

UPC



0 47700 25716 7

06702871

INCLUDES 1 IN CHAMBER

5716

ORDER NO.

BARREL LENGTH

CAPACITY*

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: RE00135883

Serial: C6702853 Model M24 SWS Center Fire
Caliber: 7.62 NATO Produced: 10/19/1992

Repairman:

Status: Closed 10/26/2007 8:27:00 AM

Verify Repair

Address Information

Customer:

Received From

Return To:

Received From

Name: US ARDEC RDECOM

US ARDEC RDECOM

Address 1: ROUTE 15 (973-724-4031)

ROUTE 15 (973-724-4031)

Address 2: BLDG. 34 NORTH

PO Box:

BLDG. 34 NORTH

PO Box:

City: PICATINNY ARSENAL

PICATINNY ARSENAL

State: NJ

Zip Code: 07806

Country: US

State: NJ

Zip Code: 07806

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	Fit and Rear Sgt Base	1

Repair Search

Refresh

Close

naglej

10/29/2007

10:55 AM

C&PS

NUM

INS

SCRL



10:55 AM

Serial Number: C6702853

Model: M24 SWS



RE00135883

SNIPER WEAPON SYSTEM - UNIQUE STATISTICAL INFORMATION

FIREARM SERIAL NUMBER / DATASET NAME: C6702853.___0
FILE DATE AND TIME: 12/13/2007 13:22

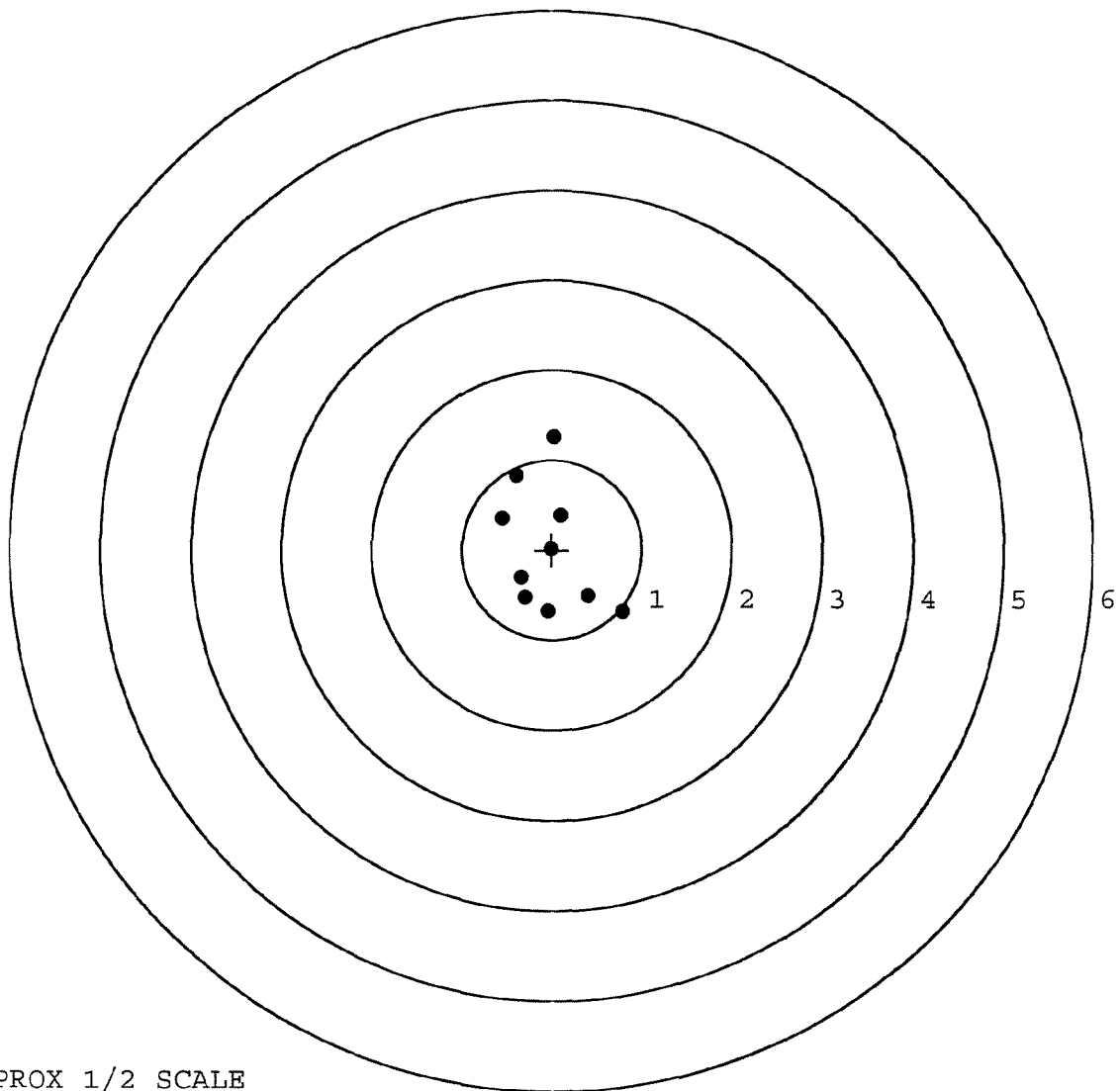
THE FOLLOWING DATA IS ALL REPORTED IN UNITS OF INCHES

The Average X Centroid of the Five Target Set:	-0.098
The Average Y Centroid of the Five Target Set:	-0.017
The Average Point of Impact of the Five Target Set:	0.100
The Average Mean Radius of the Five Target Set:	0.683
The Distance from POA to Centroid Target #1:	0.035
The Distance from Centroid Target #2 to Centroid Target #1:	0.025
The Distance from Centroid Target #3 to Centroid Target #1:	0.198
The Distance from Centroid Target #4 to Centroid Target #1:	0.199
The Distance from Centroid Target #5 to Centroid Target #1:	0.168

SERIAL NUMBER: C6702853. __0
TARGET NUMBER: 1
FILE DATE: 12/13/2007
FILE TIME: 13:22

X CENTROID: -0.034
Y CENTROID: 0.009
POA TO CENTROID: 0.035
HORZ SPREAD: 1.338
VERT SPREAD: 1.940
GROUP SPREAD: 2.080
MIN RADIUS: 0.025
MAX RADIUS: 1.243
MEAN RADIUS: 0.670
IN 1 IN DIAMETER: 3
IN 2 IN DIAMETER: 8
in 3 IN DIAMETER: 10

POINT#	X	Y
1:	0.032	1.250
2:	-0.395	0.832
3:	-0.556	0.359
4:	0.100	0.381
5:	-0.009	0.011
6:	0.782	-0.690
7:	0.404	-0.517
8:	-0.050	-0.687
9:	-0.305	-0.537
10:	-0.341	-0.310



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. 0

TARGET NUMBER: 2

FILE DATE: 12/13/2007

FILE TIME: 13:22

POINT#	X	Y
1:	-0.078	-0.558
2:	0.196	-0.562
3:	0.582	-0.246
4:	0.338	-0.061
5:	0.340	0.170
6:	-0.042	0.179
7:	-0.290	0.615
8:	-0.431	0.115
9:	-0.843	0.293
10:	0.115	0.262

X CENTROID: -0.011

Y CENTROID: 0.021

POA TO CENTROID: 0.024

HORZ SPREAD: 1.425

VERT SPREAD: 1.177

GROUP SPREAD: 1.524

MIN RADIUS: 0.161

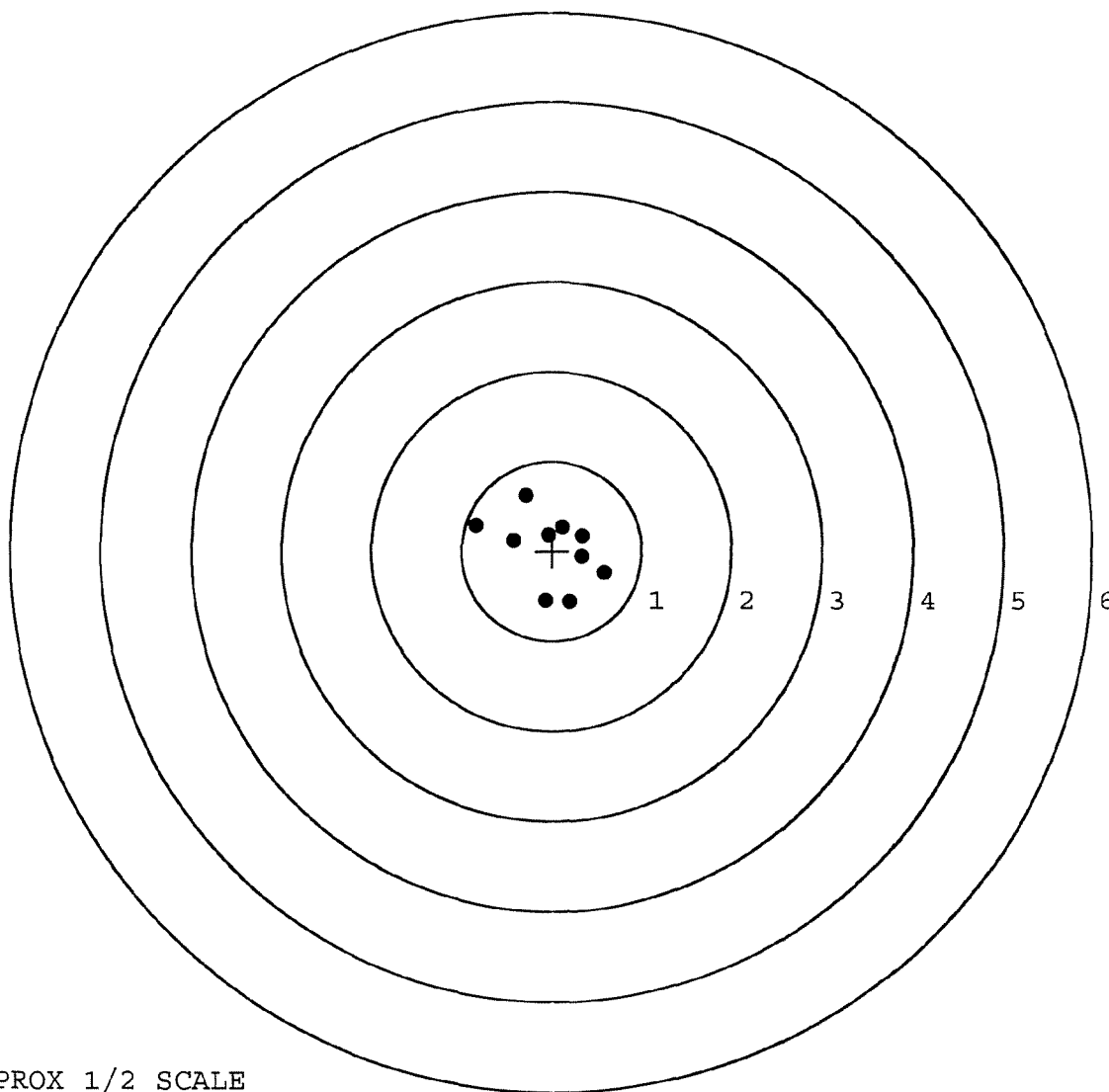
MAX RADIUS: 0.875

MEAN RADIUS: 0.499

IN 1 IN DIAMETER: 5

IN 2 IN DIAMETER: 10

in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. __0

TARGET NUMBER: 3

FILE DATE: 12/13/2007

FILE TIME: 13:22

POINT#	X	Y
1:	0.633	-0.307
2:	0.781	0.412
3:	0.233	0.790
4:	0.022	0.457
5:	0.162	-0.470
6:	-0.200	-0.199
7:	-0.561	-0.450
8:	-0.801	0.142
9:	-0.808	0.384
10:	-1.772	-0.799

X CENTROID: -0.231

Y CENTROID: -0.004

POA TO CENTROID: 0.231

HORZ SPREAD: 2.553

VERT SPREAD: 1.589

GROUP SPREAD: 2.826

MIN RADIUS: 0.197

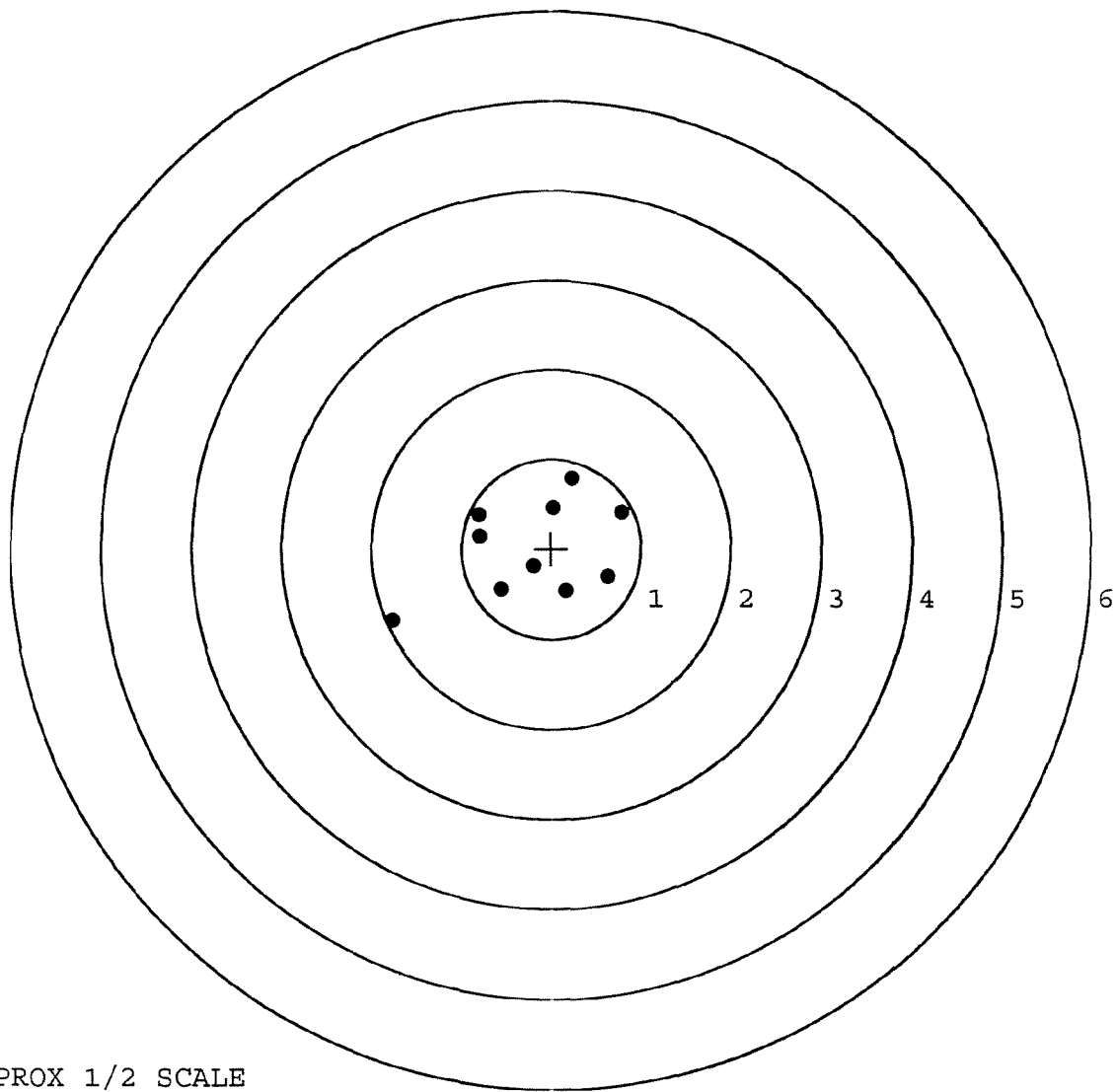
MAX RADIUS: 1.734

MEAN RADIUS: 0.783

IN 1 IN DIAMETER: 1

IN 2 IN DIAMETER: 8

in 3 IN DIAMETER: 9



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. __0

TARGET NUMBER: 4

FILE DATE: 12/13/2007

FILE TIME: 13:22

POINT#	X	Y
1:	-1.083	0.117
2:	-0.935	-0.022
3:	-0.951	1.128
4:	-0.185	0.754
5:	-0.485	-0.048
6:	0.064	0.036
7:	0.346	-0.037
8:	1.073	-0.062
9:	0.064	-0.614
10:	-0.211	-0.858

X CENTROID: -0.230

Y CENTROID: 0.039

POA TO CENTROID: 0.234

HORZ SPREAD: 2.156

VERT SPREAD: 1.986

GROUP SPREAD: 2.348

MIN RADIUS: 0.269

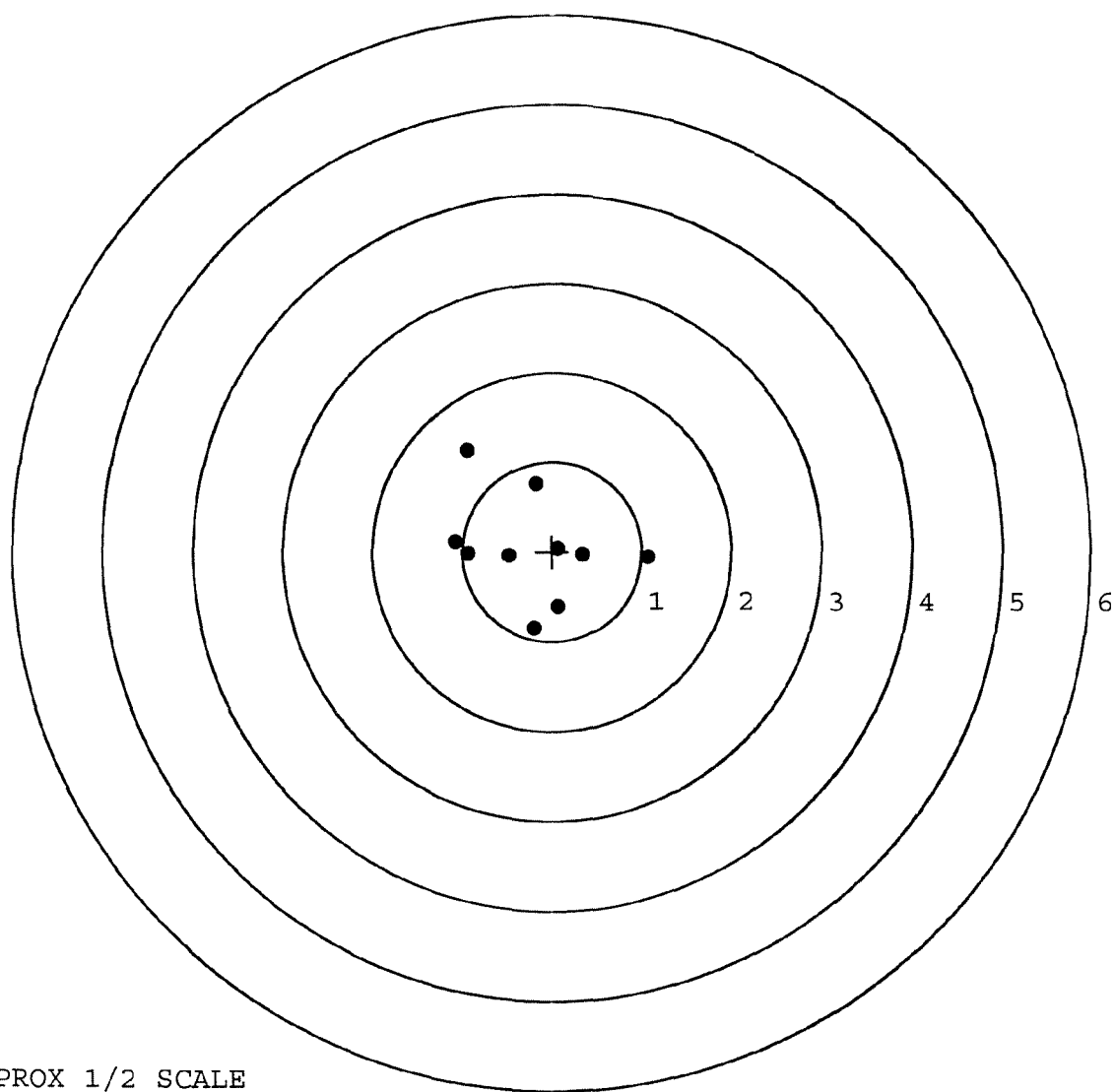
MAX RADIUS: 1.307

MEAN RADIUS: 0.765

IN 1 IN DIAMETER: 2

IN 2 IN DIAMETER: 8

in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. __0

TARGET NUMBER: 5

FILE DATE: 12/13/2007

FILE TIME: 13:22

POINT#	X	Y
1:	0.639	0.492
2:	0.456	0.690
3:	-0.291	0.634
4:	-0.139	0.293
5:	0.050	0.105
6:	-0.467	-0.235
7:	0.369	-0.945
8:	-0.045	-0.668
9:	-0.005	-0.863
10:	-0.403	-1.012

X CENTROID: 0.016

Y CENTROID: -0.151

POA TO CENTROID: 0.152

HORZ SPREAD: 1.106

VERT SPREAD: 1.702

GROUP SPREAD: 1.906

MIN RADIUS: 0.258

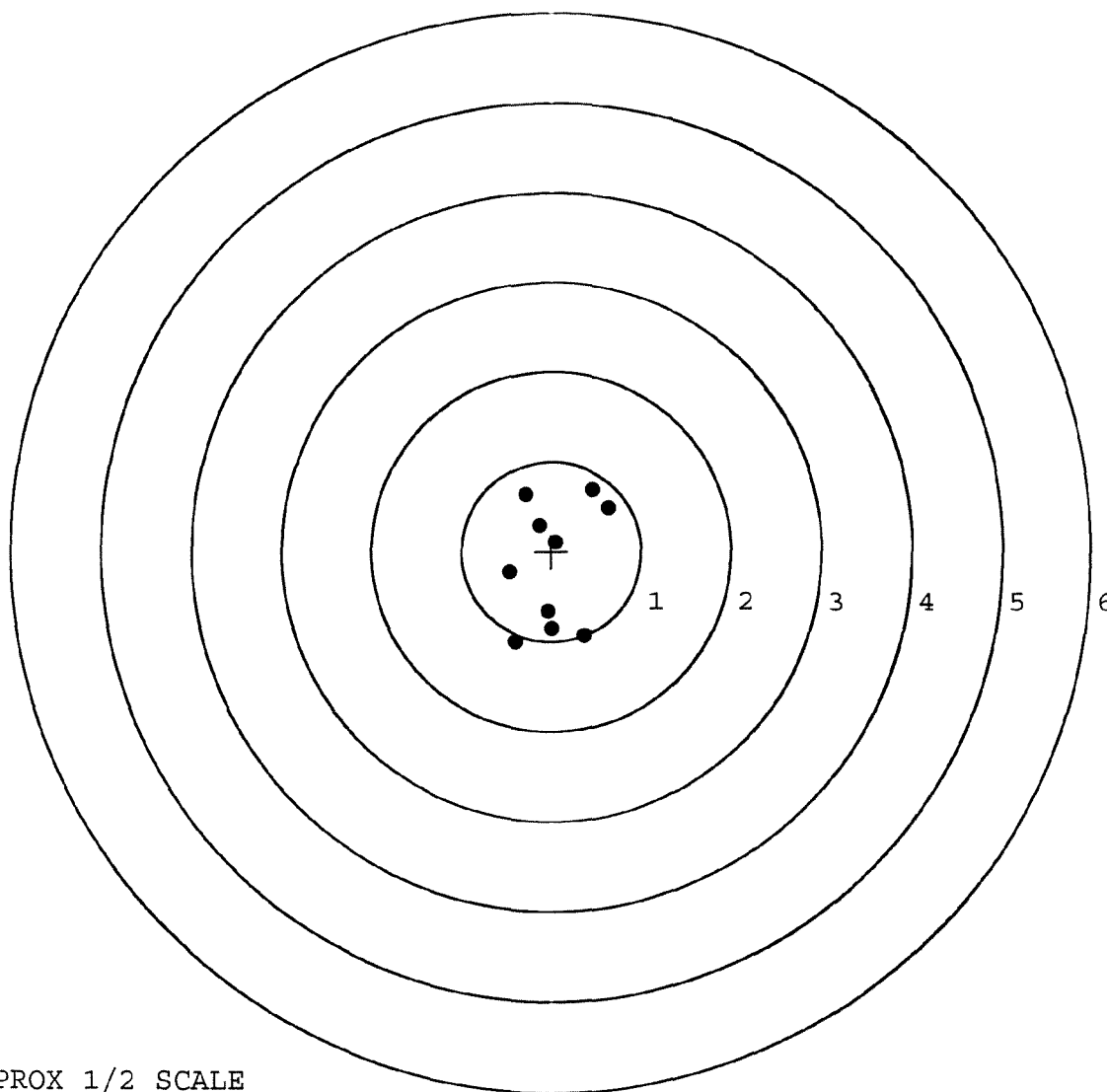
MAX RADIUS: 0.958

MEAN RADIUS: 0.697

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 <u>135883</u>			
SERIAL NUMBER <u>C6702853</u>			
LOG-IN DATE <u>10-26-07</u>			
OPERATION #	OPERATION NAME	DATE	INITIAL
500	DIS-ASSEMBLE GUN	11-12-07	RTZ
505	RE-BARREL	11-27-07	J.P.D.
560	ASSEMBLE	11-27-07	J.P.D.
600	PROOF	11-27-07	J.P.D.
605	CHECK HEADSPACE	11-27-07	TRW
610	DIS-ASSEMBLE GUN		
612	MAGNAFLUX	12-09-07	GB
510	DRILL AND TAP	12-3-07	TRW
615	ROLLMARK CALIBER	12-3-07	CW
618	ROTO-BLAST	12-5-07	JY
620	APPLY COATINGS	12-8-07	LM
625	FINAL ASSEMBLY	12-12-07	RTZ
640	FUNCTION TEST AND	(PASS) FAIL	12-13-07 TRW
650	TARGET	(PASS) FAIL	12-13-07 TRW
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
670	FINAL INSPECTION		12-13-07 FM
	A) HEADSPACE	(PASS) FAIL	12-14-07 RA
	B) TRIGGER PULL	+/- .5 LBS MIN 2.50 LBS MAX 4.0 LBS	2.68 2.70 2.69 2.74 2.77 12-14-07 RA
680	F) SAFETY ON FORCE	2 LBS MIN 10 LBS MAX	55 55 62 12-14-07 RA
	G) SAFETY OFF FORCE	2 LBS MAX	3.5 3.5 3.75 12-14-07 RA
	I) FIRING PIN INDENT	.020	.023 .0225 .023 12-14-07 RA
690	PACK		2-13-08 FM

GFM

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6702853

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		5/1/92	RW
600	Proof		5/1/92	RW
607	Check Headspace		5/1/92	RW
610	Dis-assemble Gun		5/1/92	RW
612	Magnaflux Barrel Action	MAY	5 1992	KCR
	Magnaflux Bolt	MAY	5 1992	KCR
615	Rollmark Caliber	MAY	5 1992	GB
617	Drill and Tap Sight Holes	MAY	5 1992	FB
618	Polish Barrel	MAY	5 1992	WB
620	Apply Coatings (Barrel Action)		6-10-92	PA
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		6/13/92	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		6/13/92	RW
	C) Inspect Ejector Hole for Chamfer		6/13/92	RW
	D) Oil Firing Pin Ass'y		6/13/92	RW
	E) Adjust Trigger Pull to Min Setting and Stake		6/17/92	RW

Op. #	OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force	4	4.5	4			6/17/92	RW
	G) Safety Off Force	3	3	3			6/17/92	RW
	H) Trigger Pull Test & Retainability						6/17/92	RW
	I) Firing Pin Indent	.022	.0215	.022			6/17/92	RW
	J) Assemble Stock						6/17/92	RW
	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						6/17/92	RW
	P) Detach & Attach Scope 20 Times						6/17/92	RW
640	Gallery Target & Test						6-24-92	DH
	A) Time						6-24-92	DH
	B) Malfunctions						6-24-92	DH
	C) Pierced Primers						6-24-92	DH
	D) Optical Clarity of Scope						6-24-92	DH
645	Inspect for Live Ammo						6-24-92	DH
655	Final Inspection							
	A) Headspace						6/24/92	RW
	B) Trigger Pull	2.71	2.72	2.72	2.85	2.79	6/24/92	RW
	C) Function						6/24/92	RW
660	Pack							

SWS TRIGGER PULL TEST

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#

3.00# ± .75#

4.00# ± 1.00#

SERIAL NO. C6702853

DATE 6/17/92

TESTER RW

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.46	2.35	2.47	2.71	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.56	2.34	2.41	2.72	
PULL #3	2.54	2.30	2.42	2.72	
PULL #4	2.52	2.34	2.42	2.85	
PULL #5	2.45	2.37	2.45	2.79	
TOTAL	12.53	11.70	12.17	13.79	
AVG.	2.51	2.34	2.43	2.76	

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.11	3.31		
PULL #2	3.21	3.33		
PULL #3	3.22	3.35		
PULL #4	3.28	3.31		
PULL #5	3.11	3.23		
TOTAL	15.93	16.53		
AVG.	3.19	3.31		

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.26	4.27		4.15
PULL #2	4.21	4.23		4.20
PULL #3	4.24	4.16		4.15
PULL #4	4.19	4.19		4.14
PULL #5	4.12	4.20		4.19
TOTAL	21.02	21.05		20.83
AVG.	4.20	4.21		4.17

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6702853
25 Jun 1992

CENTROIDAL DISTANCES

0 TO	1	.127534
1 TO	2	.401888
1 TO	3	.404951
1 TO	4	.81676
1 TO	5	.492847

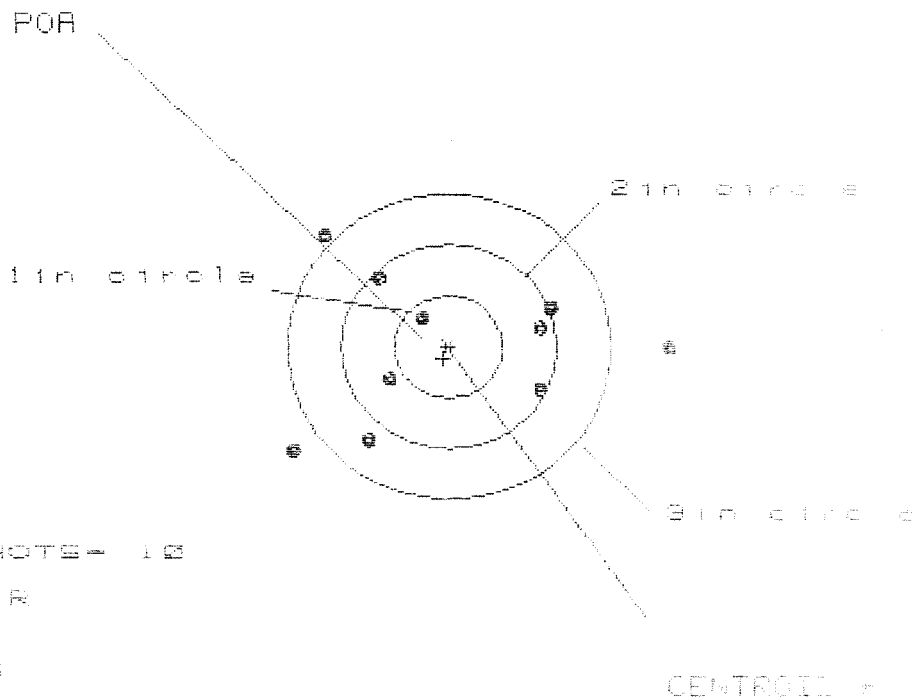
$\bar{x} = \frac{1}{5} \sum_{i=1}^5 x_i$ (----FOR

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .832
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.1568
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: 1.189612
THE AMR FOR THIS RIFLE IS: 1.045

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/C6700850

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1in = 1

2in = 5

3in = 7

HST = 2.484

VS = 2.144

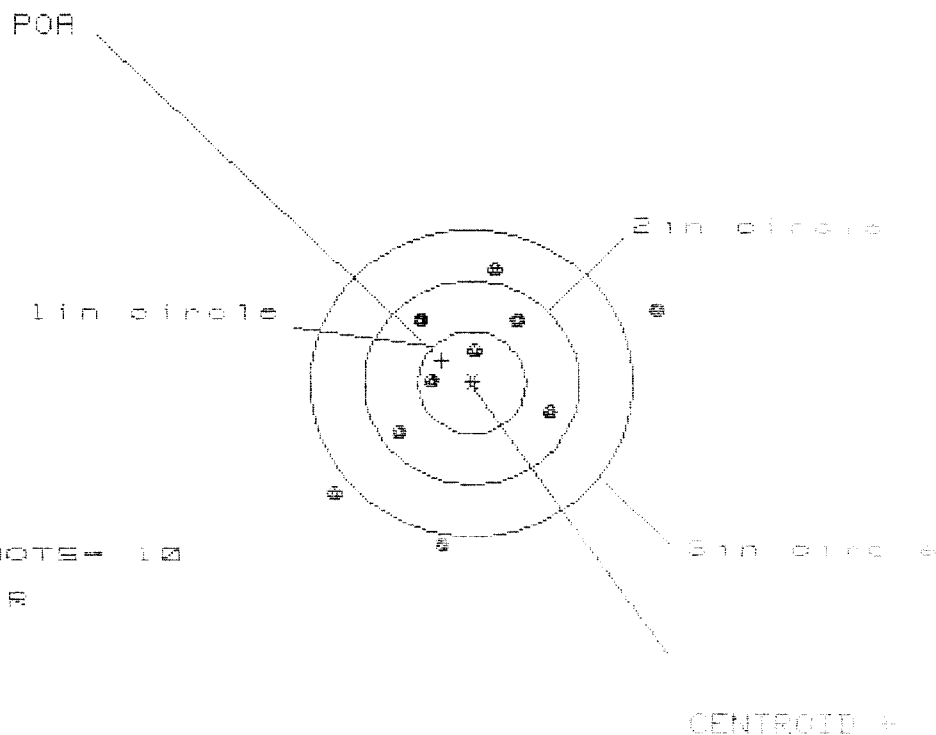
GS = 3.579

PATTERN #	:	1	2	3
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	2.020	1.215	1.067
MINIMUM X	:	-1.404	-1.179	-1.059
MAXIMUM Y	:	1.106	1.106	.977
MINIMUM Y	:	-1.038	-1.038	-1.055
CENTROID X	:	.050	-.172	-.024
CENTROID Y	:	.116	.116	.246
POR TO CENTROID in.	:	.127	.207	.246
MIN RADIUS	:	.326	.241	.181
MEAN RADIUS	:	1.138	1.016	.934
MAX RADIUS	:	2.020	1.571	1.440
HORIZONTAL SPREAD	:	3.424	2.394	2.126
VERTICAL SPREAD	:	2.144	2.144	2.042
EXTREME SPREAD	:	3.579	2.797	2.484
NUMBER IN ONE INCH CIRCLE	=	1		
NUMBER IN TWO INCH CIRCLE	=	5		
NUMBER IN THREE INCH CIRCLE	=	7		

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/08702853

CENTERFIRE PATTERNS # 2



OF SHOTS= 10

IN CIR

1 in = 2

2 in = 6

3 in = 7

HS= 2.822

VS= 2.706

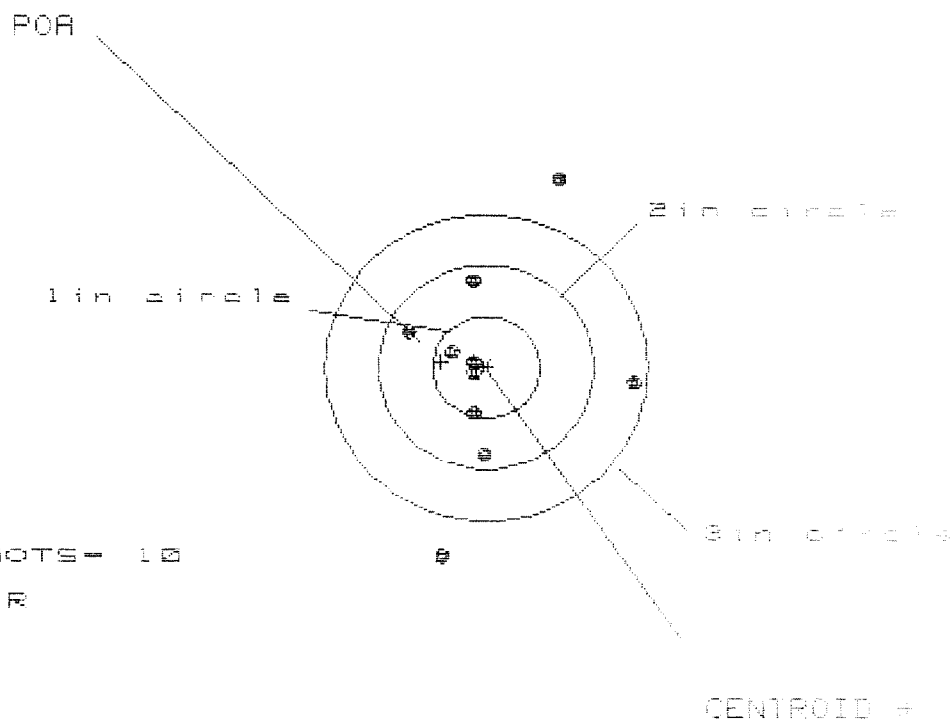
CS= 3.436

PATTERN #	2	2	2
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.697	.985	.775
MINIMUM X	-1.232	-1.044	-1.581
MAXIMUM Y	1.164	1.240	1.112
MINIMUM Y	-1.542	-1.466	-1.594
CENTROID X	.278	.090	.220
CENTROID Y	-.217	-.293	-.165
POA TO CENTROID in.	.352	.386	.375
MIN RADIUS	.348	.228	.306
MEAN RADIUS	1.009	.904	.912
MAX RADIUS	1.831	1.471	1.613
HORIZONTAL SPREAD	2.929	1.949	1.356
VERTICAL SPREAD	2.706	2.706	2.706
EXTREME SPREAD	3.436	2.757	2.757
NUMBER IN ONE INCH CIRCLE =		2	
NUMBER IN TWO INCH CIRCLE =		6	
NUMBER IN THREE INCH CIRCLE =		7	

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/C8702853

CENTERFIRE PATTERNS # 3



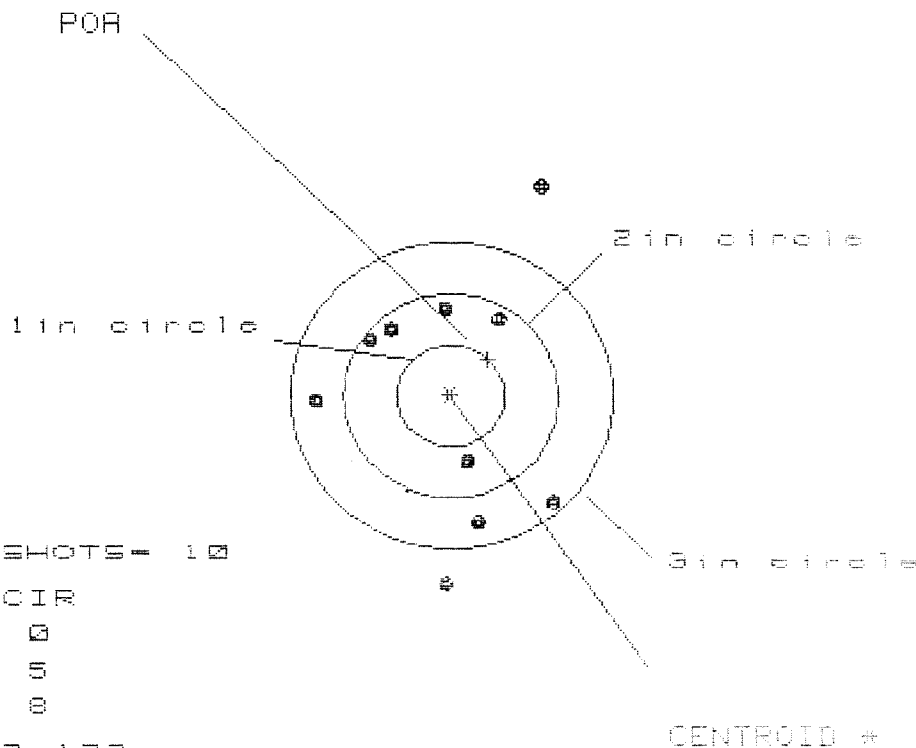
OF SHOTS - 10
 # IN CIR
 1 in = 4
 2 in = 7
 3 in = 8
 HS = 2.090
 VS = 3.717
 GS = 3.894

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.336	1.416	1.371
MINIMUM X	:	-.754	-.674	-.716
MAXIMUM Y	:	1.849	1.100	.892
MINIMUM Y	:	-1.868	-1.663	-.817
CENTROID X	:	.421	.341	.386
CENTROID Y	:	-.853	-.258	-.850
POA TO CENTROID in.	:	.425	.428	.389
MIN RADIUS	:	.141	.137	.114
MEAN RADIUS	:	.898	.762	.623
MAX RADIUS	:	1.985	1.781	1.377
HORIZONTAL SPREAD	:	2.090	2.090	2.090
VERTICAL SPREAD	:	3.717	2.763	1.709
EXTREME SPREAD	:	3.894	2.787	2.148
NUMBER IN ONE INCH CIRCLE	=		4	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		8	

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/08702853

CENTERFIRE PATTERNS # 4



OF SHOTS = 10

IN CIR

1 in = 0

2 in = 5

3 in = 8

HS = 2.173

VS = 3.922

GS = 4.825

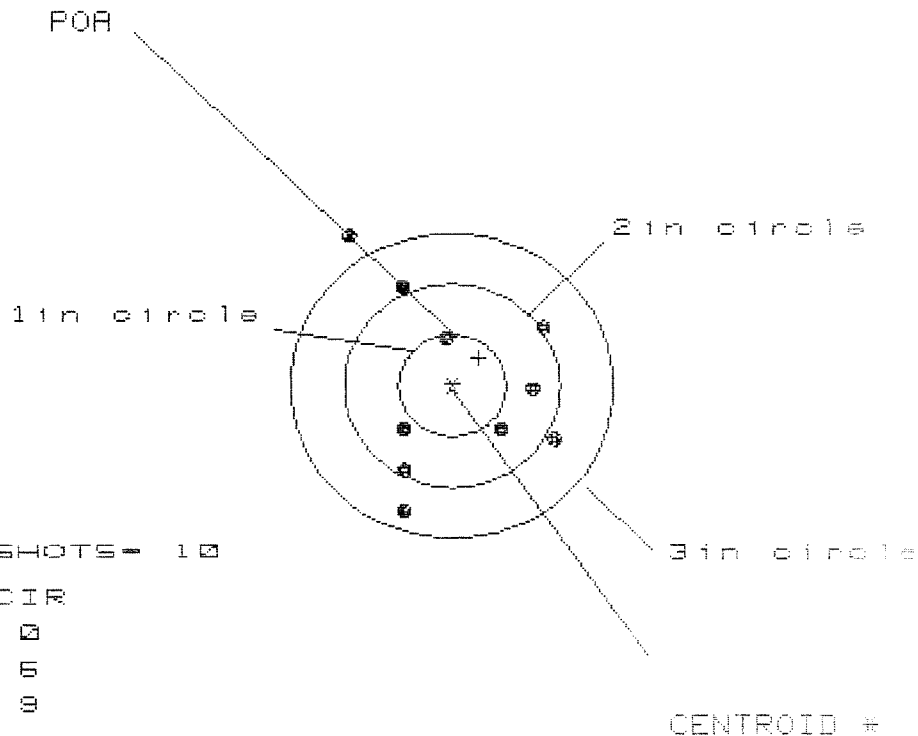
CENTROID *

PATTERN #	4	4	4
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.926	1.025	1.036
MINIMUM X	-1.247	-1.148	-1.137
MAXIMUM Y	2.031	1.106	.898
MINIMUM Y	-1.891	-1.666	-1.177
CENTROID X	-.344	-.443	-.454
CENTROID Y	-.356	-.581	-.373
POR TO CENTROID in.	.495	.731	.588
MIN RADIUS	.692	.512	.706
MEAN RADIUS	1.207	1.087	.988
MAX RADIUS	2.218	1.668	1.425
HORIZONTAL SPREAD	2.173	2.173	2.173
VERTICAL SPREAD	3.922	2.772	2.075
EXTREME SPREAD	4.825	2.773	2.368
NUMBER IN ONE INCH CIRCLE =	0		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	8		

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/06702853

CENTERFIRE PATTERNS # 5



OF SHOTS = 10

IN CIR

1in = 0

2in = 6

3in = 9

HS = 1.924

VS = 2.638

GS = 2.719

PATTERN #	5		
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.951	.843	.767
MINIMUM X	-.973	-.609	-.684
MAXIMUM Y	1.431	1.162	1.030
MINIMUM Y	-1.207	-1.048	-.814
CENTROID X	-.248	-.140	-.064
CENTROID Y	-.274	-.433	-.301
POA TO CENTROID in.	.369	.455	.308
MIN RADIUS	.518	.451	.507
MEAN RADIUS	.975	.965	.810
MAX RADIUS	1.730	1.306	1.231
HORIZONTAL SPREAD	1.924	1.452	1.451
VERTICAL SPREAD	2.638	2.210	1.844
EXTREME SPREAD	2.719	2.210	2.075
NUMBER IN ONE INCH CIRCLE =		0	
NUMBER IN TWO INCH CIRCLE =		6	
NUMBER IN THREE INCH CIRCLE =		9	