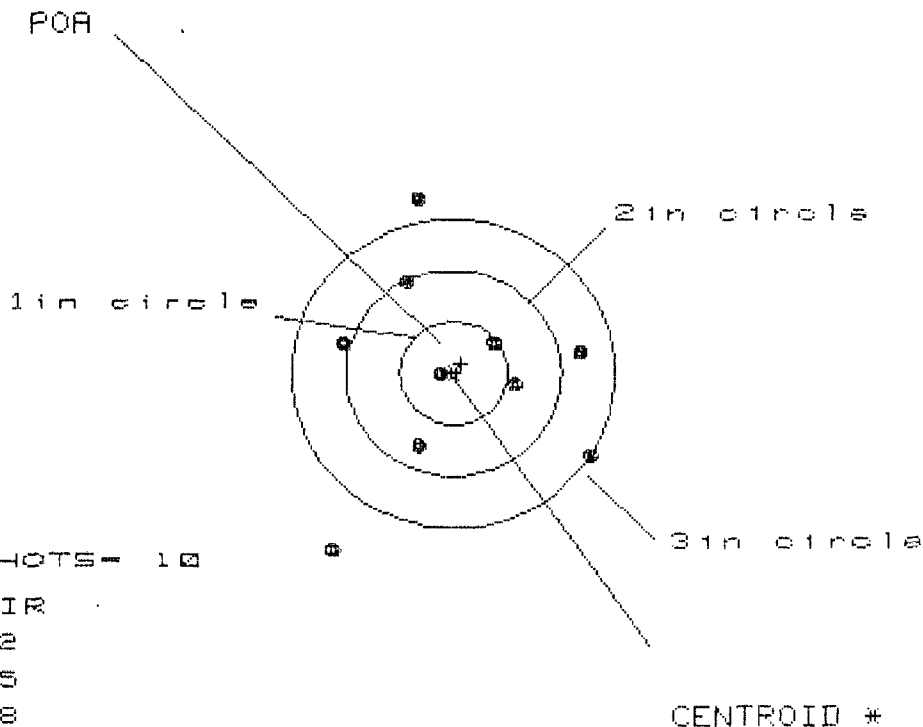
GS = 3.198

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.184	.992	.909
MINIMUM X	-1.727	-.812	-.688
MAXIMUM Y	1.251	1.205	1.314
MINIMUM Y	-.776	-.822	-.714
CENTROID X	.109	.301	.177
CENTROID Y	.152	.198	.090
POA TO CENTROID in.	.187	.360	.199
MIN RADIUS	.193	.161	.102
MEAN RADIUS	.946	.836	.759
MAX RADIUS	1.776	1.316	1.355
HORIZONTAL SPREAD	2.911	1.804	1.597
VERTICAL SPREAD	2.027	2.027	2.027
EXTREME SPREAD	3.198	2.431	2.374
NUMBER IN ONE INCH CIRCLE =	3		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	9		

29 Jul 1991

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CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1in = 2

2in = 5

3in = 8

HS= 2.403

VS= 3.441

GS= 3.534

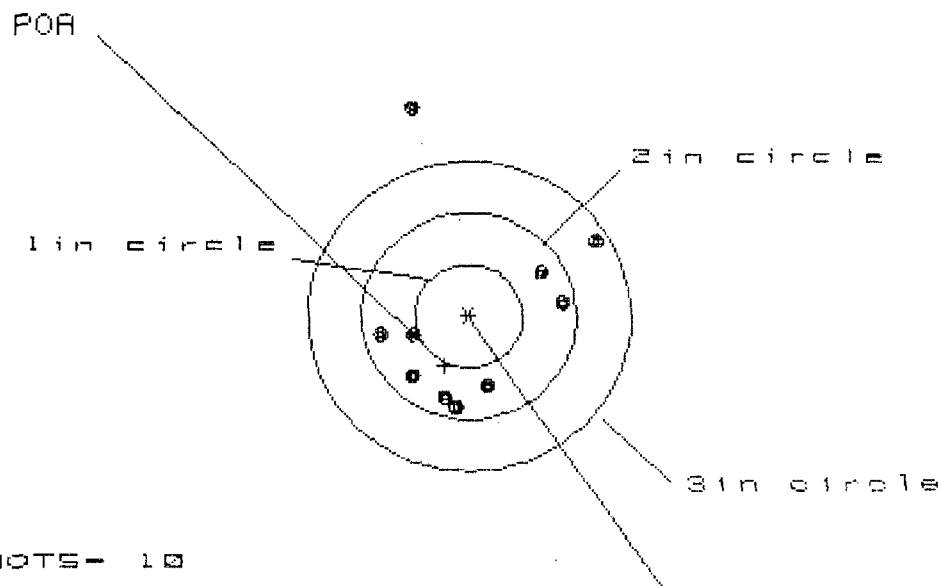
CENTROID *

PATTERN #	2
SHOTS (BEST OF)	10
MAXIMUM X	1.245
MINIMUM X	-1.158
MAXIMUM Y	1.716
MINIMUM Y	-1.726
CENTROID X	-.071
CENTROID Y	-.093
POA TO CENTROID in.	.117
MIN RADIUS	.137
MEAN RADIUS	1.043
MAX RADIUS	2.078
HORIZONTAL SPREAD	2.403
VERTICAL SPREAD	3.441
EXTREME SPREAD	3.534
NUMBER IN ONE INCH CIRCLE	2
NUMBER IN TWO INCH CIRCLE	5
NUMBER IN THREE INCH CIRCLE	8

29 Jul 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636331

CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1 in = 0

2 in = 8

3 in = 9

HS= 1.962

VS= 2.848

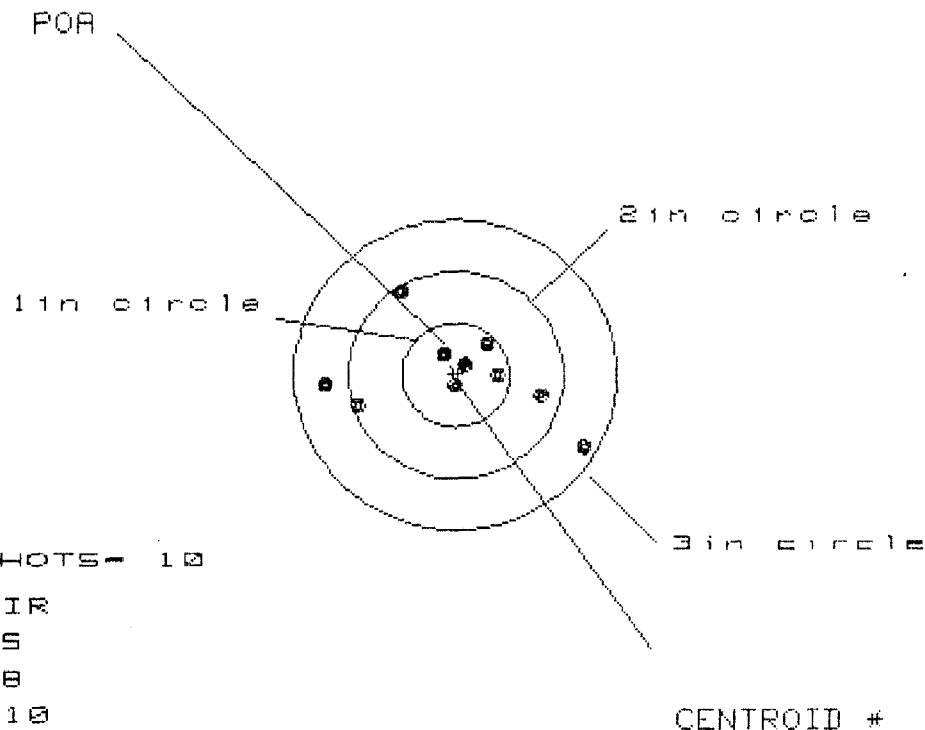
GS= 2.868

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.145	1.089	.945
MINIMUM X	:	-.817	-.873	-.737
MAXIMUM Y	:	1.974	.940	.724
MINIMUM Y	:	-.874	-.655	-.537
CENTROID X	:	.227	.283	.147
CENTROID Y	:	.476	.257	.139
POA TO CENTROID in.	:	.527	.382	.202
MIN RADIUS	:	.547	.463	.411
MEAN RADIUS	:	.955	.787	.653
MAX RADIUS	:	2.038	1.439	1.065
HORIZONTAL SPREAD	:	1.962	1.962	1.682
VERTICAL SPREAD	:	2.848	1.595	1.261
EXTREME SPREAD	:	2.868	2.173	1.722
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		9	

29 Jul 1991

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CENTERFIRE PATTERNS # 4



OF SHOTS- 10

IN CIR

1in = 5

2in = 8

3in = 10

HS= 2.366

VS= 1.489

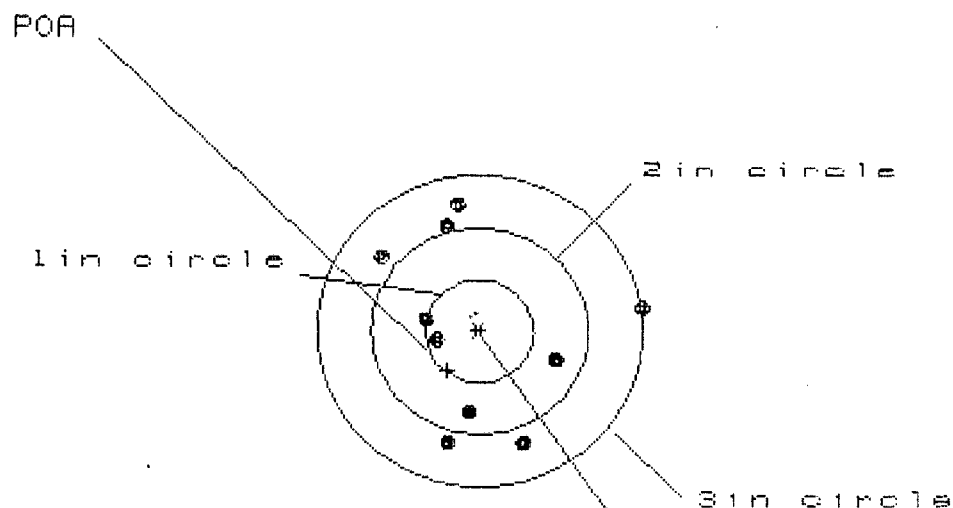
GS= 2.429

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.194	.892	.762
MINIMUM X	:	-1.172	-1.040	-.926
MAXIMUM Y	:	.828	.754	.731
MINIMUM Y	:	-.661	-.339	-.362
CENTROID X	:	-.090	-.222	-.092
CENTROID Y	:	-.108	-.034	-.011
POA TO CENTROID in.	:	.140	.225	.093
MIN RADIUS	:	.115	.112	.123
MEAN RADIUS	:	.656	.588	.494
MAX RADIUS	:	1.365	1.056	.995
HORIZONTAL SPREAD	:	2.366	1.932	1.689
VERTICAL SPREAD	:	1.489	1.093	1.093
EXTREME SPREAD	:	2.429	1.936	1.689
NUMBER IN ONE INCH CIRCLE	=		5	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		10	

29 Jul 1991

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CENTERFIRE PATTERNS # 5



OF SHOTS - 10

IN CIR

1 in = 2

2 in = 4

3 in = 10

HS = 2.306

VS = 2.296

GS = 2.377

CENTROID *

PATTERN #	5		
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.457	.861	.934
MINIMUM X	-.849	-.687	-.614
MAXIMUM Y	1.175	1.194	1.056
MINIMUM Y	-1.121	-1.102	-1.166
CENTROID X	.297	.135	.062
CENTROID Y	.380	.361	.499
POA TO CENTROID in.	.482	.385	.502
MIN RADIUS	.395	.231	.232
MEAN RADIUS	.946	.854	.787
MAX RADIUS	1.468	1.248	1.166
HORIZONTAL SPREAD	2.306	1.548	1.548
VERTICAL SPREAD	2.296	2.296	2.222
EXTREME SPREAD	2.377	2.374	2.223
NUMBER IN ONE INCH CIRCLE =		2	
NUMBER IN TWO INCH CIRCLE =		4	
NUMBER IN THREE INCH CIRCLE =		10	

INTERCHANGEABILITY

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6636331
14 Sep 1991

CENTROIDAL DISTANCES

0 TO 1	.149091
1 TO 2	.167287
1 TO 3	.225428
1 TO 4	.12037
1 TO 5	.106042

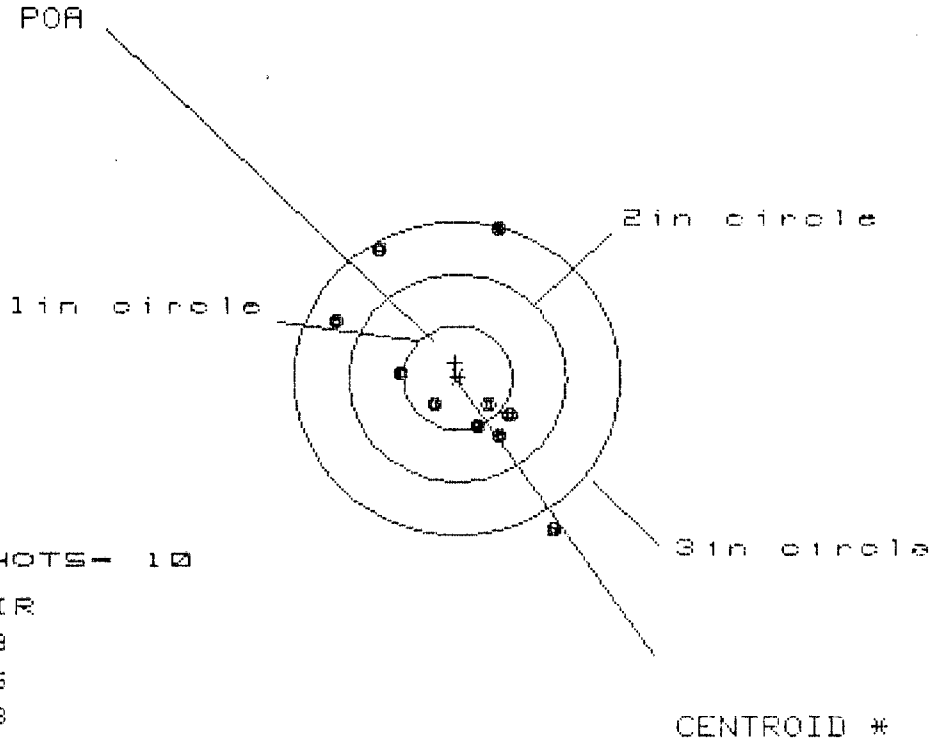
⌘ <----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0538
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.0856
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .101103
THE AMR FOR THIS RIFLE IS: 1.023

14 Sep 1991

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CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1in = 3

2in = 5

3in = 2

HS= 2.037

VS= 2.914

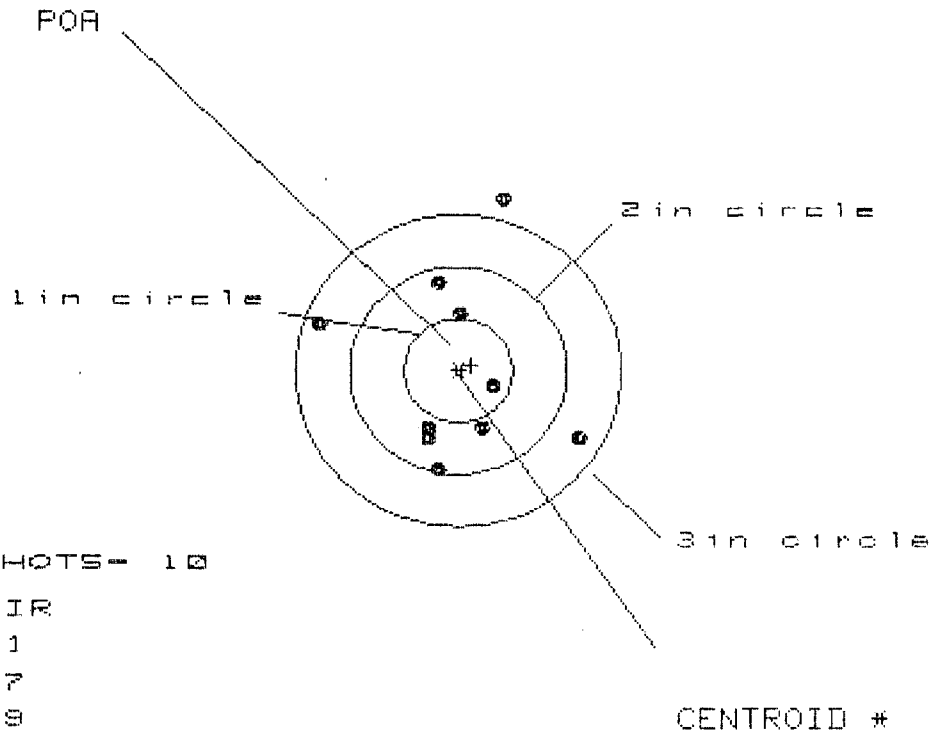
GS= 3.109

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.885	.543	.607
MINIMUM X	-1.152	-1.054	-.990
MAXIMUM Y	1.491	1.333	1.240
MINIMUM Y	-1.423	-.742	-.576
CENTROID X	.018	-.000	-.144
CENTROID Y	-.140	.010	-.156
POA TO CENTROID in.	.149	.081	.213
MIN RADIUS	.344	.393	.280
MEAN RADIUS	.895	.839	.714
MAX RADIUS	1.676	1.429	1.365
HORIZONTAL SPREAD	2.037	1.597	1.597
VERTICAL SPREAD	2.914	2.075	1.816
EXTREME SPREAD	3.109	2.147	2.147
NUMBER IN ONE INCH CIRCLE =	3		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	8		

14 Sep 1991

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CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 7

3 in = 9

HS= 2.430

VS= 2.673

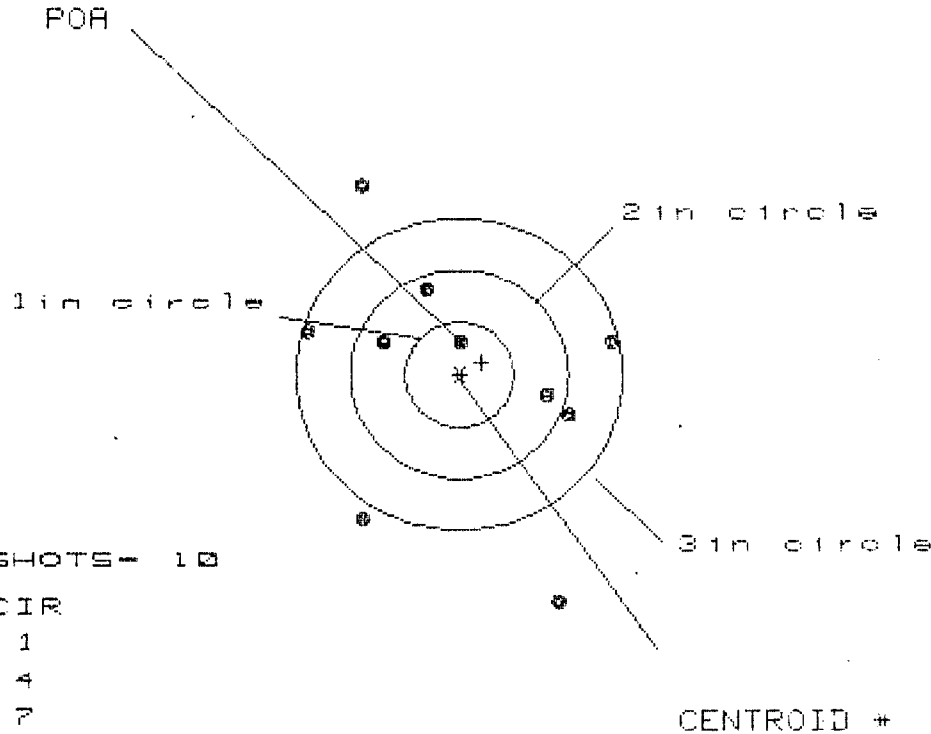
GS= 2.743

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.155	1.205	1.052
MINIMUM X	:	-1.275	-1.225	-.412
MAXIMUM Y	:	1.689	1.068	1.142
MINIMUM Y	:	-.984	-.796	-.722
CENTROID X	:	-.119	-.169	-.016
CENTROID Y	:	-.052	-.240	-.314
POA TO CENTROID in.	:	.130	.293	.314
MIN RADIUS	:	.325	.341	.218
MEAN RADIUS	:	.912	.783	.682
MAX RADIUS	:	1.748	1.361	1.168
HORIZONTAL SPREAD	:	2.430	2.430	1.464
VERTICAL SPREAD	:	2.673	1.864	1.864
EXTREME SPREAD	:	2.743	2.648	2.003
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

14 Sep 1991

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CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 4

3 in = 7

HS= 2.766

VS= 3.917

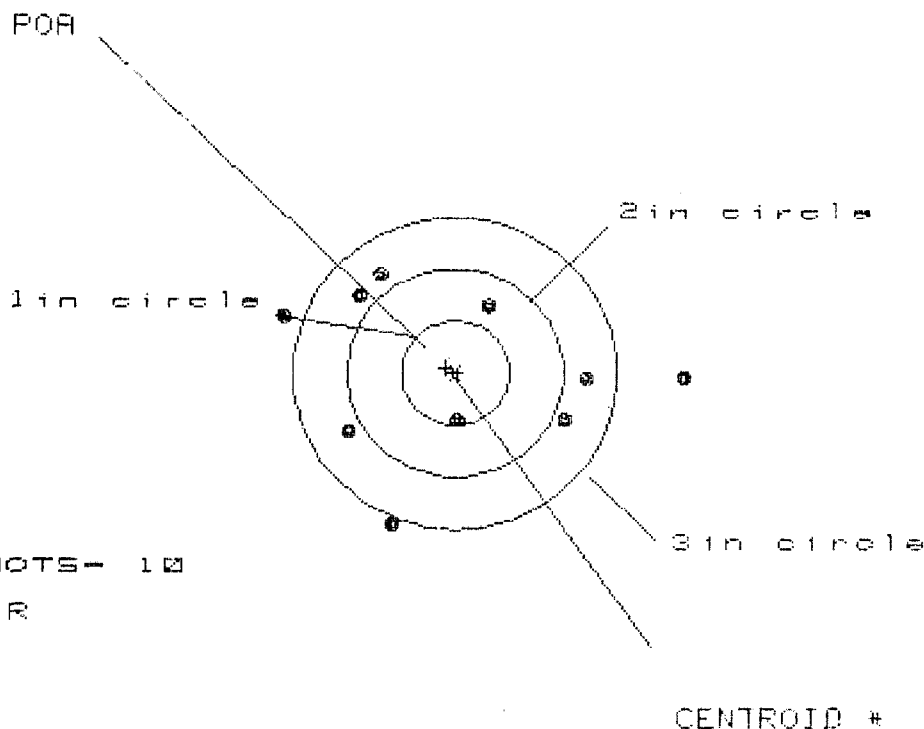
GS= 4.331

PATTERN #	3	3	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.418	1.523	1.424
MINIMUM X	-1.348	-1.243	-1.342
MAXIMUM Y	1.770	1.532	.800
MINIMUM Y	-2.147	-1.581	-1.390
CENTROID X	-.205	-.310	-.211
CENTROID Y	-.115	.123	-.068
POA TO CENTROID in.	.235	.334	.221
MIN RADIUS	.350	.139	.303
MEAN RADIUS	1.270	1.098	1.037
MAX RADIUS	2.346	1.786	1.673
HORIZONTAL SPREAD	2.766	2.766	2.766
VERTICAL SPREAD	3.917	3.113	2.190
EXTREME SPREAD	4.331	3.113	2.870
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	7		

14 Sep 1991

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CENTERFIRE PATTERNS # 4



OF SHOTS- 10

IN CIR

1 in - 1

2 in - 2

3 in - 7

HS= 3.720

VS= 2.407

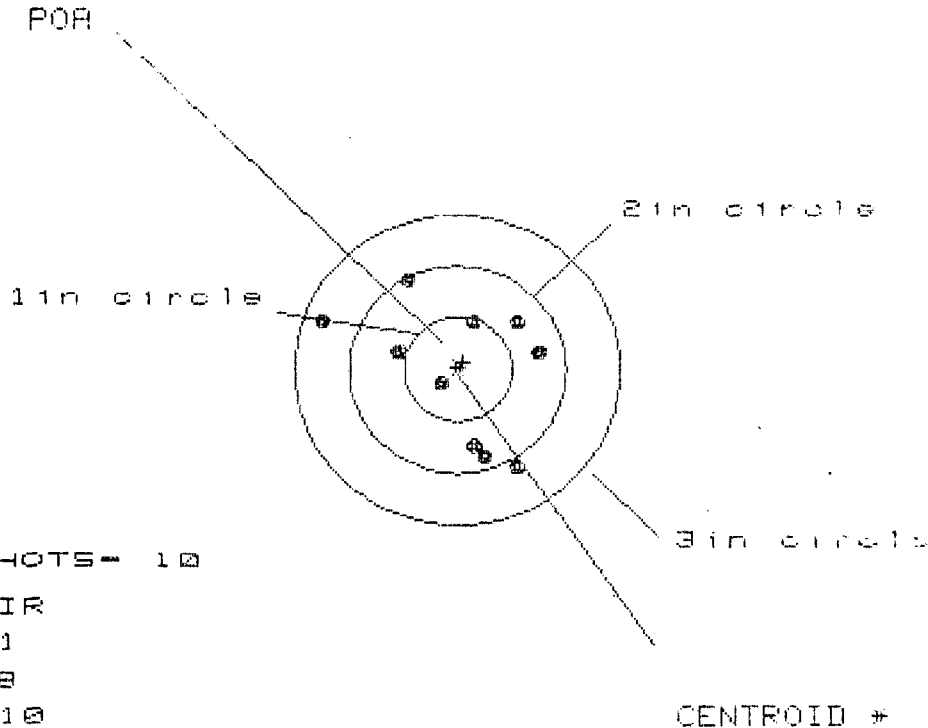
GS= 3.777

PATTERN #	4	4	4
SHOTS (BEST OF)	10	9	8
MAXIMUM X	2.151	1.484	1.317
MINIMUM X	-1.569	-1.330	-0.920
MAXIMUM Y	.993	.985	1.056
MINIMUM Y	-1.414	-1.422	-1.351
CENTROID X	.085	-.154	.013
CENTROID Y	-.048	-.040	-.112
FOR TO CENTROID in.	.098	.159	.112
MIN RADIUS	.440	.510	.384
MEAN RADIUS	1.249	1.133	1.079
MAX RADIUS	2.152	1.485	1.441
HORIZONTAL SPREAD	3.720	2.814	2.237
VERTICAL SPREAD	2.407	2.407	2.407
EXTREME SPREAD	3.777	2.883	2.411
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	2		
NUMBER IN THREE INCH CIRCLE =	7		

14 Sep 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636331.1

CENTERFIRE PATTERNS # 5



OF SHOTS - 10

IN CIR

1in - 1

2in - 8

3in - 10

HS - 2.029

VS - 1.840

GS - 2.265

PATTERN #	5	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.765	.625	.671
MINIMUM X	-1.264	-.738	-.692
MAXIMUM Y	.880	.930	.816
MINIMUM Y	-.960	-.910	-.900
CENTROID X	-.048	.092	.046
CENTROID Y	-.065	-.115	-.001
POA TO CENTROID in.	.081	.147	.046
MIN RADIUS	.173	.267	.285
MEAN RADIUS	.790	.723	.681
MAX RADIUS	1.341	1.093	.972
HORIZONTAL SPREAD	2.029	1.363	1.363
VERTICAL SPREAD	1.840	1.840	1.716
EXTREME SPREAD	2.265	2.068	1.864
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	8		
NUMBER IN THREE INCH CIRCLE =	10		