

C6636100

MODEL 700TM M24

Model **SMS** TM

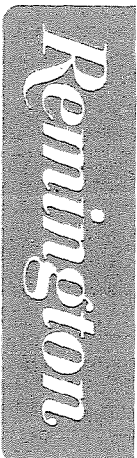
Action

Barrel Length

Capacity

Order No. **5716**

* Includes 1 in chamber.






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

MODEL 700™ H24

SERIAL NO.
C6636100

ORDER NO.
5716

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

20

UPC



0 47700 25716 7



5716 C6636100

INTERCHANGEABILITY

M-24

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6636100

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock	QUALITY AUDIT	4 8 91	RW
600	Proof		4 8 91	RW
607	Check Headspace		4 8 91	RW
610	Dis-assemble Gun		4 8 91	RW
612	Magnaflux Barrel Action		APR 9 1991	KR
	Magnaflux Bolt		APR 9 1991	LI
615	Rollmark Caliber		APR 9 1991	LS
617	Drill and Tap Sight Holes		APR 19 1991	LB
618	Polish Barrel		APR 19 1991	WB
620	Apply Coatings (Barrel Action)		5-10-91	TB
	Apply Coating (Bolt)			
625	Final Assembly			
	A) Clean inside of Bolt Assembly		5/14/91	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		5/14/91	RW
	C) Inspect Ejector Hole for Chamfer		5/14/91	RW
	D) Oil Firing Pin Ass'y		5/14/91	RW
	E) Adjust Trigger Pull to Min Setting and Stake		5-15-91	JK

op. #	OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force	6	5	5	5	5	5-16-91	DH
	G) Safety Off Force	3	3	2	2	2	5-16-91	DH
	H) Trigger Pull Test & Retainability						5-15-91	JLL
	I) Firing Pin Indent	.020	.020	.020			5-16-91	DH
	J) Assemble Stock						5/16/91	RW
	K) Assemble Swivel Studs						5-23-91	DH
	L) Attach Front and Rear Sight Assemblies						5/16/91	RW
	M) Iron Sight Alignment						5/16/91	RW
	N) Detach Front & Rear Sights & place in numbered container						5/16/91	RW
	O) Attach Scope to Rifle						5/16/91	RW
	P) Detach & Attach Scope 20 Times						5/16/91	RW
640	Gallery Target & Test						5-23-91	NF
	A) Time						"	NF
	B) Malfunctions						"	NF
	C) Pierced Primers						"	NF
	D) Optical Clarity of Scope						"	NF
645	Inspect for Live Ammo						5/23/91	NF
655	Final Inspection							
	A) Headspace						5-23-91	DH
	B) Trigger Pull	2.38	2.49	2.42	2.56	2.65	5/23/91	JLL
	C) Function						5-23-91	DH
660	Pack						6-14-91	NF

SWS TRIGGER PULL TEST

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#

3.00# ± .75#

4.00# ± 1.00#

SERIAL NO. C-6636100

DATE 5-15-91

TESTER JLL

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.58	2.21	2.46	2.38	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.28	2.15	2.43	2.49	
PULL #3	2.26	2.47	2.22	2.42	
PULL #4	2.29	2.41	2.44	2.56	
PULL #5	2.28	2.45	2.44	2.55	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.19	3.42		
PULL #2	3.44	3.48		
PULL #3	3.46	3.44		
PULL #4	3.50	3.52		
PULL #5	3.44	3.55		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.37	4.33		4.13
PULL #2	4.33	4.32		4.29
PULL #3	4.34	4.32		4.16
PULL #4	4.30	4.27		4.27
PULL #5	4.31	4.32		4.28
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # 06636100
22 May 1991

CENTROIDAL DISTANCES

0 TO	1	.163487
1 TO	2	.429466
1 TO	3	.594378
1 TO	4	.118089
1 TO	5	.132231

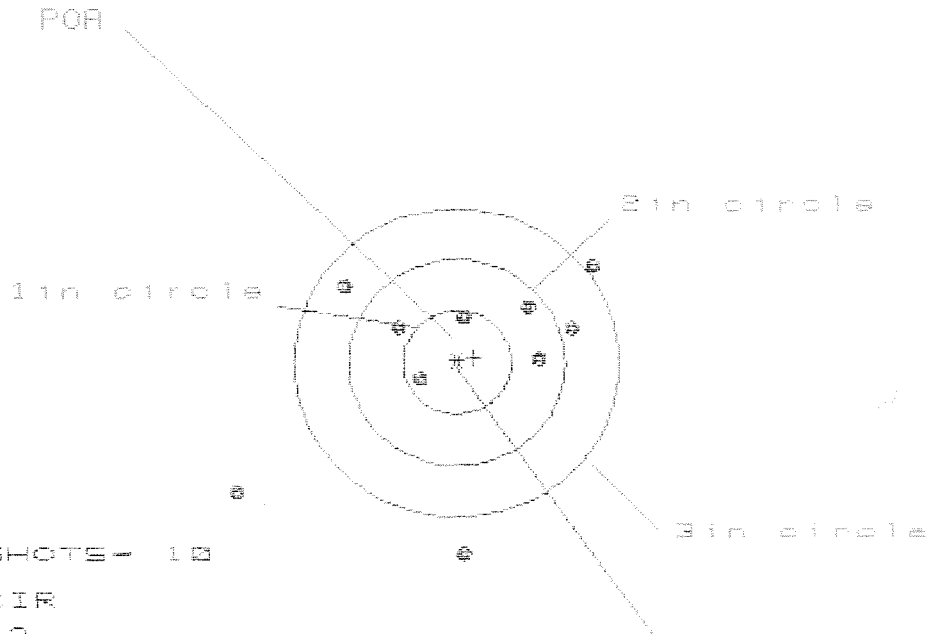
3 <----FOR

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0026
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.1714
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .17142
THE AMR FOR THIS RIFLE IS: 1.113

22 May 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6536100

CENTERFIRE PATTERNS # 1



OF SHOTS - 10

IN CIR

1 in = 2

2 in = 5

3 in = 7

HS = 3.299

VS = 2.777

CS = 3.935

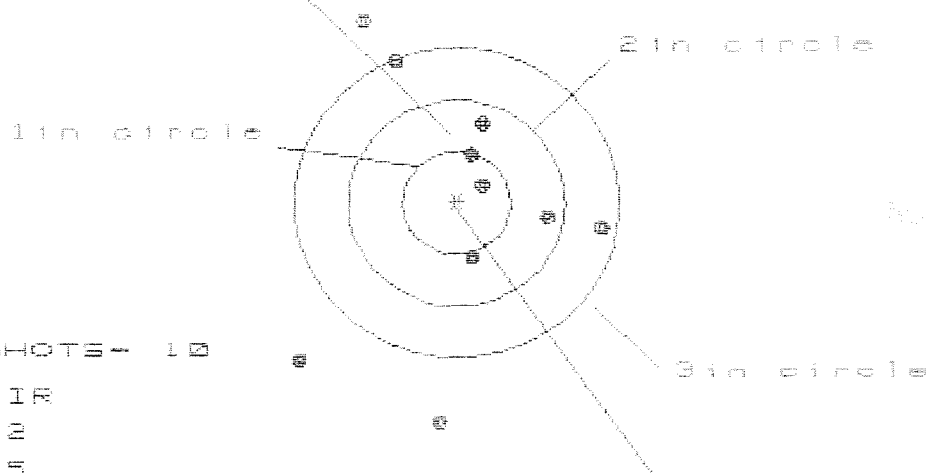
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.300	1.078	1.063
MINIMUM X	-1.999	-1.272	-1.286
MAXIMUM Y	.906	.768	.517
MINIMUM Y	-1.871	-2.009	-1.550
CENTROID X	-.158	.064	.078
CENTROID Y	-.042	.096	.347
POA TO CENTROID in.	.164	.115	.356
MIN RADIUS	.393	.322	.176
MEAN RADIUS	1.125	.942	.769
MAX RADIUS	2.352	2.013	1.323
HORIZONTAL SPREAD	3.299	2.350	2.350
VERTICAL SPREAD	2.777	2.777	1.067
EXTREME SPREAD	3.935	3.024	2.359
NUMBER IN ONE INCH CIRCLE	= 2		
NUMBER IN TWO INCH CIRCLE	= 5		
NUMBER IN THREE INCH CIRCLE	= 7		

22 May 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636180

CENTERFIRE PATTERNS # 2

FOR



OF SHOTS- 10

IN CIR

1in = 2

2in = 5

3in = 7

HS= 2.872

VS= 3.986

GS= 3.968

CENTROID *

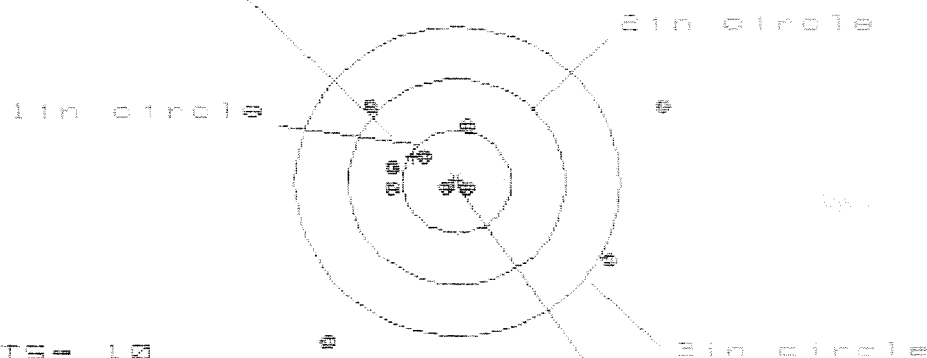
PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.376	1.210	1.174
MINIMUM X	:	-1.496	-0.989	-1.025
MAXIMUM Y	:	1.786	1.612	1.325
MINIMUM Y	:	-2.120	-2.294	-1.814
CENTROID X	:	-1.138	.028	.064
CENTROID Y	:	-.471	-.297	-.010
FOR TO CENTROID in.	:	.491	.298	.065
MIN RADIUS	:	.340	.121	.100
MEAN RADIUS	:	1.210	1.030	.844
MAX RADIUS	:	2.169	2.313	1.675
HORIZONTAL SPREAD	:	2.872	2.199	2.199
VERTICAL SPREAD	:	3.986	3.986	2.339
EXTREME SPREAD	:	3.968	3.968	2.955
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		7	

22 May 1991

FILE:/PATTERNING/CENTERFIRE_PATT/06636100

CENTERFIRE PATTERNS # 3

FOR



OF SHOTS- 10

IN CIR

1 in = 3

2 in = 6

3 in = 7

HS= 3.069

VS= 2.300

GS= 3.835

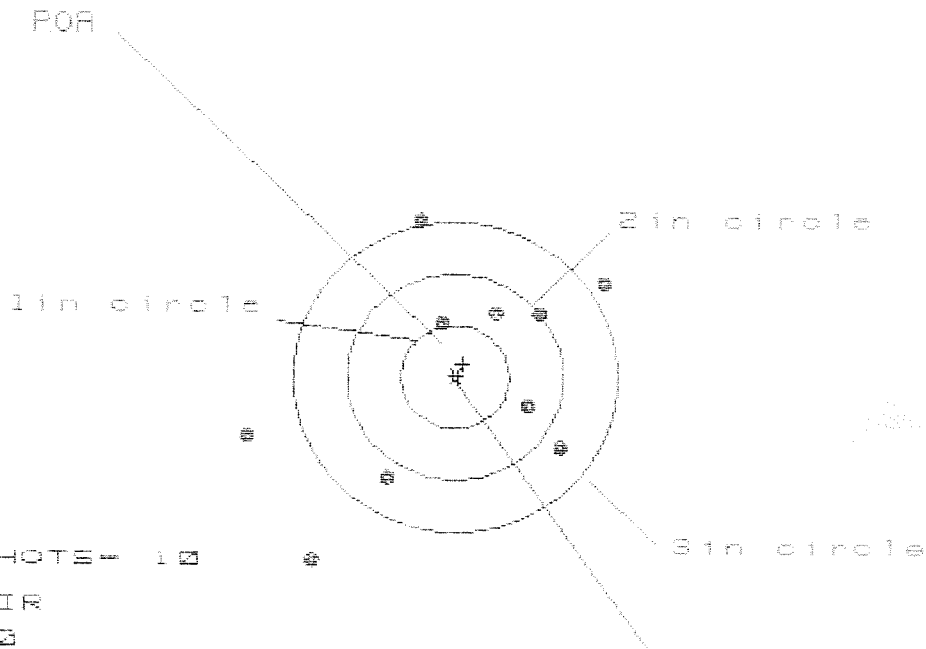
CENTROID #

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.899	1.610	1.490
MINIMUM X	:	-1.170	-.959	-.694
MAXIMUM Y	:	.776	.861	.681
MINIMUM Y	:	-1.524	-1.438	-.846
CENTROID X	:	.401	.190	.310
CENTROID Y	:	-.244	-.331	-.151
FOR TO CENTROID in.	:	.469	.381	.344
MIN. RADIUS	:	.182	.074	.204
MEAN RADIUS	:	.985	.747	.607
MAX. RADIUS	:	2.051	1.743	1.714
HORIZONTAL SPREAD	:	3.069	2.569	2.184
VERTICAL SPREAD	:	2.300	2.299	1.527
EXTREME SPREAD	:	3.835	2.692	2.665
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		7	

22 May 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8536100

CENTERFIRE PATTERNS # 4



OF SHOTS= 10

IN CIR

1in = 0

2in = 3

3in = 6

HS= 3.212

VS= 3.269

GS= 3.761

CENTROID #

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.330	1.187	.933
MINIMUM X	:	-1.882	-2.025	-1.026
MAXIMUM Y	:	1.492	1.294	1.202
MINIMUM Y	:	-1.777	-1.123	-1.215
CENTROID X	:	-.074	.069	.323
CENTROID Y	:	-.125	.073	.165
POA TO CENTROID in.	:	.145	.101	.362
MIN RADIUS	:	.502	.408	.381
MEAN RADIUS	:	1.271	1.111	.925
MAX RADIUS	:	2.193	2.156	1.591
HORIZONTAL SPREAD	:	3.212	3.212	1.960
VERTICAL SPREAD	:	3.269	2.417	2.417
EXTREME SPREAD	:	3.761	3.531	2.696
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		3	
NUMBER IN THREE INCH CIRCLE	=		6	

22 May 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8635100

CENTERFIRE PATTERNS

5

POA

1in circle

2in circle

3in circle

OF SHOTS = 10

IN CIR

1in = 1

2in = 4

3in = 8

HS = 3.072

VS = 2.758

GS = 3.094

CENTROID *

PATTERN #	5	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.011	.782	.756
MINIMUM X	-2.061	-1.537	-1.563
MAXIMUM Y	1.128	1.128	.924
MINIMUM Y	-1.630	-1.630	-1.041
CENTROID X	-.044	.185	.211
CENTROID Y	.025	.025	.229
POA TO CENTROID in.	.051	.186	.311
MIN. RADIUS	.119	.163	.330
MEAN RADIUS	1.053	.885	.780
MAX. RADIUS	2.061	1.643	1.563
HORIZONTAL SPREAD	3.072	2.319	2.319
VERTICAL SPREAD	2.758	2.758	1.965
EXTREME SPREAD	3.094	2.793	2.325
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	8		

INTERCHANGEABILITY

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6636100
17 Jun 1991

CENTROIDAL DISTANCES

0 TO	1	.526211
1 TO	2	.60659
1 TO	3	.612785
1 TO	4	.590989
1 TO	5	.688332

1
0 (----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .0272
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .016
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .0315569

THE AMR FOR THIS RIFLE IS: .9882

17 Jun 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8636180.1

CENTERFIRE PATTERNS

1

POB

1 in circle

2 in circle

3 in circle

OF SHOTS = 10

IN CIR

1 in = 1

2 in = 4

3 in = 8

HE = 2.758

VS = 2.743

GS = 2.798

CENTROID *

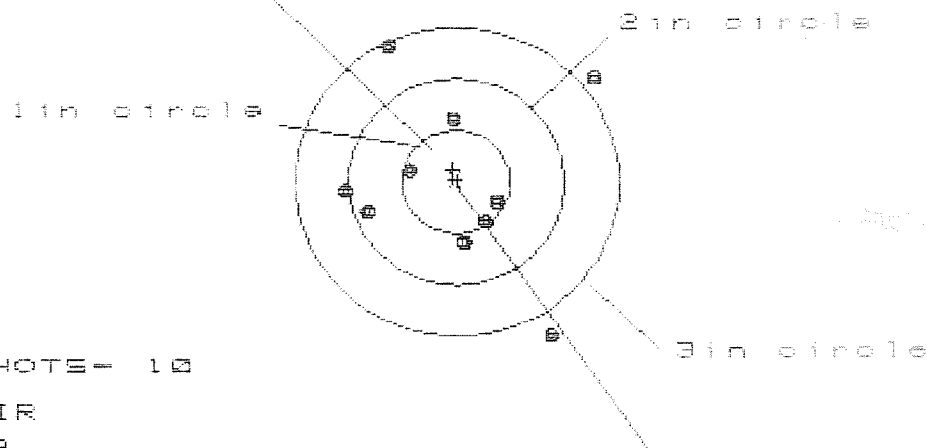
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.057	.868	.800
MINIMUM X	-1.701	-1.057	-1.125
MAXIMUM Y	1.239	1.279	1.096
MINIMUM Y	-1.504	-1.464	-1.395
CENTROID X	.313	.502	.570
CENTROID Y	.423	.383	.566
POB TO CENTROID in.	.527	.632	.804
MIN RADIUS	.107	.243	.265
MEAN RADIUS	1.074	.985	.886
MAX RADIUS	1.739	1.562	1.402
HORIZONTAL SPREAD	2.758	1.925	1.925
VERTICAL SPREAD	2.743	2.743	2.491
EXTREME SPREAD	2.798	2.757	2.499
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	8		

17 Jun 1991

FILE:/PATTERNING/CENTERFIRE_PATT/06636100.1

CENTERFIRE PATTERNS # 2

POA



OF SHOTS- 10

IN CIR

1 in - 2

2 in - 5

3 in - 8

HS= 2.387

VS= 2.775

GS= 3.166

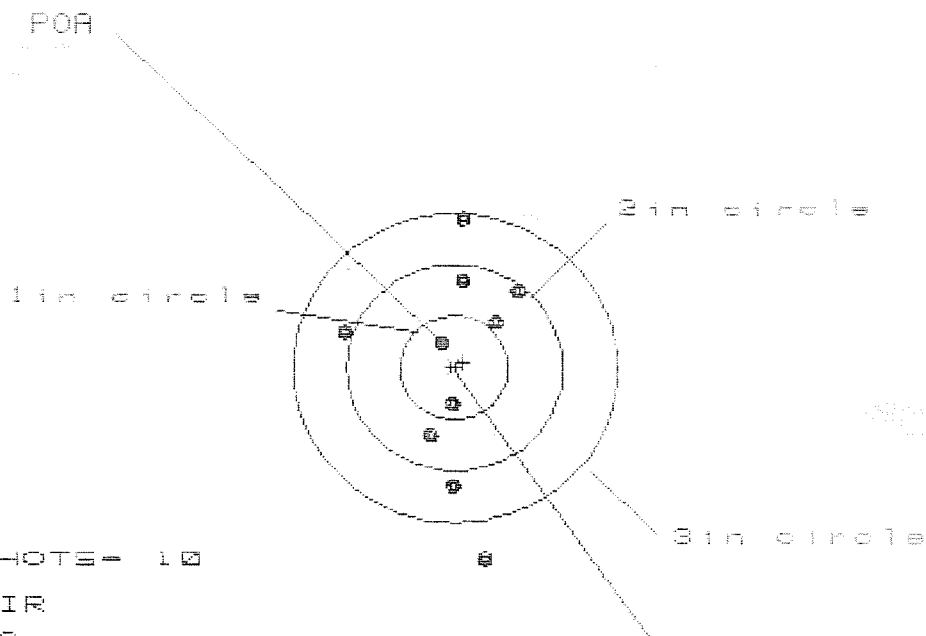
CENTROID #

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.312	1.414	.602
MINIMUM X	:	-1.075	-.973	-.796
MAXIMUM Y	:	1.294	1.129	1.237
MINIMUM Y	:	-1.481	-.753	-.645
CENTROID X	:	.029	-.073	-.250
CENTROID Y	:	-.113	.052	-.056
POA TO CENTROID in.	:	.116	.090	.256
MIN RADIUS	:	.357	.313	.119
MEAN RADIUS	:	.924	.833	.692
MAX RADIUS	:	1.743	1.657	1.279
HORIZONTAL SPREAD	:	2.387	2.387	1.398
VERTICAL SPREAD	:	2.775	1.882	1.882
EXTREME SPREAD	:	3.166	2.649	1.989
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		8	

(7 Jun 1991)

FILE:/PATTERNING/CENTERFIRE_PATT/C8836100.1

CENTERFIRE PATTERNS # 3



OF SHOTS= 10

IN CIR

1 in = 2

2 in = 6

3 in = 9

HS= 1.649

VS= 3.329

GS= 3.333

CENTROID *

PATTERN #	:	3
SHOTS (BEST OF)	:	10 9 8
MAXIMUM X	:	.599 .628 .645
MINIMUM X	:	-1.050 -1.021 -1.004
MAXIMUM Y	:	1.466 1.259 .801
MINIMUM Y	:	-1.863 -1.375 -1.217
CENTROID X	:	-.079 -.109 -.126
CENTROID Y	:	-.048 .159 .001
POA TO CENTROID in.	:	.093 .193 .126
MIN RADIUS	:	.314 .120 .253
MEAN RADIUS	:	.942 .804 .754
MAX RADIUS	:	1.882 1.376 1.219
HORIZONTAL SPREAD	:	1.649 1.649 1.649
VERTICAL SPREAD	:	3.329 2.634 2.018
EXTREME SPREAD	:	3.333 2.635 2.019
NUMBER IN ONE INCH CIRCLE =	:	2
NUMBER IN TWO INCH CIRCLE =	:	6
NUMBER IN THREE INCH CIRCLE =	:	9

17 Jun 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8636180.1

CENTERFIRE PATTERNS # 4

POA

1in circle

2in circle

3in circle

OF SHOTS- 10

IN CIR

1in = 3

2in = 6

3in = 9

HS= 2.701

VS= 1.802

GS= 2.905

CENTROID #

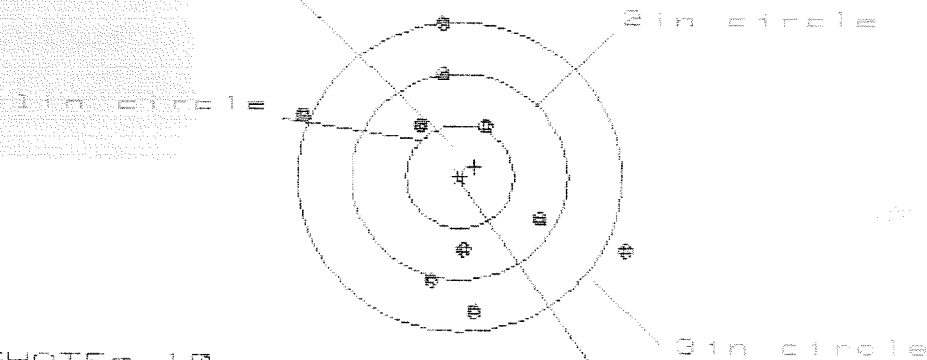
PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.661	.855	.748
MINIMUM X	:	-1.040	-.855	-.732
MAXIMUM Y	:	.792	.762	.755
MINIMUM Y	:	-1.010	-1.040	-.945
CENTROID X	:	.011	-.174	-.067
CENTROID Y	:	-.085	-.055	-.150
POA TO CENTROID in.	:	.086	.182	.164
MIN RADIUS	:	.268	.082	.211
MEAN RADIUS	:	.873	.764	.712
MAX RADIUS	:	1.684	1.145	1.065
HORIZONTAL SPREAD	:	2.701	1.710	1.480
VERTICAL SPREAD	:	1.802	1.802	1.700
EXTREME SPREAD	:	2.905	2.090	2.090
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		9	

17 Jun 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636100.1

CENTERFIRE PATTERNS # 5

POA



OF SHOTS = 10

IN CIR

1in = 0

2in = 4

3in = 8

HS = 3.016

VS = 2.796

GS = 3.278

CENTROID #

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.518	.869	.763
MINIMUM X	:	-1.498	-1.329	-.379
MAXIMUM Y	:	1.482	1.406	1.472
MINIMUM Y	:	-1.314	-1.398	-1.324
CENTROID X	:	-.138	-.387	-.141
CENTROID Y	:	-.097	-.021	-.087
POA TO CENTROID in.	:	.169	.308	.166
MIN RADIUS	:	.554	.489	.545
MEAN RADIUS	:	1.088	1.015	.950
MAX RADIUS	:	1.664	1.430	1.481
HORIZONTAL SPREAD	:	3.016	2.198	1.082
VERTICAL SPREAD	:	2.796	2.796	2.796
EXTREME SPREAD	:	3.278	2.812	2.812
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		4	
NUMBER IN THREE INCH CIRCLE	=		8	