

C 6702863

GFM

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6702871

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	CS
617	Drill and Tap Sight Holes		MAY 5 1992	LB
618	Polish Barrel		MAY 5 1992	LB
620	Apply Coatings (Barrel Action)		6-10-92	AA
	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	4.5	4.5	4.5			6/17/92	RW
	G) Safety Off Force	2	2	2			6/17/92	RW
	H) Trigger Pull Test & Retainability						6/17/92	RW
	I) Firing Pin Indent	.0205	.021	.0215			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	2.49	2.53	2.52	2.55	2.60	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. C6702871DATE 6/17/92TESTER RW

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.46	2.27	2.36	2.49	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.43	2.27	2.42	2.53	
PULL #3	2.39	2.28	2.41	2.52	
PULL #4	2.36	2.25	2.40	2.55	
PULL #5	2.42	2.23	2.44	2.60	
TOTAL	12.06	11.30	12.03	12.69	
AVG.	2.41	2.26	2.41	2.54	

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.26	3.23		
PULL #2	3.17	3.26		
PULL #3	3.22	3.32		
PULL #4	3.28	3.34		
PULL #5	3.30	3.33		
TOTAL	16.23	16.48		
AVG.	3.25	3.30		

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.05	4.18		4.15
PULL #2	4.04	4.22		4.20
PULL #3	4.10	4.16		4.23
PULL #4	4.20	4.15		4.32
PULL #5	4.11	4.16		4.32
TOTAL	20.50	20.87		21.22
AVG.	4.10	4.17		4.22

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6702871
25 Jun 1992

CENTROIDAL DISTANCES

0 TO	1	.0757694
1 TO	2	.488256
1 TO	3	.0430465
1 TO	4	.139402
1 TO	5	.0786384

2
4 <----POA

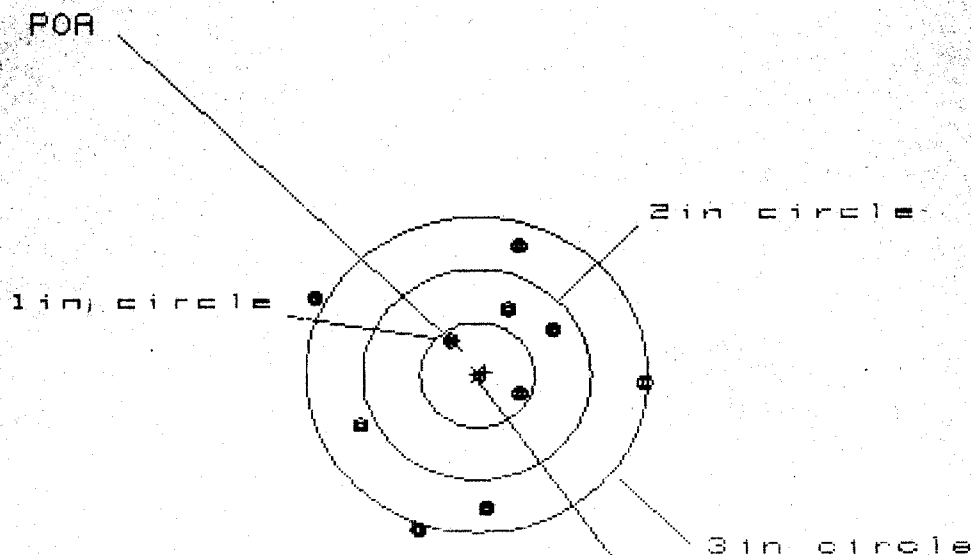
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.1259
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .004
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .128069
THE AMR FOR THIS RIFLE IS: 1.005

24 Jun 1982

FILE:/PATTERNING/CENTERFIRE_PATT/CG702871

CENTERFIRE PATTERNS

1



OF SHOTS- 10

IN CIR

1 in = 2

2 in = 4

3 in = 8

HS= 2.966

VS= 2.700

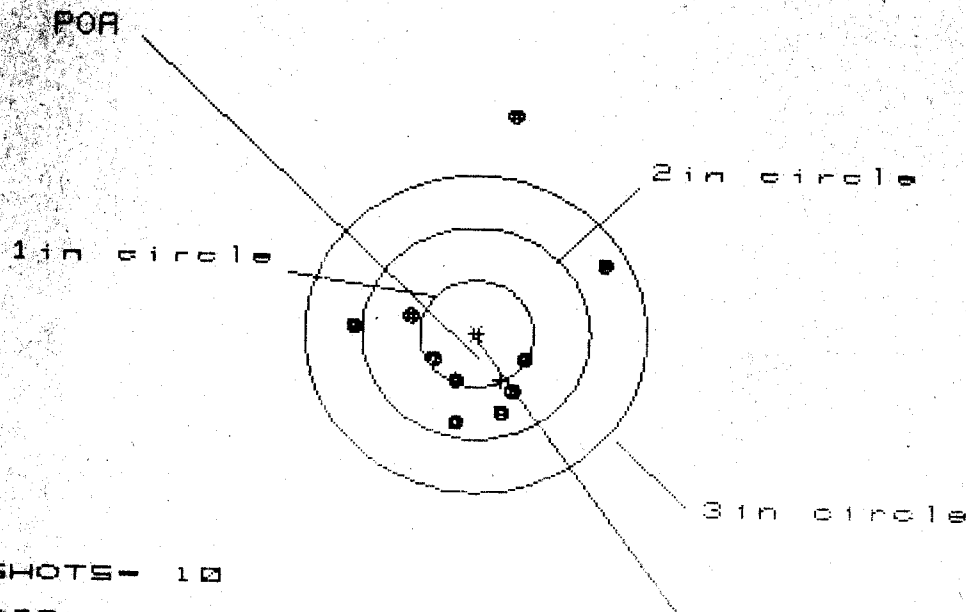
GS= 3.070

PATTERN #	:	1	2	3
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.492	1.328	1.243
MINIMUM X	:	-1.474	-1.156	-1.241
MAXIMUM Y	:	1.239	1.323	1.151
MINIMUM Y	:	-1.461	-1.377	-1.367
CENTROID X	:	-.070	.093	.178
CENTROID Y	:	-.029	-.113	.059
POA TO CENTROID in.	:	.076	.147	.187
MIN RADIUS	:	.380	.196	.272
MEAN RADIUS	:	1.066	.984	.884
MAX RADIUS	:	1.657	1.533	1.374
HORIZONTAL SPREAD	:	2.966	2.484	2.484
VERTICAL SPREAD	:	2.700	2.700	2.518
EXTREME SPREAD	:	3.070	2.835	2.530
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		4	
NUMBER IN THREE INCH CIRCLE	=		8	

24 JUN 1992

FILE:/PATTERNING/CENTERFIRE_PATT/CG702071

CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1in = 3

2in = 7

3in = 9

HE = 2.177

VS = 2.924

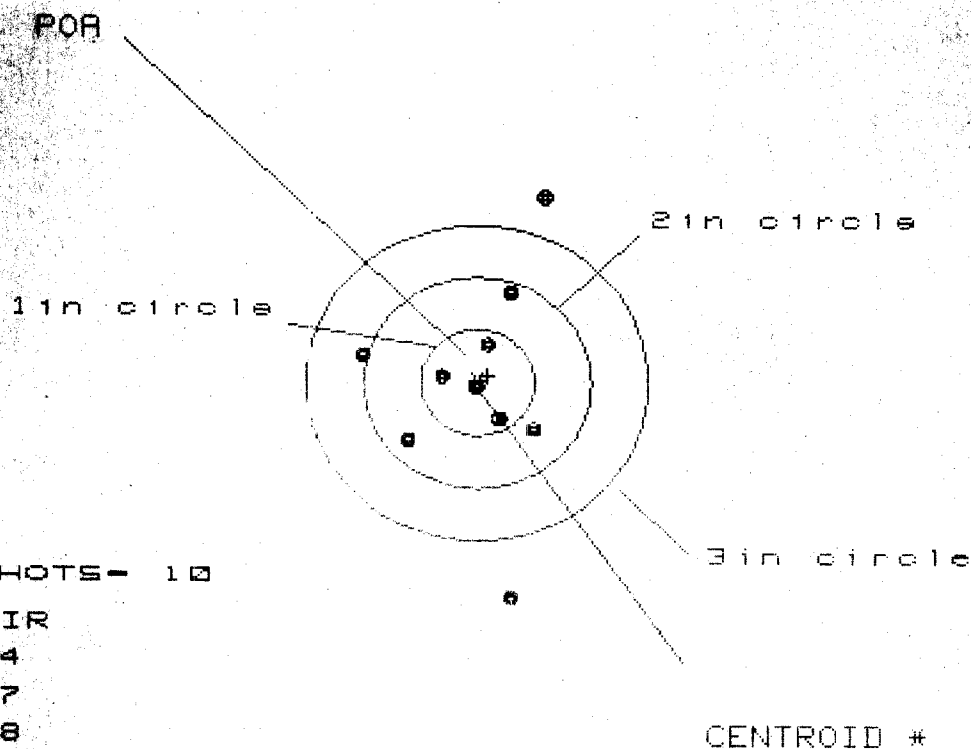
GS = 2.972

PATTERN #	:	10	9	8
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.080	1.120	.614
MINIMUM X	:	-1.097	-1.057	-.918
MAXIMUM Y	:	2.104	.863	.523
MINIMUM Y	:	-.820	-.586	-.478
CENTROID X	:	-.225	-.265	-.404
CENTROID Y	:	.434	.200	.092
POA TO CENTROID in.	:	.489	.332	.415
MIN RADIUS	:	.455	.255	.091
MEAN RADIUS	:	.877	.658	.524
MAX RADIUS	:	2.135	1.414	1.012
HORIZONTAL SPREAD	:	2.177	2.177	1.532
VERTICAL SPREAD	:	2.924	1.449	1.001
EXTREME SPREAD	:	2.972	2.244	1.565
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/CG702871

CENTERFIRE PATTERNS # 3



OF SHOTS - 10

IN CIR

1in = 4

2in = 7

3in = 8

HS = 1.655

VS = 3.793

GS = 3.810

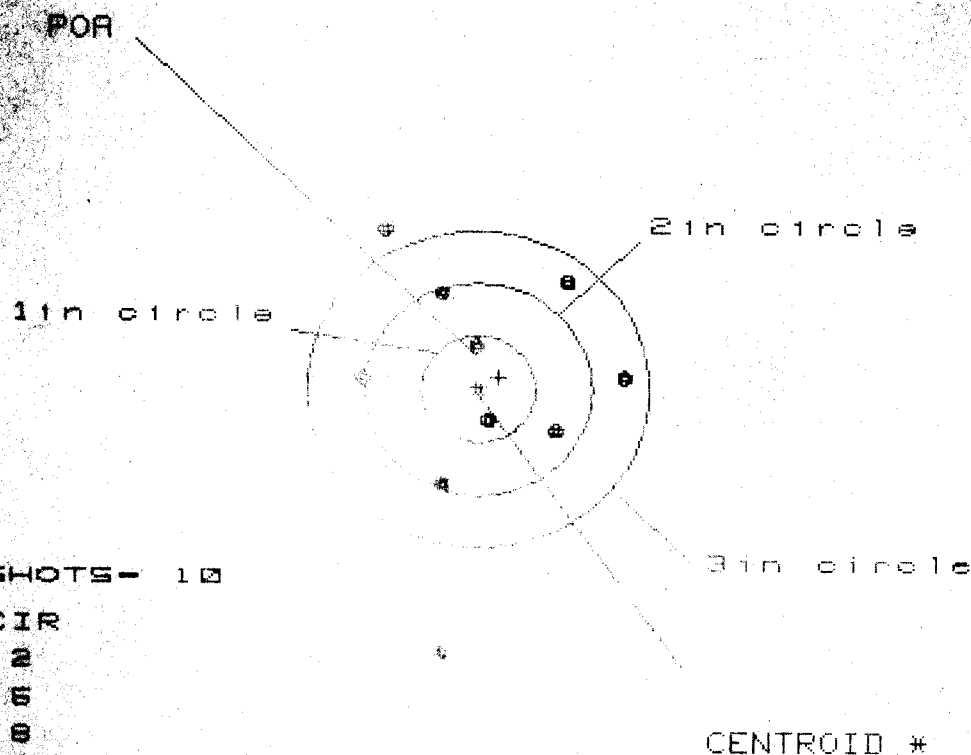
PATTERN #	:	10	8	8
SHOTS (BEST OF)	:	10	8	8
MAXIMUM X	:	.632	.662	.603
MINIMUM X	:	-1.023	-.943	-.910
MAXIMUM Y	:	1.751	1.524	.805
MINIMUM Y	:	-2.042	-.767	-.577
CENTROID X	:	-.092	-.122	-.205
CENTROID Y	:	-.066	.161	-.029
POA TO CENTROID in.	:	.113	.202	.207
MIN RADIUS	:	.035	.212	.154
MEAN RADIUS	:	.847	.724	.575
MAX RADIUS	:	2.060	1.661	.939
HORIZONTAL SPREAD	:	1.655	1.655	1.513
VERTICAL SPREAD	:	3.793	2.291	1.382
EXTREME SPREAD	:	3.810	2.621	1.658
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/C8702871

CENTERFIRE PATTERNS

4



OF SHOTS- 10

IN CIR

1in = 2

2in = 6

3in = 8

HSE = 2.238

VSE = 3.991

GSE = 4.030

PATTERN #	:		:	
SHOTS (BEST OF)	:	10	:	8
MAXIMUM X	:	1.251	:	1.164
MINIMUM X	:	-0.987	:	1.174
MAXIMUM Y	:	1.513	:	1.900
MINIMUM Y	:	-2.479	:	1.654
CENTROID X	:	-0.182	:	0.035
CENTROID Y	:	-0.112	:	0.009
POA TO CENTROID in.	:	0.213	:	0.036
MIN RADIUS	:	0.358	:	0.363
MEAN RADIUS	:	1.124	:	0.863
MAX RADIUS	:	2.497	:	1.134
HORIZONTAL SPREAD	:	2.238	:	2.238
VERTICAL SPREAD	:	3.991	:	1.954
EXTREME SPREAD	:	4.030	:	2.238
NUMBER IN ONE INCH CIRCLE	=	2		
NUMBER IN TWO INCH CIRCLE	=	6		
NUMBER IN THREE INCH CIRCLE	=	8		

24 JUL 1982

FILE://PATTERNING/CENTERFIRE_PATT/C6702871

CENTERFIRE PATTERNS

5

POA

2in circle

1in circle

3in circle

CENTROID *

OF SHOTS- 10

IN CIR

1in = 3

2in = 5

3in = 7

MEAN 2.851

VSM 3.276

OS 2.851

PATTERN 9

SHOTS (BEST OF)

10

8

MAXIMUM X

1.437

1.194

MINIMUM X

-1.437

-1.194

MAXIMUM Y

1.187

1.187

MINIMUM Y

-2.066

-2.066

CENTROID X

-.860

-.860

CENTROID Y

-.187

-.187

POA TO CENTROID in.

.123

165

165

MIN RADIUS

.298

143

143

MEAN RADIUS

1.113

151

151

MAX RADIUS

2.140

159

159

HORIZONTAL SPREAD

2.861

161

161

VERTICAL SPREAD

3.276

162

162

EXTREME SPREAD

3.651

163

163

NUMBER IN ONE INCH CIRCLE =

NUMBER IN TWO INCH CIRCLE =

NUMBER IN THREE INCH CIRCLE =

Remington Test Lab, Ilion, N.Y.

Centroidal distance calculations for Rifle # C6702871
6 Aug 1997

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .021
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.333
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .333662

THE AMR FOR THIS RIFLE IS: .896

CENTROIDAL DISTANCES

0	TO	1	.333662
1	TO	2	0
1	TO	3	0
1	TO	4	0
1	TO	5	0

+ <----FOA
B

Barber

PATTERN #: 1

POA TO CENTROID: .334

MIN RADIUS : .088

MEAN RADIUS : .896

MAX RADIUS : 1.362

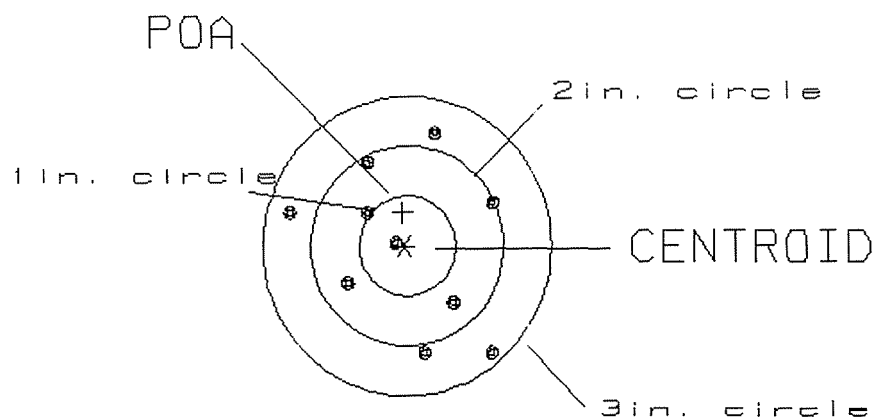
CENTROID X : .021

CENTROID Y : -.333

6 Aug 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702071

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 2.18

1

VS= 2.26

5

GS= 2.54

10

21 DAY TURN - AROUND

*New
Barrel*

M-24

CONTRACT # DAAA09-92-C-0834

R&E NO.

SERIAL NO. *C6702871*

LOG IN DATE: / /

DATE

INIT.

INSPECT & VERIFY:

OP. # OP. NAME

550 DIS-ASSEMBLE GUN

560 A RE-BARREL AT CUSTOM SHOP

B DRILL & TAP

C POLISH

575 ASSEMBLE

600 PROOF

605 CHECK HEADSPACE

610 DIS-ASSEMBLE

612 MAGNAFLUX

615 ROLLMARK CALIBER

618 ROTO-BLAST

620 APPLY COATINGS

625 A FINAL ASSEMBLY

B TRIGGER PULL TEST

C SAFETY ON FORCE

D SAFETY OFF FORCE

E FIRING PIN INDENT

640 TARGET

655 FINAL INSPECT

660 PACK

QAR INSPECTION

SHIP DATE

Remington Test Lab, Ilion, N.Y.

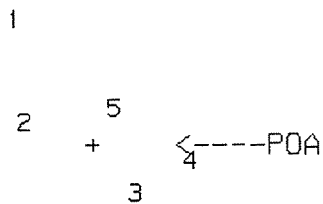
Centroidal distance calculations for Rifle # C6702871
22 Sep 1997

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .0104
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .152
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .152355

THE AMR FOR THIS RIFLE IS: 1.035

CENTROIDAL DISTANCES

0	TO	1	.966154
1	TO	2	.677278
1	TO	3	1.38041
1	TO	4	1.46555
1	TO	5	.874973

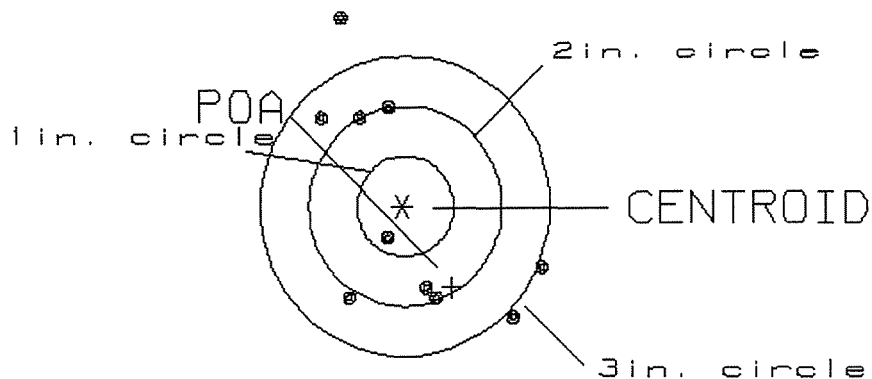


PATTERN #: ☐ 1 ☐
POA TO CENTROID: .966
MIN RADIUS : .361
MEAN RADIUS : 1.169
MAX RADIUS : 2.052
CENTROID X : -.522
CENTROID Y : .813

19 Sep 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702871

CENTERFIRE PATTERN # 1



OF SHOTS= 10

IN CIRCLE

HS= 2.25
VS= 3.03
GS= 3.52

1
4
7

PATTERN #: 2

POA TO CENTROID: .467

MIN RADIUS : .408

MEAN RADIUS : 1.025

MAX RADIUS : 1.797

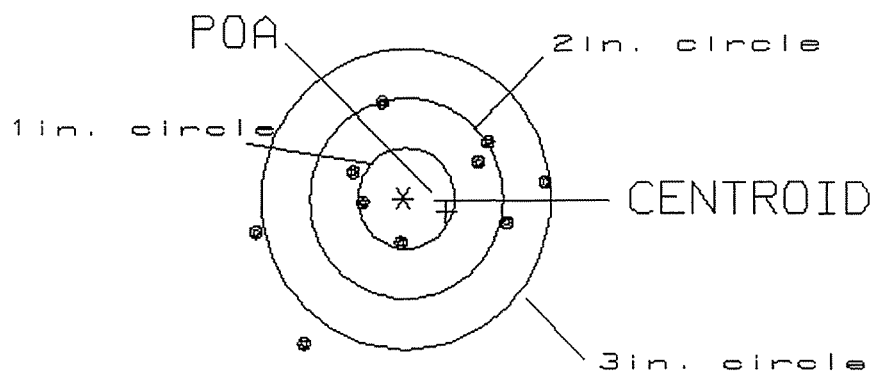
CENTROID X : -.446

CENTROID Y : .140

19 Sep 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702871

CENTERFIRE PATTERN # 2



OF SHOTS= 10

IN CIRCLE

HS= 2.99

2

VS= 2.43

4

GS= 3.04

8

PATTERN #: ☐ 3 ☐

POA TO CENTROID: .417

MIN RADIUS : .176

MEAN RADIUS : 1.028

MAX RADIUS : 2.344

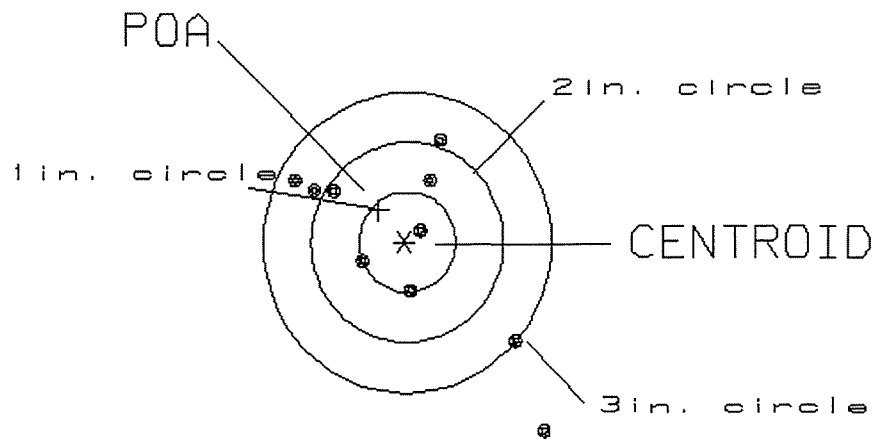
CENTROID X : .268

CENTROID Y : -.319

19 Sep 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702871

CENTERFIRE PATTERN # 3



OF SHOTS= 10

IN CIRCLE

HS= 2.60

1

VS= 2.94

5

GS= 3.58

8

PATTERN #: ☐ 4 ☐

POA TO CENTROID: .628

MIN RADIUS : .508

MEAN RADIUS : 1.152

MAX RADIUS : 1.956

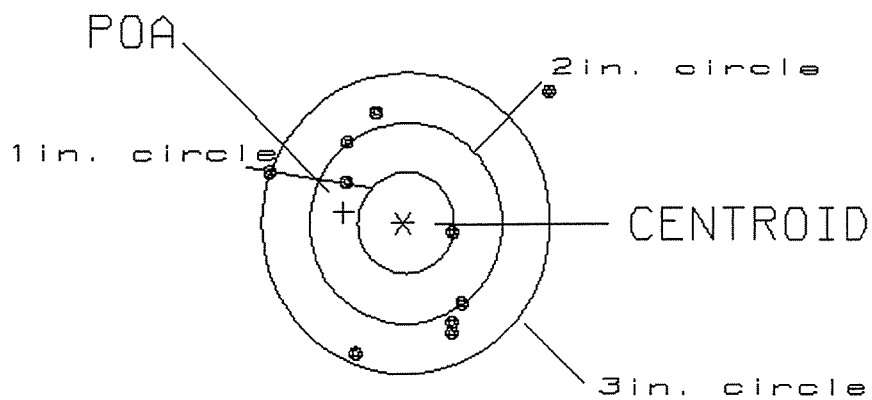
CENTROID X : .618

CENTROID Y : -.108

19 Sep 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702871

CENTERFIRE PATTERN # 4



OF SHOTS= 10

IN CIRCLE

HS= 2.91

0

VS= 2.55

3

GS= 3.21

8

PATTERN #: ☐ 5 ☐

POA TO CENTROID: .270

MIN RADIUS : .399

MEAN RADIUS : .800

MAX RADIUS : 1.234

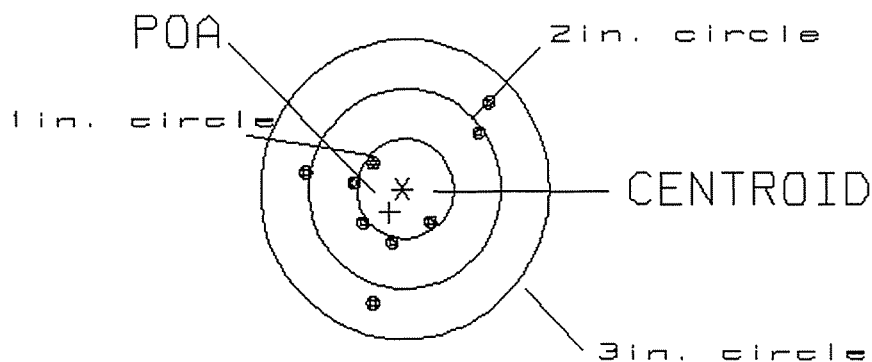
CENTROID X : .134

CENTROID Y : .234

19 Sep 1997

FILE:/Hpbasic/Accuracy/Patterning/Centerfire_Patt/C6702871

CENTERFIRE PATTERN # 5



OF SHOTS= 10

IN CIRCLE

HS= 1.92

2

VS= 2.06

7

GS= 2.40

10

Final Inspection

Sn: C6702871

DATE REC'D: 7-31-97

DATE RET'D:

AUDITOR: RW

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: _____

UPC



0 47700 25716 7

C6702871

*INCLUDES 1 IN CHAMBER

ORDER NO.	5716
BARREL LENGTH	
CAPACITY*	

COMPONENT CASE
DEPLOY KIT
SCORE CASE
SET CASE

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

nagletj

10/29/2007

10:55 AM

CAPS

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

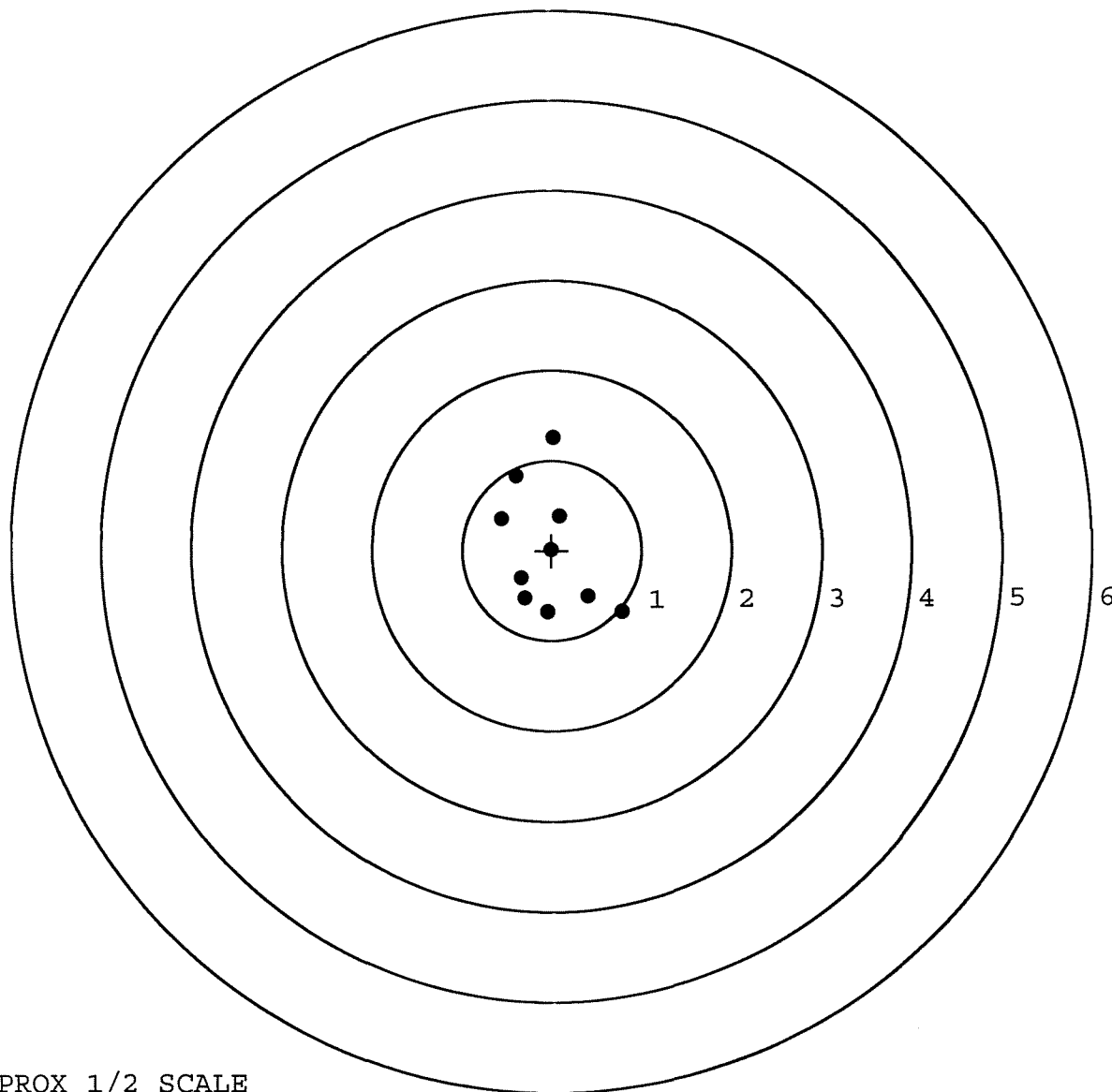
THE FOLLOWING DATA IS ALL REPORTED IN UNITS OF INCHES

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

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

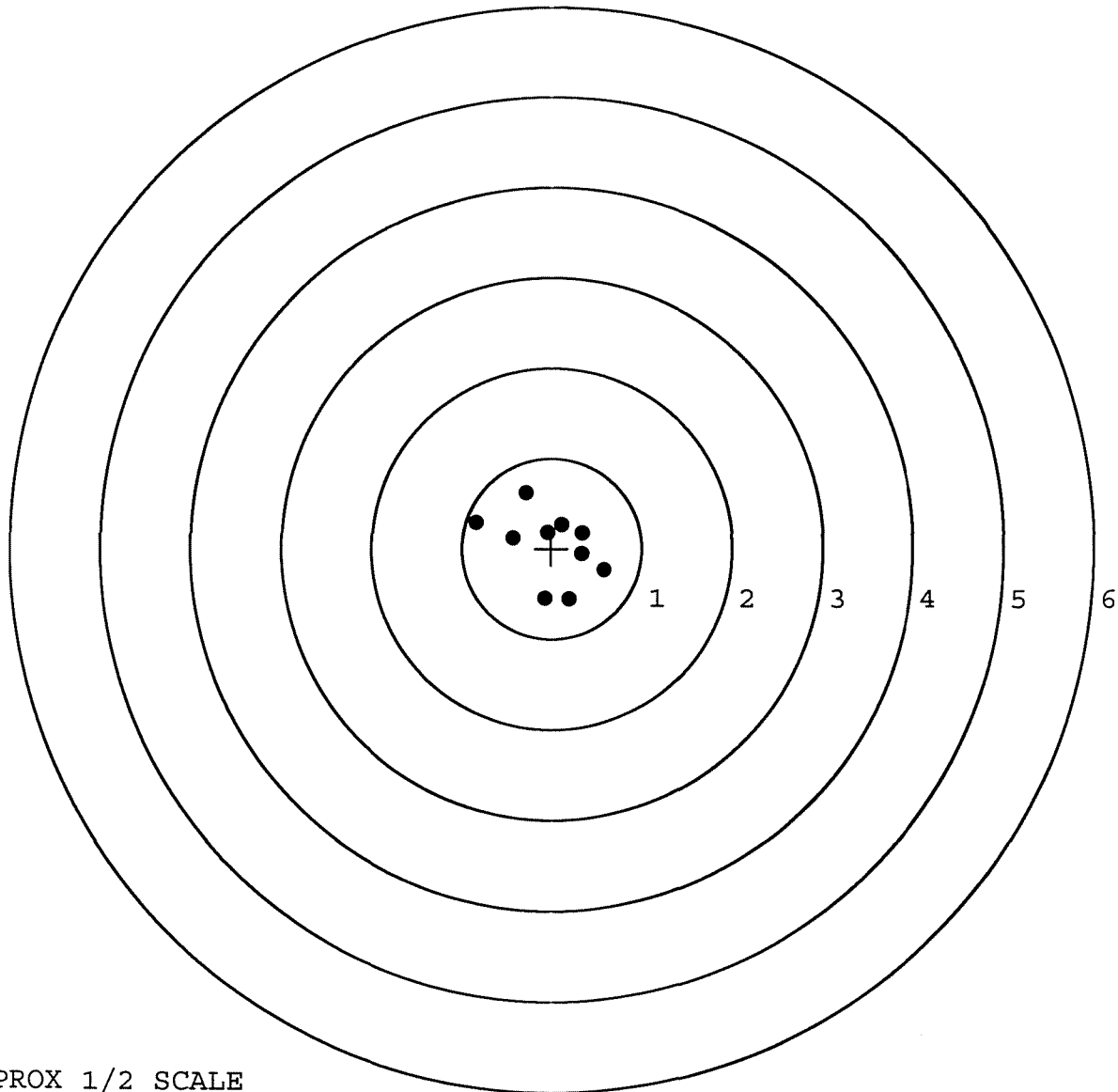
MEAN RADIUS: 0.499

IN 1 IN DIAMETER: 5

IN 2 IN DIAMETER: 10

in 3 IN DIAMETER: 10

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



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. 0

TARGET NUMBER: 3

FILE DATE: 12/13/2007

FILE TIME: 13:22

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

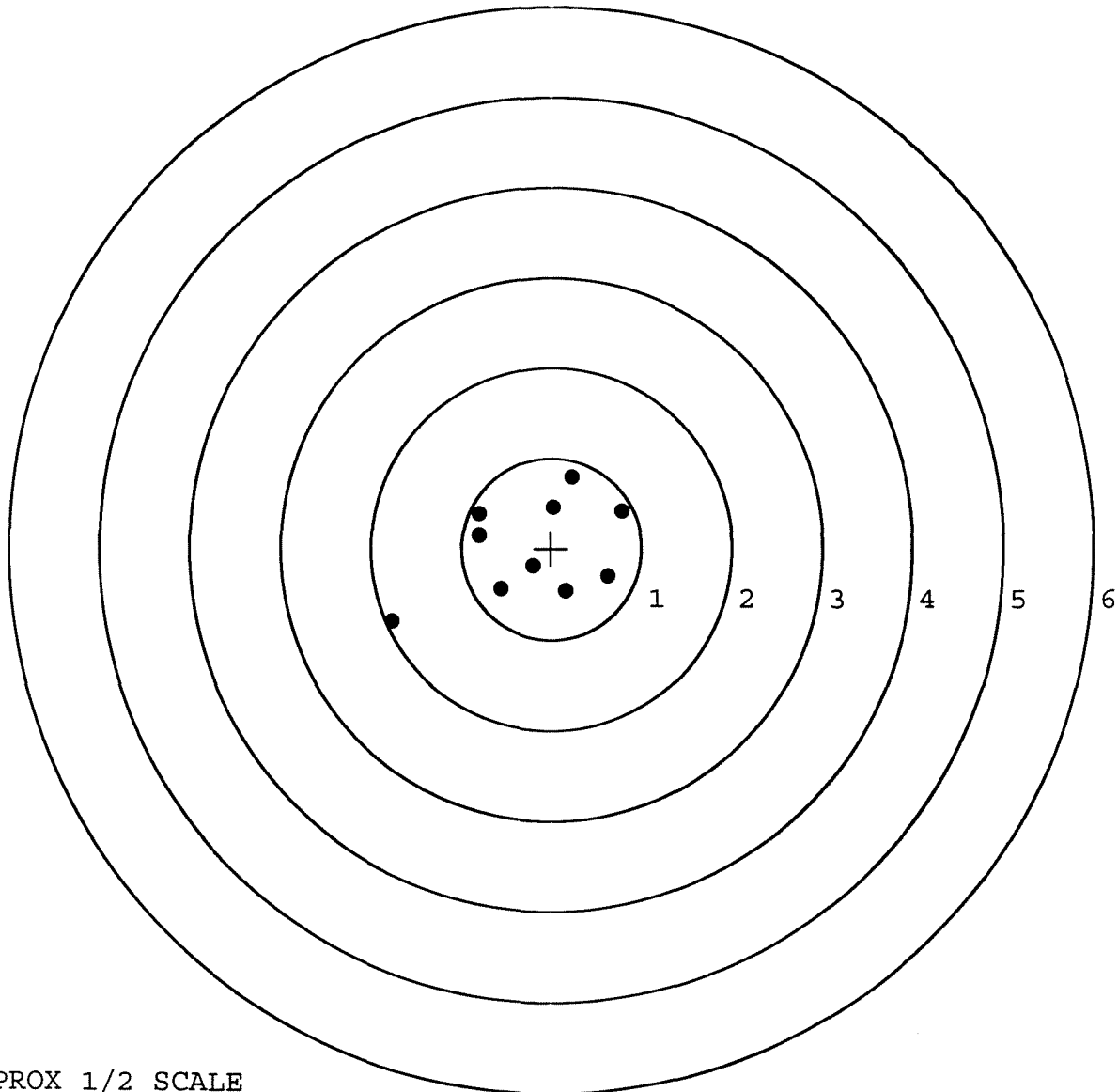
MEAN RADIUS: 0.783

IN 1 IN DIAMETER: 1

IN 2 IN DIAMETER: 8

in 3 IN DIAMETER: 9

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



TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. 0

TARGET NUMBER: 4

FILE DATE: 12/13/2007

FILE TIME: 13:22

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

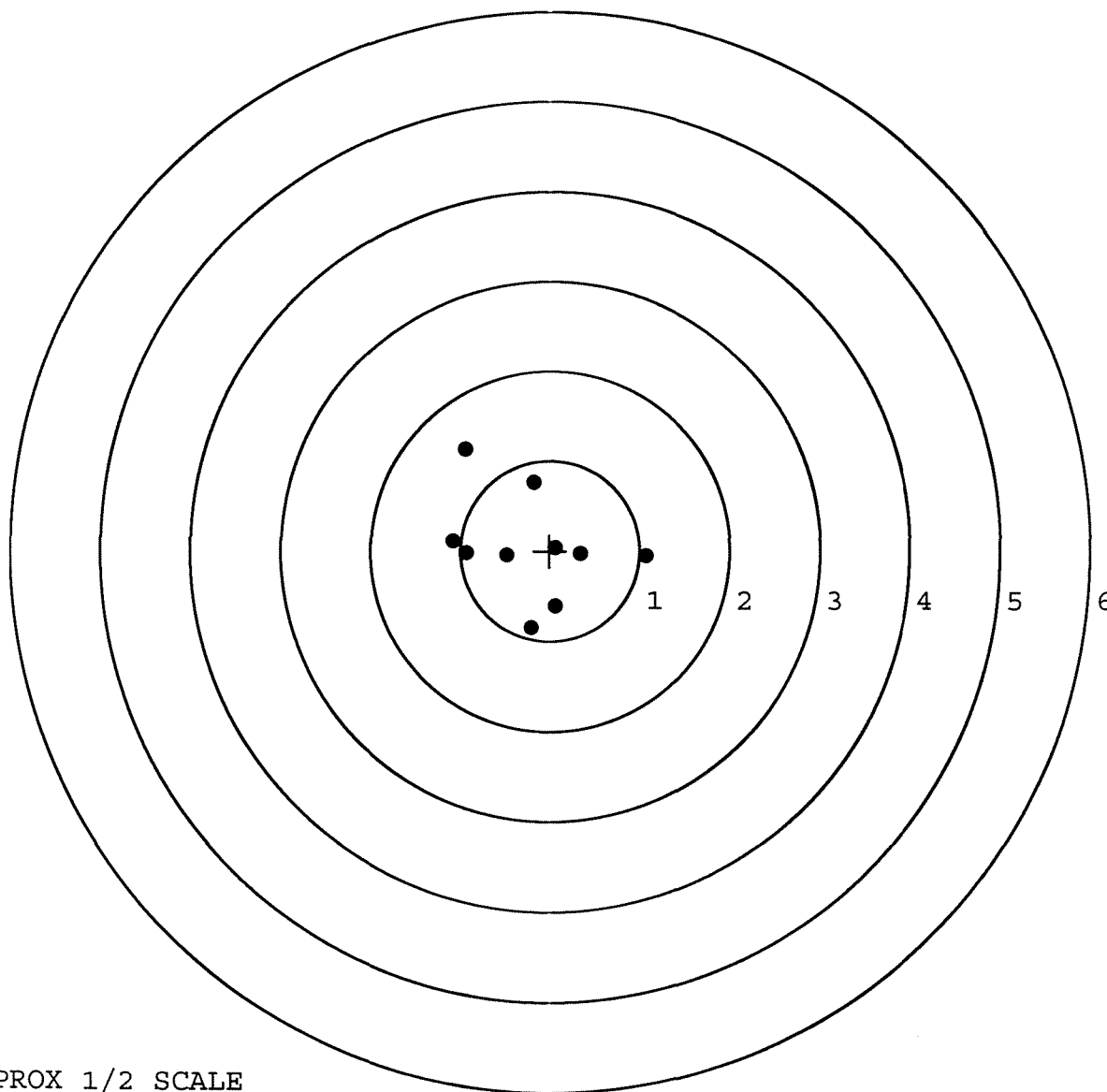
MEAN RADIUS: 0.765

IN 1 IN DIAMETER: 2

IN 2 IN DIAMETER: 8

in 3 IN DIAMETER: 10

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

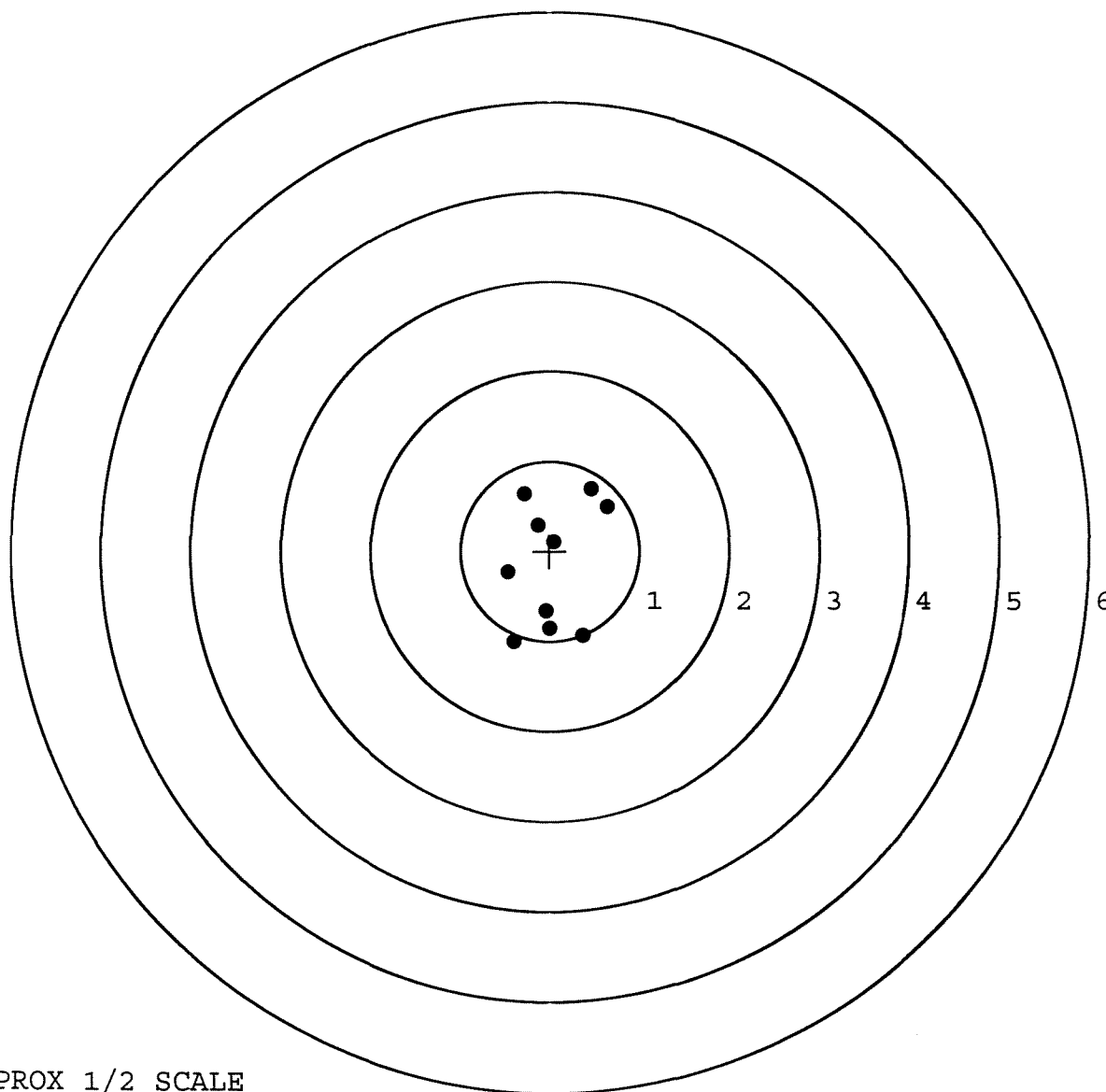


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6702853. 0
 TARGET NUMBER: 5
 FILE DATE: 12/13/2007
 FILE TIME: 13:22

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

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



TARGET APPROX 1/2 SCALE

M-24 INSPECTION CHECKLIST
CONTRACT #: DAAE-20-02-C-0149

R & E NUMBER

135883

SERIAL NUMBER

C6702853

LOG-IN DATE

10-26-07

OPERATION #	OPERATION NAME	DATE	INITIAL
500	DIS-ASSEMBLE GUN	11-12-07	RTZ
505	RE-BARREL	11-27-07	SPD
560	ASSEMBLE	11-27-07	SPD
600	PROOF	11-27-07	SPD
605	CHECK HEADSPACE	11-27-07	TRW
610	DIS-ASSEMBLE GUN		
612	MAGNAFLUX	12-04-07	GB
510	DRILL AND TAP	12-3-07	TRW
615	ROLLMARK CALIBER	12-3-07	CW
618	ROTO-BLAST	12-5-07	YU
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	
	FINAL INSPECTION	12-13-07	FM
670	A) HEADSPACE	PASS FAIL 12-14-07	DA
	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	DA
	F) SAFETY ON FORCE	2 LBS MIN 10 LBS MAX 55 55 60 12-14-07	DA
	G) SAFETY OFF FORCE	2 LBS 3.5 3.5 3.75 12-14-07	DA
	I) FIRING PIN INDENT	.020 .023 .0225 .023 12-14-07	DA
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	GS
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	JA
	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 TESTAVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# + .50#

3.00# + .75#

4.00# + 1.00#

SERIAL NO. C6702853DATE 6/17/92TESTER 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	.61676
1 TO	5	.492647

$\bar{x} =$ -----FOR

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .002
 THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.1568
 THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .1568

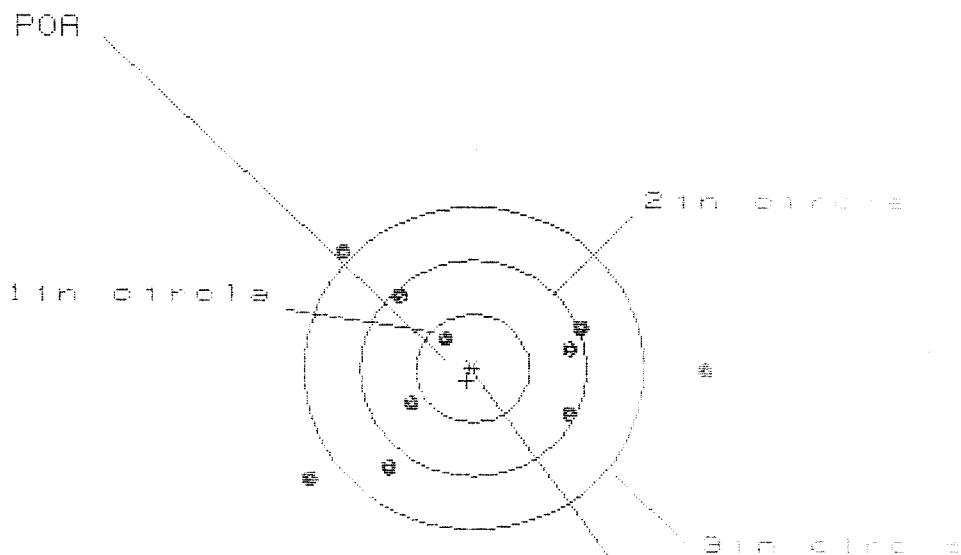
THE AMR FOR THIS RIFLE IS: 1.045

24 Jun 1992

FILE:/PATTERNING/CENTERFIRE_PATT/087002850

CENTERFIRE PATTERNS

1



OF SHOTS = 10

IN CIR

1 in = 1

2 in = 5

3 in = 7

HS = 2.424

VS = 2.144

GS = 3.579

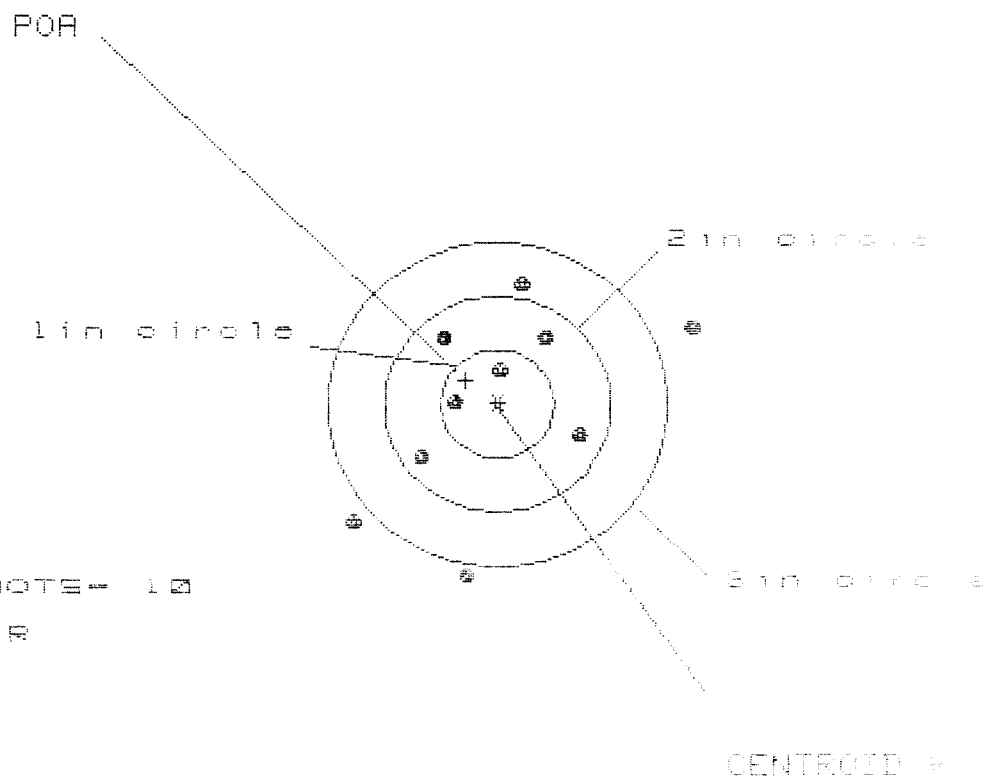
CENTROID

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	.053	-.172	-.024
CENTROID Y	.116	.116	.245
POR TO CENTROID in.	.127	.207	.246
MIN RADIUS	.326	.241	.181
MEAN RADIUS	1.138	1.018	.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 = 0.988

VS = 2.706

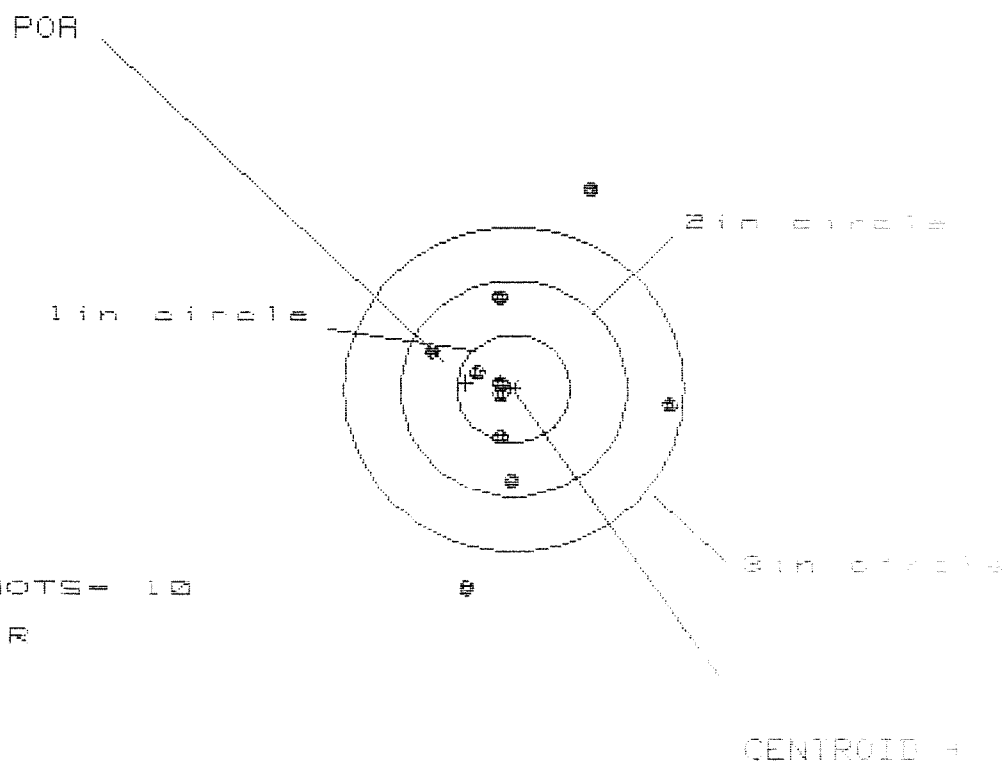
GS = 3.430

PATTERN #	2	2	2
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.637	.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	.306	.275
MIN RADIUS	.348	.228	.306
MEAN RADIUS	1.009	.904	.812
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	3.430	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/087002053

CENTERFIRE PATTERNS # 3



OF SHOTS - 10

IN CIR

1 in = 4

2 in = 7

3 in = 8

HS = 2.0500

VS = 3.717

GS = 3.894

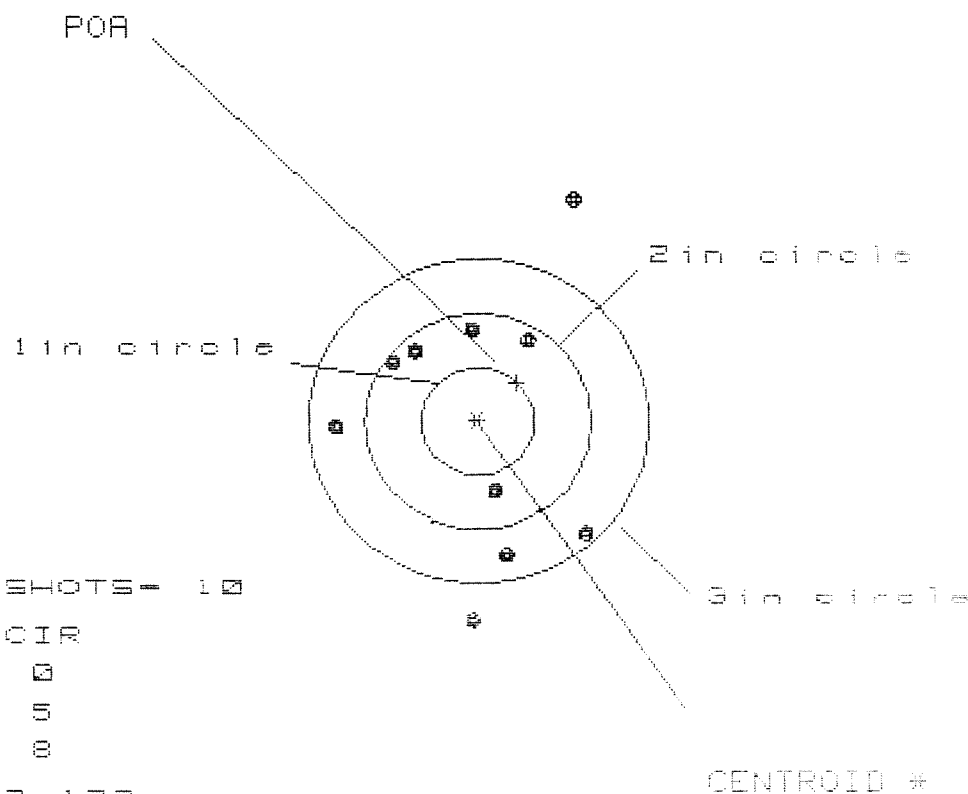
PATTERN #	3	3	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.336	1.416	1.371
MINIMUM X	-.754	-.674	-.719
MAXIMUM Y	1.849	1.100	.892
MINIMUM Y	-1.868	-1.663	-.817
CENTROID X	.421	.341	.386
CENTROID Y	-.053	-.258	-.050
POR TO CENTROID in.	.425	.428	.389
MIN RADIUS	.141	.137	.114
MEAN RADIUS	.898	.762	.623
MAX RADIUS	1.985	1.701	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/06702853

CENTERFIRE PATTERNS

4



OF SHOTS = 10

IN CIR

1 in = 0

2 in = 5

3 in = 8

HS = 0.173

VS = 0.922

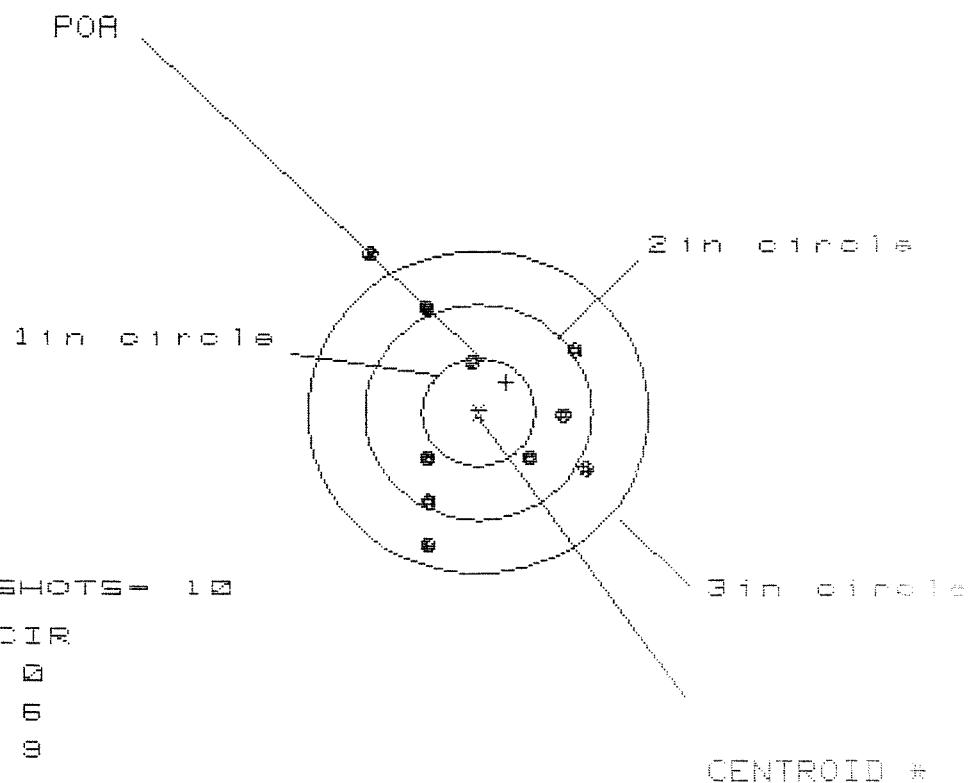
GS = 4.025

PATTERN #	4	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.926	1.025	1.096
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
POA 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	4.025	2.773	2.366
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

1 in = 0

2 in = 6

3 in = 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	-.634
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	.865	.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	