

G 6590169
Rapha
C-622549/

Repair Inquiry

Repair Number: RE00146049

Serial: G6590169 Model M24 SWS Center Fire
Caliber: 7.62 NATO

Repairman:

Status: Closed 6/3/2008 9:50:39 AM

Verify Repair

Address Information

Customer:

☒ Received From

Return To:

☐ Received From

Name: INSTALLATION SERIALIZATION OFFICER

INSTALLATION SERIALIZATION OFFICER

Address 1: BLDG 7920

BLDG 7920

Address 2:

PO Box:

PO Box:

City: FT. RILEY

FT. RILEY

State: KS

Zip Code: 66442

Country: US

State: KS

Zip Code: 66442

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
A010	Hard Case	1
A017	Scope Base	1
A026	Scope	1
A057	Fit and Rear Sgt Base	1

Repair Search

Refresh

Close

nagletj

6/3/2008

12:58 PM

CAFS

NUM

INS

SCRL



Number: G6590169

Model: M24 SWS



RE00146049

INSPECTION CHECKLIST - REPAIRS
CONTRACT #: W52H09-07-C-0207
ISSUED 10/1/2007

R & E NUMBER <u>146049</u>				
SERIAL NUMBER <u>G6590169</u>				
LOG-IN DATE <u>6-3-09</u>				
OPERATION #	OPERATION NAME		DATE	INITIAL
500	DIS-ASSEMBLE GUN		5-21-09	RTZ
505	RE-BARREL		5-26-09	RTZ
420	ASSEMBLE		5-26-09	RTZ
440	PROOF	MAGNA - FLUX	5-26-09	RTZ
460	CHECK HEADSPACE		5-26-09	RTZ
470	DIS-ASSEMBLE GUN		5-26-09	RTZ
480	MAGNAFLUX	OPERATOR <u>(D)</u>	5/30/09	(D)
510	DRILL AND TAP		5-27-09	SL
500	ROLLMARK CALIBER		6/1/09	RT
520	GOFF BLAST BBL / REC		6-1-09	DLWD
530 & 540	APPLY COATINGS		6/3	RTZ
560	FINAL ASSEMBLY		6-4-09	RTZ
640	FUNCTION TEST AND	PASS FAIL	6/5/09	RB
650	TARGET	PASS FAIL	6/5/09	RB
	MALFUNCTION	CORRECTION		
	MALFUNCTION	CORRECTION <u>N/A</u>		
	MALFUNCTION	CORRECTION		
	MALFUNCTION	CORRECTION		
670	FINAL INSPECTION		6/5/09	TQR
	A) HEADSPACE	PASS FAIL	6-5-09	RTZ
	B) TRIGGER PULL	+/- .5 LBS MIN 2.50 LBS MAX 4.0 LBS	2.44 2.41 2.38 2.42 2.44 6-5-09	RTZ
680	F) SAFETY ON FORCE	2 LBS MIN 10 LBS MAX	4.0 4.0 4.0 6-5-09	RTZ
	G) SAFETY OFF FORCE	2 LBS MIN	5.0 5.0 5.0 6-5-09	RTZ
	I) FIRING PIN INDENT	.020	.021 .021 .021 6-5-09	RTZ
690	PACK		6/5/09	FM

F006 REV 1/2009

SNIPER WEAPON SYSTEM - UNIQUE STATISTICAL INFORMATION

FIREARM SERIAL NUMBER / DATASET NAME: G6590169.___0
FILE DATE AND TIME: 10/15/2007 14:33

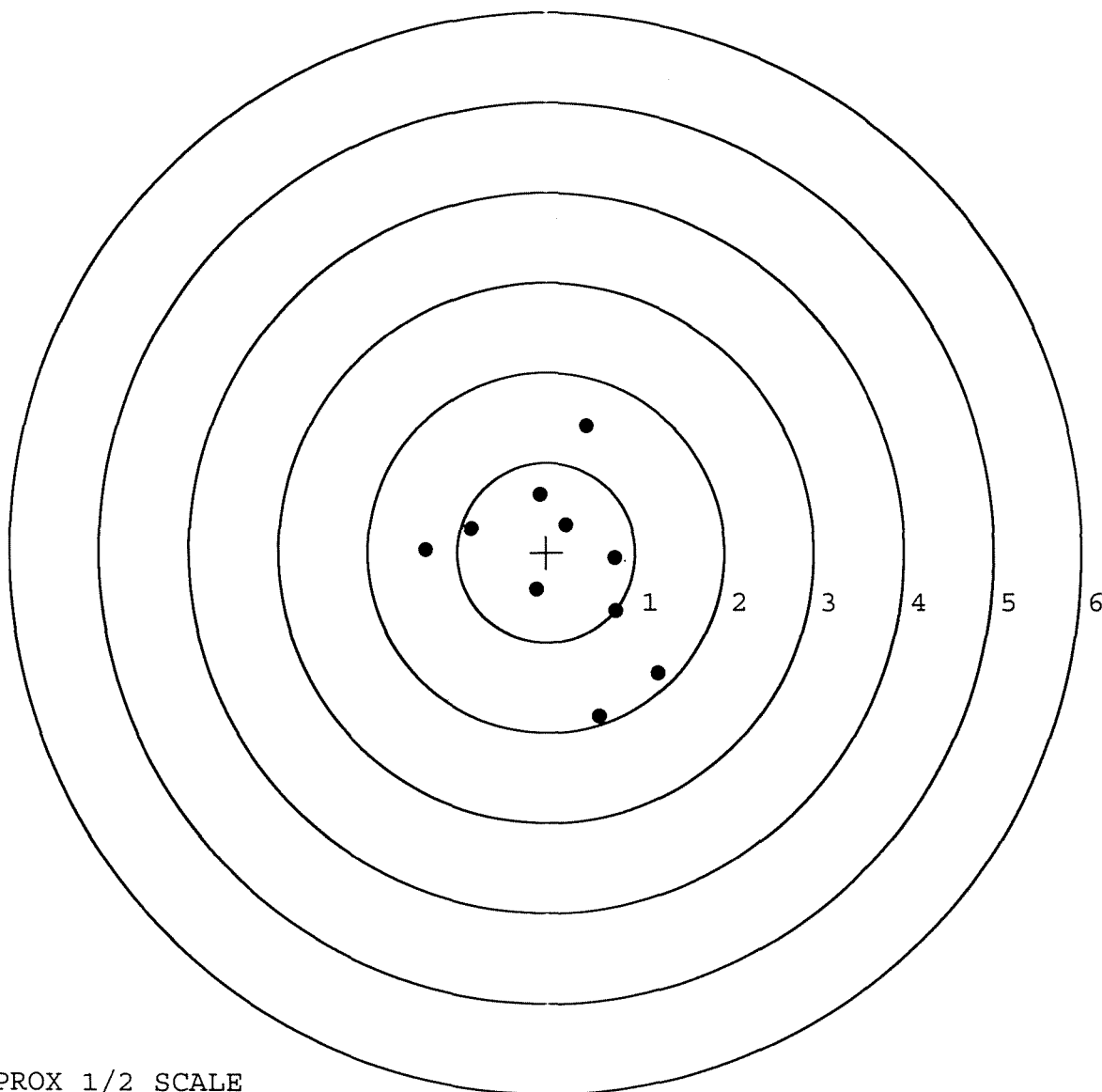
THE FOLLOWING DATA IS ALL REPORTED IN UNITS OF INCHES

The Average X Centroid of the Five Target Set:	-0.035
The Average Y Centroid of the Five Target Set:	-0.068
The Average Point of Impact of the Five Target Set:	0.077
The Average Mean Radius of the Five Target Set:	0.826
The Distance from POA to Centroid Target #1:	0.233
The Distance from Centroid Target #2 to Centroid Target #1:	0.309
The Distance from Centroid Target #3 to Centroid Target #1:	0.235
The Distance from Centroid Target #4 to Centroid Target #1:	0.408
The Distance from Centroid Target #5 to Centroid Target #1:	0.320

SERIAL NUMBER: G6590169. __0
TARGET NUMBER: 1
FILE DATE: 10/15/2007
FILE TIME: 14:33

POINT#	X	Y
1:	1.258	-1.349
2:	0.587	-1.825
3:	0.779	-0.648
4:	0.768	-0.065
5:	0.215	0.313
6:	-0.078	0.646
7:	-0.117	-0.418
8:	-0.845	0.268
9:	-1.353	0.031
10:	0.449	1.413

X CENTROID: 0.166
Y CENTROID: -0.163
POA TO CENTROID: 0.233
HORZ SPREAD: 2.611
VERT SPREAD: 3.238
GROUP SPREAD: 3.241
MIN RADIUS: 0.381
MAX RADIUS: 1.714
MEAN RADIUS: 1.065
IN 1 IN DIAMETER: 2
IN 2 IN DIAMETER: 5
in 3 IN DIAMETER: 6

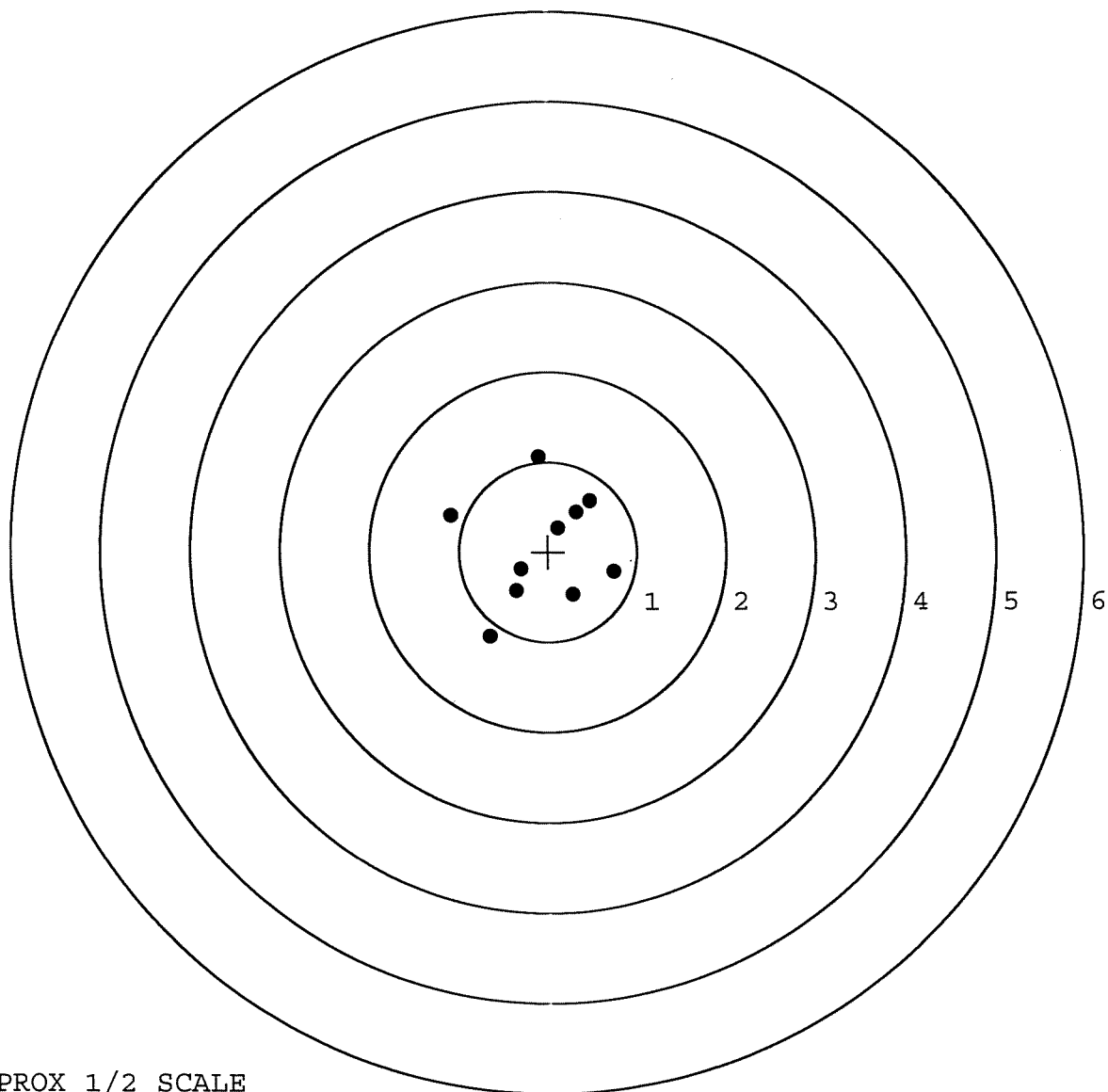


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590169. 0
TARGET NUMBER: 2
FILE DATE: 10/15/2007
FILE TIME: 14:33

POINT#	X	Y
1:	-0.107	1.054
2:	-1.093	0.408
3:	0.469	0.567
4:	0.317	0.441
5:	0.107	0.262
6:	0.739	-0.222
7:	0.277	-0.475
8:	-0.310	-0.198
9:	-0.364	-0.439
10:	-0.656	-0.946

X CENTROID: -0.062
Y CENTROID: 0.045
POA TO CENTROID: 0.077
HORZ SPREAD: 1.832
VERT SPREAD: 2.000
GROUP SPREAD: 2.074
MIN RADIUS: 0.275
MAX RADIUS: 1.156
MEAN RADIUS: 0.721
IN 1 IN DIAMETER: 2
IN 2 IN DIAMETER: 7
in 3 IN DIAMETER: 10

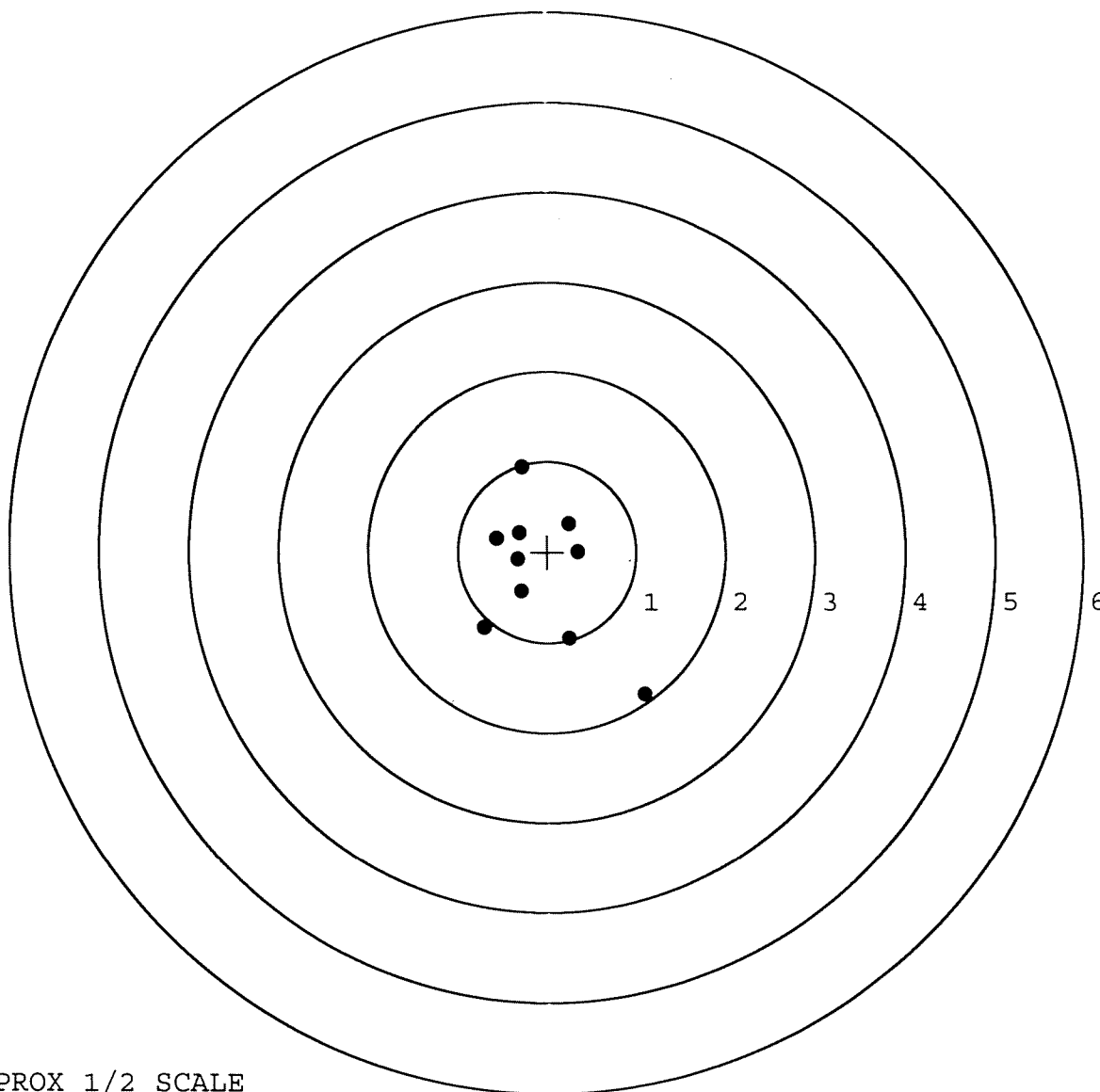


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590169. __0
TARGET NUMBER: 3
FILE DATE: 10/15/2007
FILE TIME: 14:33

POINT#	X	Y
1:	1.092	-1.578
2:	0.242	-0.954
3:	-0.713	-0.835
4:	0.346	-0.002
5:	0.246	0.307
6:	-0.282	0.934
7:	-0.568	0.150
8:	-0.339	-0.083
9:	-0.298	-0.437
10:	-0.319	0.210

X CENTROID: -0.059
Y CENTROID: -0.229
POA TO CENTROID: 0.236
HORZ SPREAD: 1.805
VERT SPREAD: 2.512
GROUP SPREAD: 2.863
MIN RADIUS: 0.315
MAX RADIUS: 1.774
MEAN RADIUS: 0.749
IN 1 IN DIAMETER: 3
IN 2 IN DIAMETER: 8
in 3 IN DIAMETER: 9

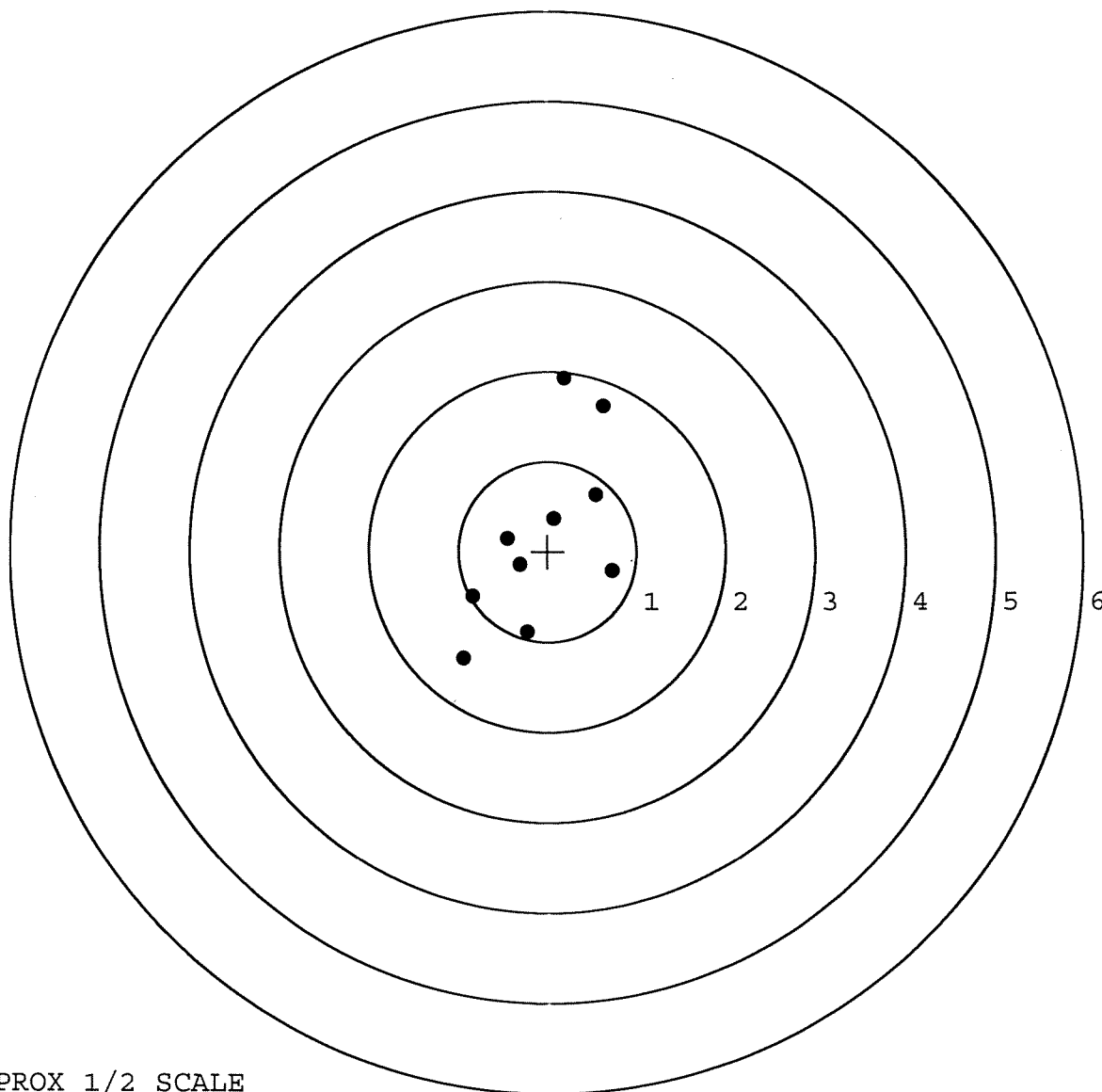


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590169. __0
TARGET NUMBER: 4
FILE DATE: 10/15/2007
FILE TIME: 14:33

POINT#	X	Y
1:	0.726	-0.219
2:	0.545	0.628
3:	0.073	0.364
4:	-0.318	-0.152
5:	-0.457	0.145
6:	-0.844	-0.495
7:	-0.236	-0.896
8:	-0.949	-1.182
9:	0.633	1.617
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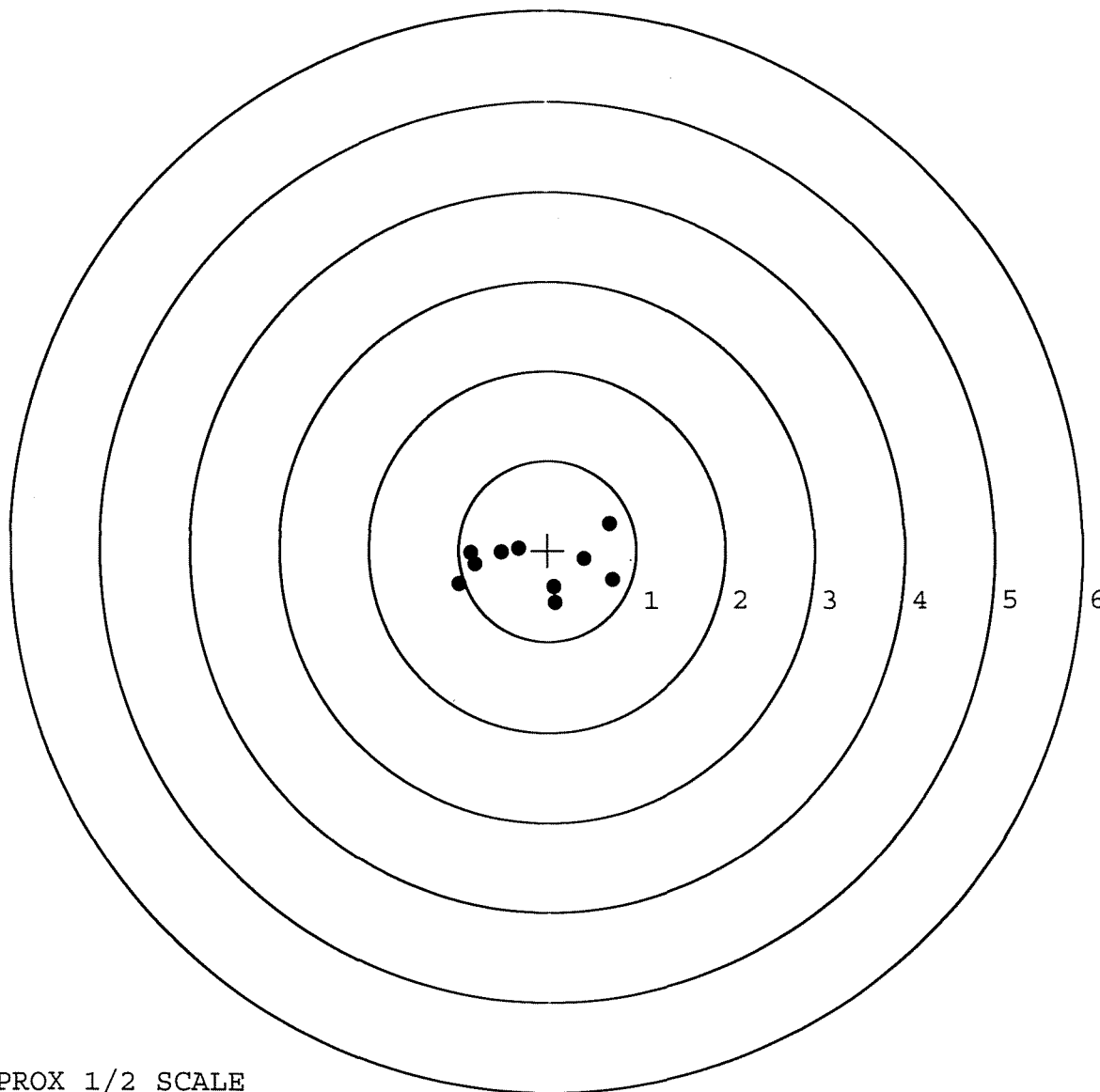


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: G6590169. __0
TARGET NUMBER: 5
FILE DATE: 10/15/2007
FILE TIME: 14:33

POINT#	X	Y
1:	0.728	-0.332
2:	0.411	-0.097
3:	0.703	0.295
4:	0.067	-0.408
5:	0.086	-0.581
6:	-0.327	0.023
7:	-0.525	-0.022
8:	-0.862	-0.027
9:	-0.816	-0.155
10:	-1.000	-0.375

X CENTROID: -0.153
Y CENTROID: -0.168
POA TO CENTROID: 0.227
HORZ SPREAD: 1.728
VERT SPREAD: 0.876
GROUP SPREAD: 1.830
MIN RADIUS: 0.258
MAX RADIUS: 0.974
MEAN RADIUS: 0.616
IN 1 IN DIAMETER: 4
IN 2 IN DIAMETER: 10
in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

Scope Case
Deployment KIT
Soft Case
Living

SNIPER WEAPON SYSTEM - UNIQUE STATISTICAL INFORMATION

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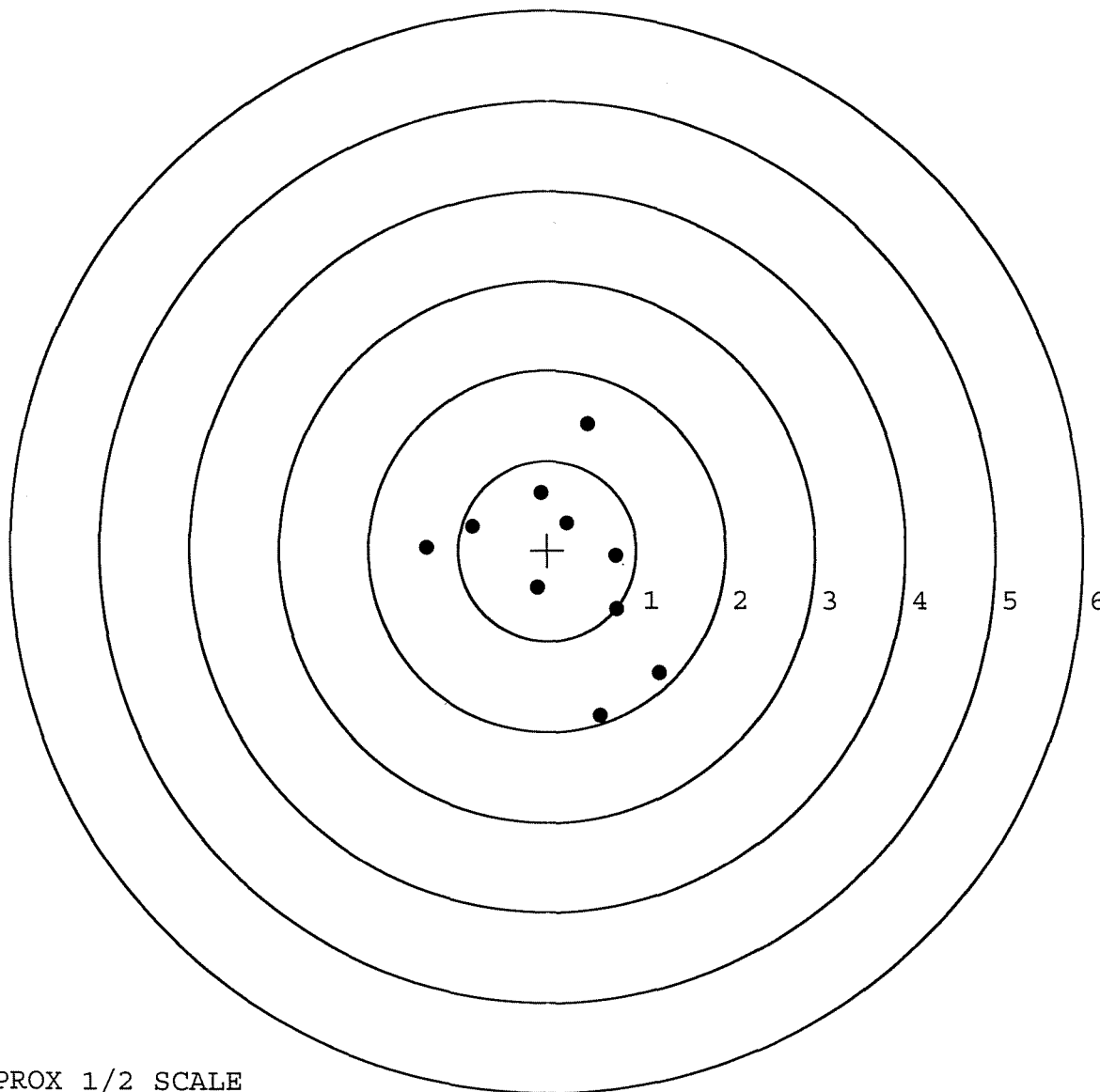
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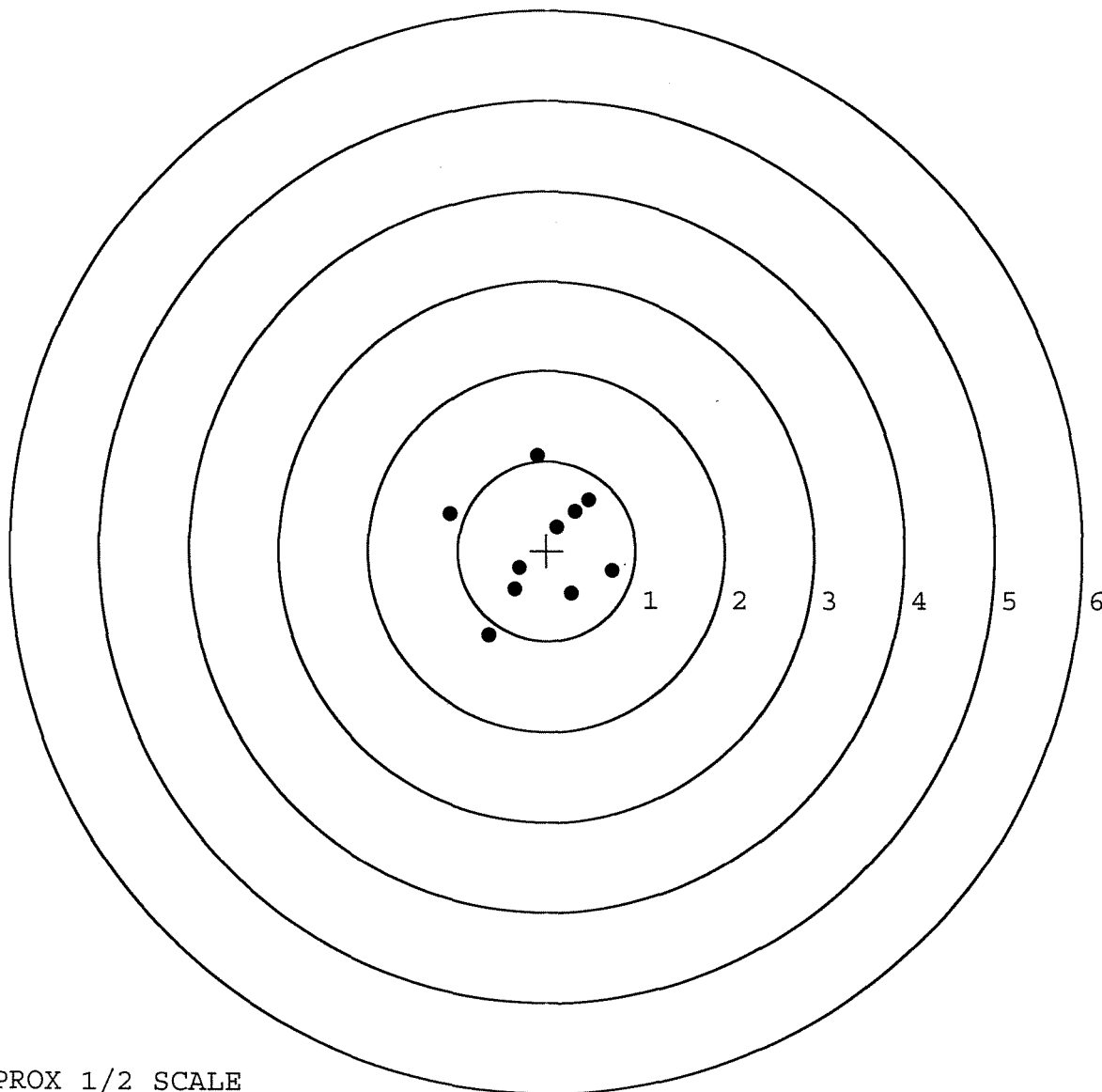


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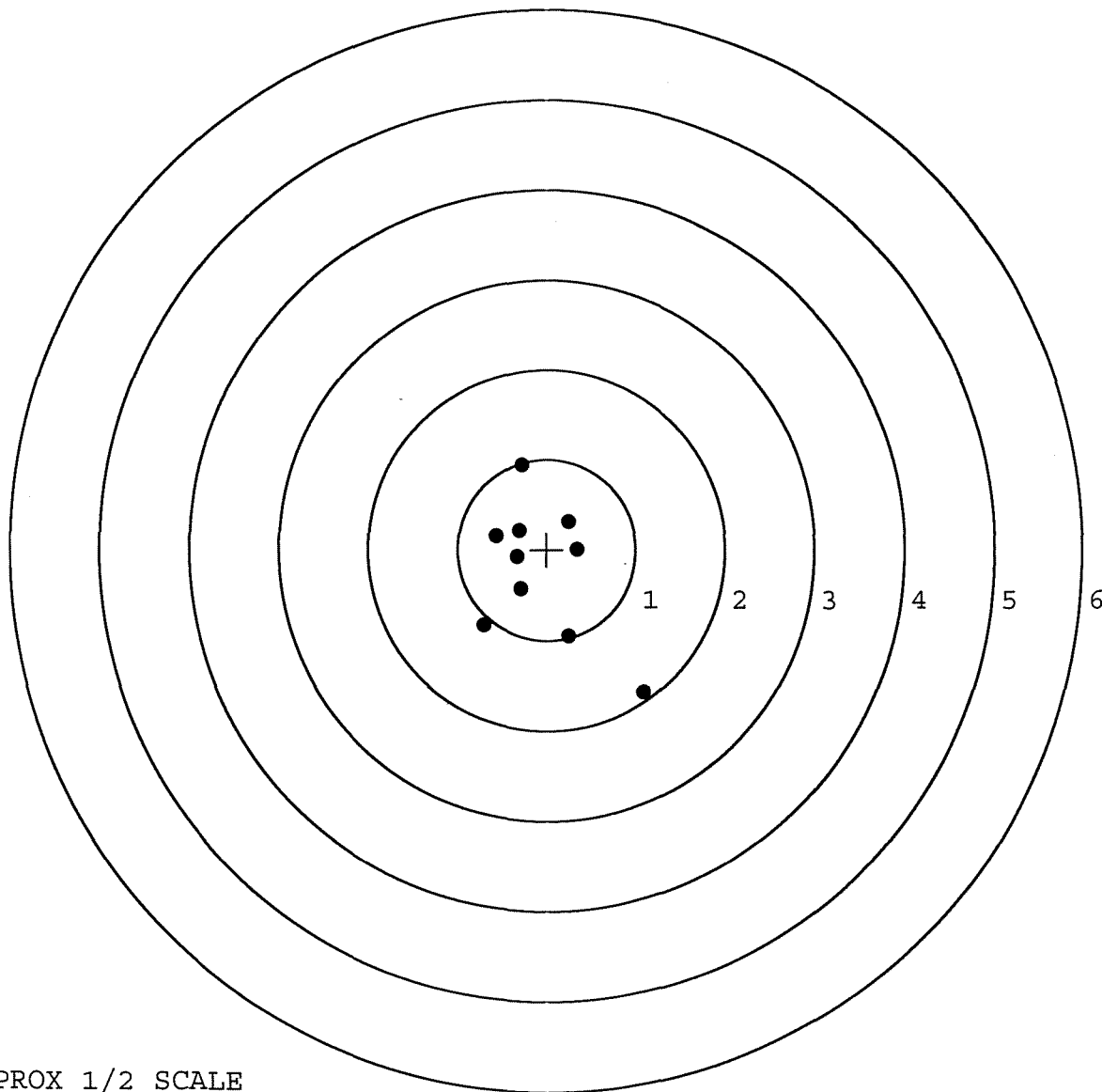


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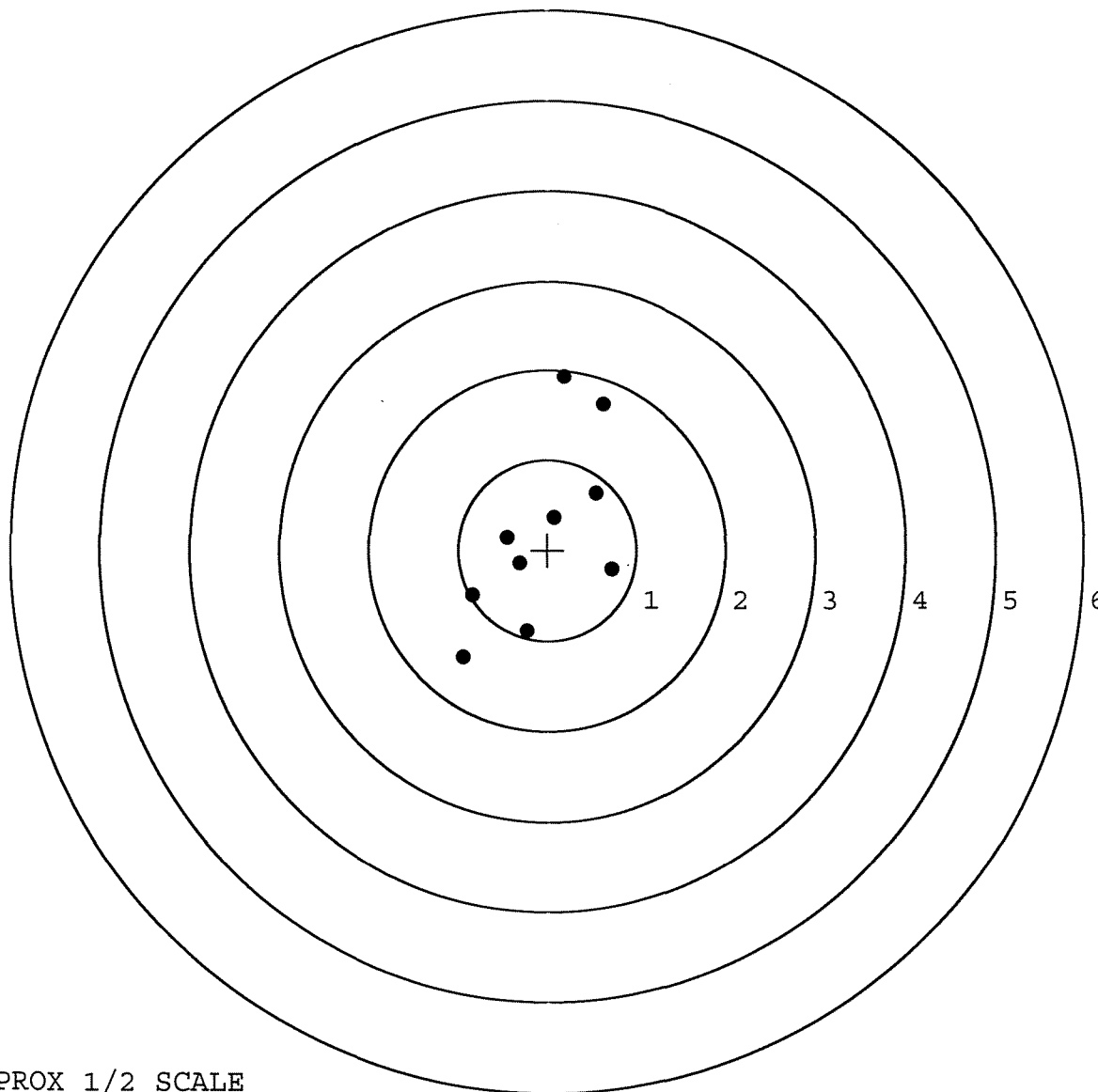


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FILE TIME: 14:33

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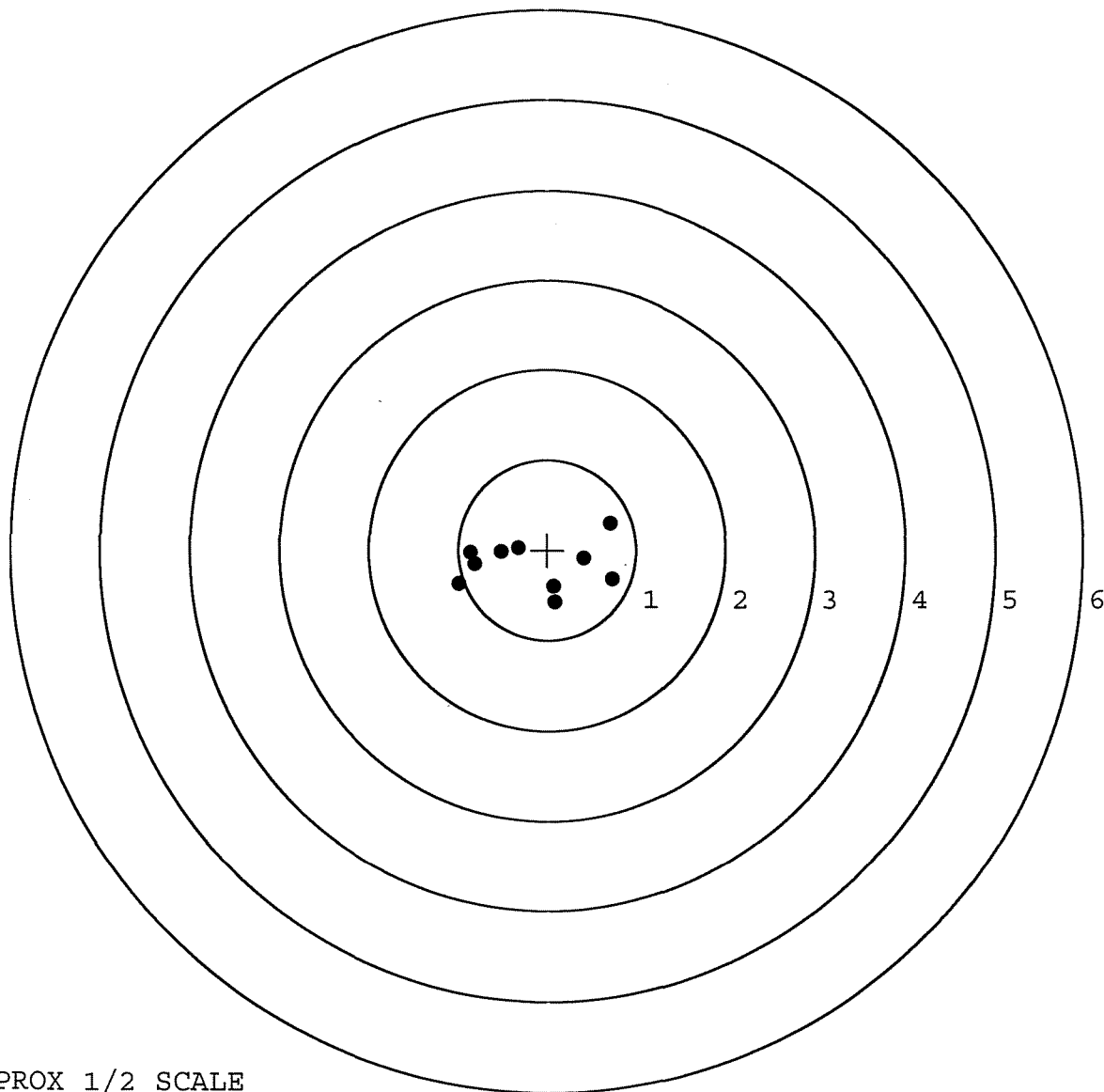


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in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE

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

R & E NUMBER		133 025	
SERIAL NUMBER		26225491 (6590169 New)	
LOG-IN DATE		8-22-07	

OPERATION #	OPERATION NAME	DATE	INITIAL
500	DIS-ASSEMBLE GUN	10-1-07	RTZ
505	RE-BARREL	10-3-07	RTZ
560	ASSEMBLE	10-3-07	RTZ
600	PROOF	10-4-07	TRW
605	CHECK HEADSPACE	10-4-07	TRW
610	DIS-ASSEMBLE GUN	10-4-07	TRW
612	MAGNAFLUX	10-5-07	TRW
510	DRILL AND TAP	10-5-07	TRW
615	ROLLMARK CALIBER	10-5-07	TRW
618	ROTO-BLAST	10-8-07	TRW
620	APPLY COATINGS	10-9-07	TRW
625	FINAL ASSEMBLY	10-11-07	RTZ
640	FUNCTION TEST AND	PASS FAIL	10-13-07 TRW
650	TARGET	PASS FAIL	10-13-07 TRW
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
	MALFUNCTION	CORRECTION	
670	FINAL INSPECTION		10-13-07 DR
	A) HEADSPACE	PASS FAIL	10-22-07 RTZ
	B) TRIGGER PULL	+/- .5 LBS MIN 2.50 LBS MAX 4.0 LBS	277 283 282 263 254 10/19/07 TRW
680	F) SAFETY ON FORCE	2 LBS MIN 10 LBS MAX	55 55 55 10-22-07 DA
	G) SAFETY OFF FORCE	2 LBS MIN	25 25 25 10-22-07 DA
	I) FIRING PIN INDENT	.020	1021 .021 0215 10-22-07 DA
690	PACK		10-22-07 DA

GFM

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

M-24

C6225491

Repair
New Barrel

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		1/5/93	RW
600	Proof		1/5/93	RW
607	Check Headspace		1/5/93	RW
610	Dis-assemble Gun		1/5/93	RW
612	Magnaflux Barrel Action			
	Magnaflux Bolt			
615	Rollmark Caliber			
617	Drill and Tap Sight Holes			
618	Polish Barrel			
620	Apply Coatings (Barrel Action)			
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		1/12/93	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		1/12/93	RW
	C) Inspect Ejector Hole for Chamfer		1/12/93	RW
	D) Oil Firing Pin Ass'y		1/12/93	RW
	E) Adjust Trigger Pull to Min Setting and Stake			

op. #	OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force							
	G) Safety Off Force							
	H) Trigger Pull Test & Retainability							
	I) Firing Pin Indent							
	J) Assemble Stock							
	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							
	P) Detach & Attach Scope 20 Times							
640	Gallery Target & Test						1/13/93	RW
	A) Time							
	B) Malfunctions							
	C) Pierced Primers							
	D) Optical Clarity of Scope							
645	Inspect for Live Ammo						1/13/93	RW
655	Final Inspection							
	A) Headspace						1/13/93	RW
	B) Trigger Pull	2.28	2.26	2.25	2.24	2.24	1/13/93	RW
	C) Function						1/13/93	RW
660	Pack							

C6225491

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6225491
14 Jan 1993

CENTROIDAL DISTANCES

Ø TO	1	.647038
1 TO	2	.988104
1 TO	3	1.34387
1 TO	4	.870664
1 TO	5	.568679

45
2
3

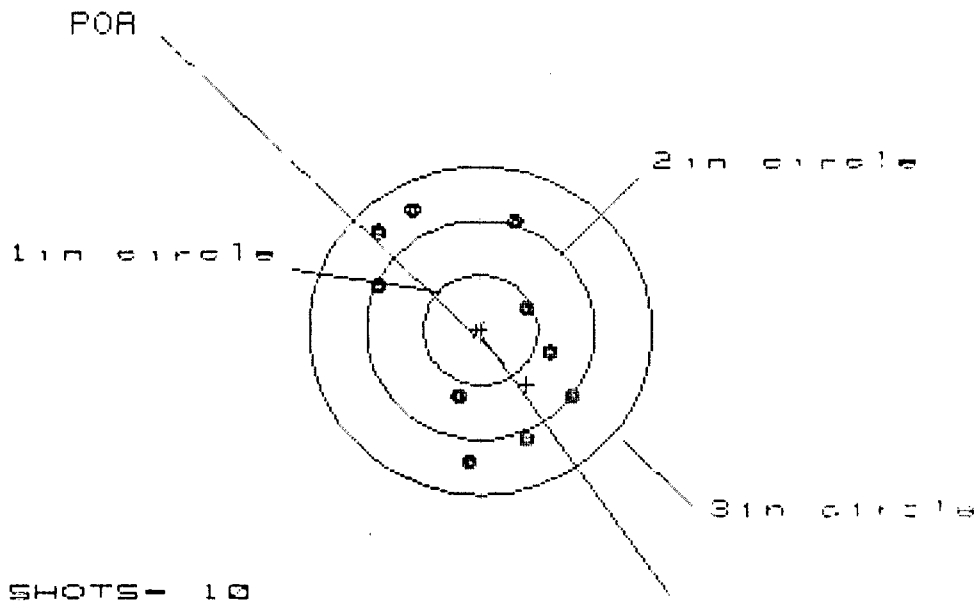
+ <----POI

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.9614
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0476
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .962578
THE AMR FOR THIS RIFLE IS: .9752

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/06225491

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 4

3 in = 10

MO = 1.741

VS = 2.314

ES = 2.398

CENTROID

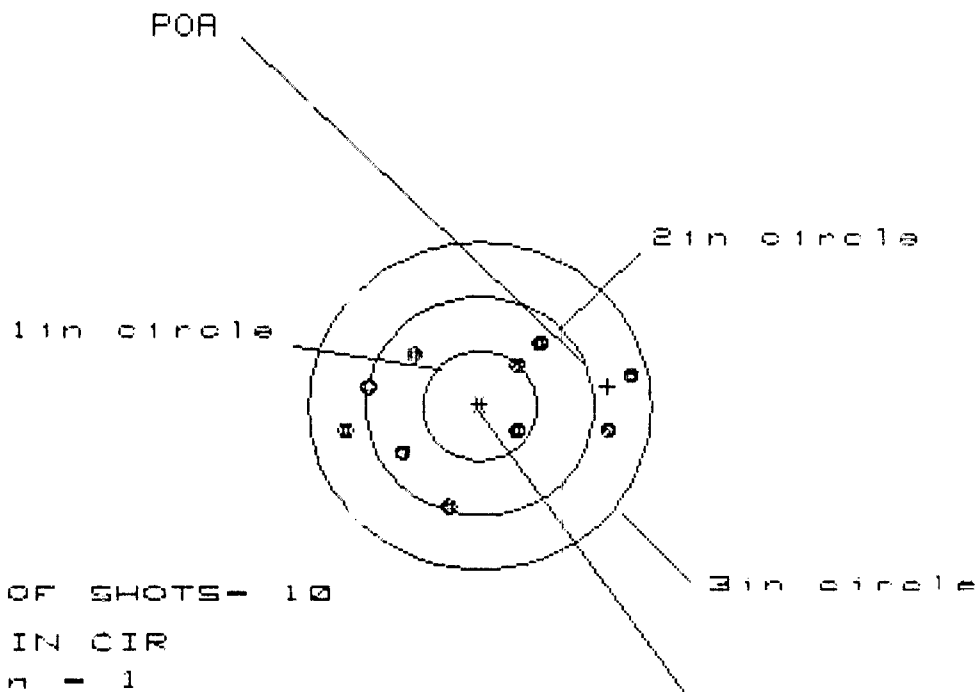
PATTERN #	:	1	2	3
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.817	.747	.632
MINIMUM X	:	-.924	-.994	-1.109
MAXIMUM Y	:	1.133	1.153	1.203
MINIMUM Y	:	-1.181	-1.055	-.925
CENTROID X	:	-.407	-.337	-.222
CENTROID Y	:	.503	.377	.247
POA TO CENTROID in.	:	.647	.506	.332
MIN RADIUS	:	.459	.457	.458
MEAN RADIUS	:	.964	.902	.805
MAX RADIUS	:	1.294	1.387	1.299
HORIZONTAL SPREAD	:	1.741	1.741	1.741
VERTICAL SPREAD	:	2.314	2.208	2.208
EXTREME SPREAD	:	2.398	2.317	2.235
NUMBER IN ONE INCH CIRCLE	=	1		
NUMBER IN TWO INCH CIRCLE	=	4		
NUMBER IN THREE INCH CIRCLE	=	10		

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/06225491

CENTERFIRE PATTERNS

2



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 6

3 in = 10

HS- 2.530

VSH 1.512

GS# 2.570

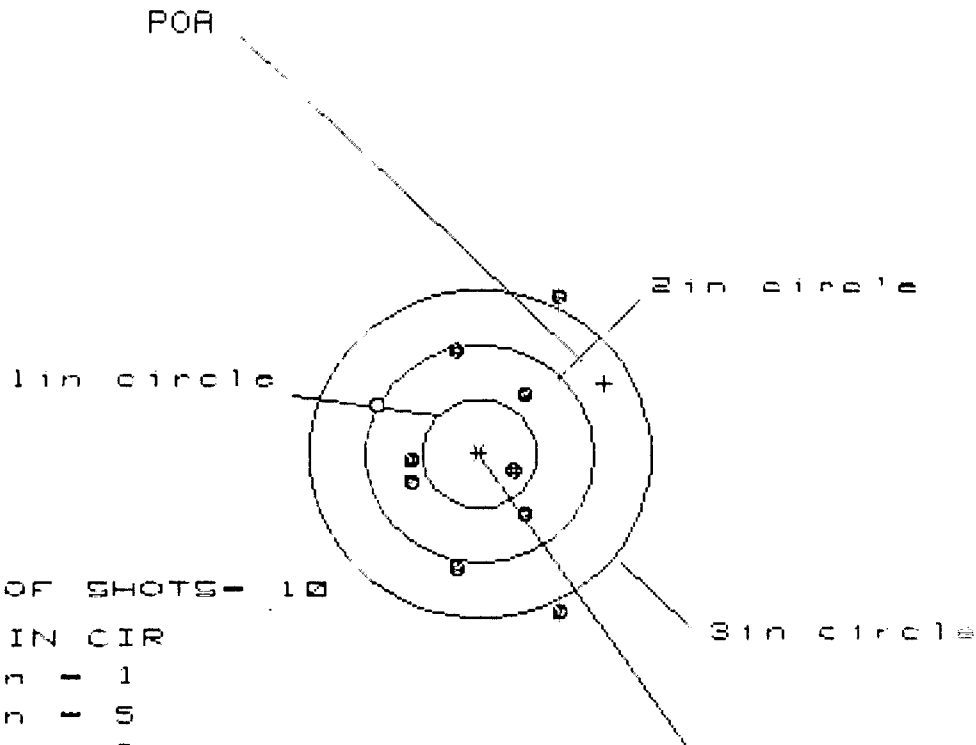
PATTERN #	:	20		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.364	1.269	1.143
MINIMUM X	:	-1.166	-1.015	-.981
MAXIMUM Y	:	.574	.601	.578
MINIMUM Y	:	-.938	-.911	-.934
CENTROID X	:	-1.122	-1.273	-1.147
CENTROID Y	:	-.179	-.206	-.183
POA TO CENTROID in.	:	1.136	1.290	1.161
MIN RADIUS	:	.423	.547	.442
MEAN RADIUS	:	.898	.836	.802
MAX RADIUS	:	1.385	1.279	1.156
HORIZONTAL SPREAD	:	2.530	2.284	2.124
VERTICAL SPREAD	:	1.512	1.512	1.512
EXTREME SPREAD	:	2.570	2.284	2.160
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		10	

14 Jan 1993

FILE: PATTERNING/CENTERFIRE_PATT/06225491

CENTERFIRE PATTERNS

3



OF SHOTS- 10

IN CIR

1in = 1

2in = 5

3in = 8

HS= 1.548

VS= 2.869

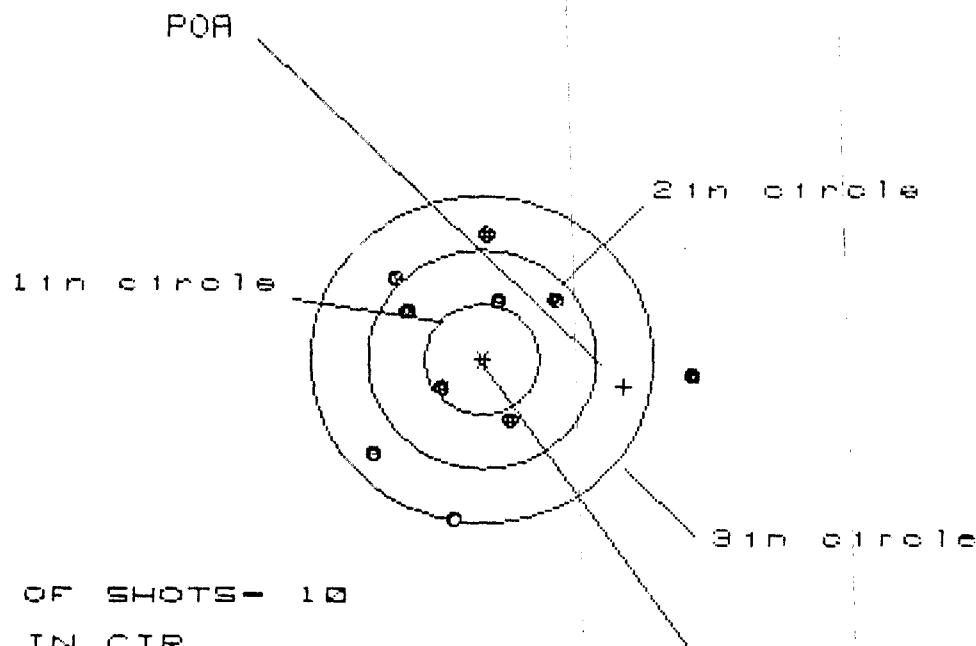
GS= 2.869

PATTERN #	:	10	9	8
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.733	.815	.590
MINIMUM X	:	-.915	-.833	-.732
MAXIMUM Y	:	1.452	1.155	.998
MINIMUM Y	:	-1.417	-1.255	-1.032
CENTROID X	:	-1.094	-1.176	-1.277
CENTROID Y	:	-.652	-.814	-.657
POA TO CENTROID in.	:	1.274	1.430	1.436
MIN RADIUS	:	.284	.342	.423
MEAN RADIUS	:	.917	.824	.728
MAX RADIUS	:	1.626	1.497	1.032
HORIZONTAL SPREAD	:	1.648	1.648	1.312
VERTICAL SPREAD	:	2.869	2.410	2.030
EXTREME SPREAD	:	2.869	2.577	2.030
NUMBER IN ONE INCH CIRCLE	=	1	5	8
NUMBER IN TWO INCH CIRCLE	=	5	8	
NUMBER IN THREE INCH CIRCLE	=	8		

14 Jan 1993

FILE:/PATTERNING/CENTERFIRE_PATT/C6225491

CENTERFIRE PATTERNS # 4



OF SHOTS- 10

IN CIR

1in = 1

2in = 5

3in = 9

HS= 2.810

VS= 2.552

GS= 2.885

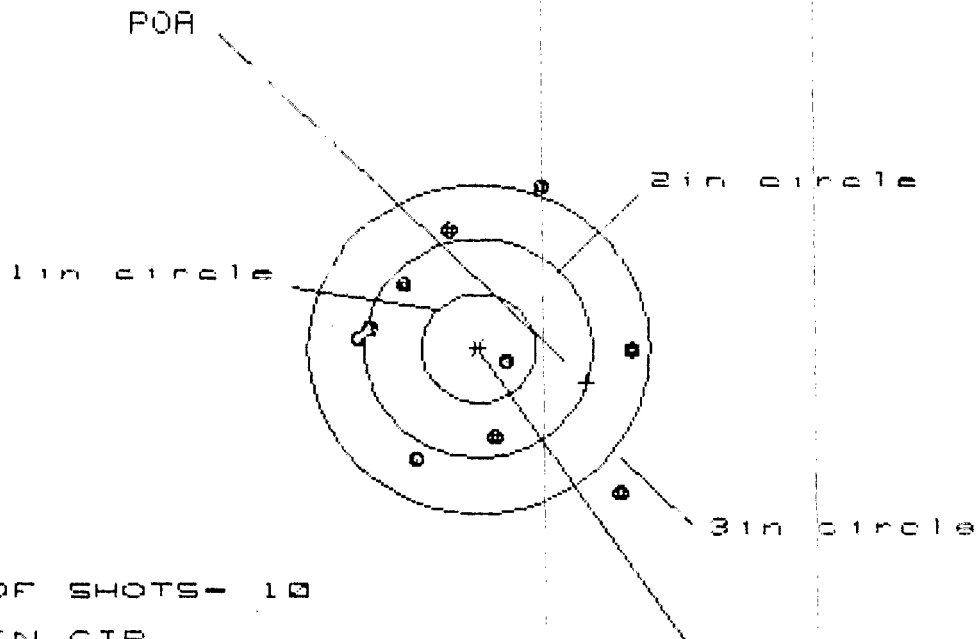
PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.885	.857	.848
MINIMUM X	:	-.925	-.715	-.724
MAXIMUM Y	:	1.111	1.089	.906
MINIMUM Y	:	-1.441	-1.463	-1.058
CENTROID X	:	-1.241	-1.451	-1.442
CENTROID Y	:	.253	.275	.458
POA TO CENTROID in.	:	1.267	1.477	1.513
MIN RADIUS	:	.452	.339	.462
MEAN RADIUS	:	.997	.873	.777
MAX RADIUS	:	1.896	1.465	1.282
HORIZONTAL SPREAD	:	2.810	1.572	1.572
VERTICAL SPREAD	:	2.552	2.552	1.964
EXTREME SPREAD	:	2.885	2.573	2.191
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		9	

14 Jan 1993

FILE: /PATTERNING/CENTERFIRE_PATT/C6225491

CENTERFIRE PATTERNS

5



OF SHOTS- 10

IN CIR

1in = 1

2in = 4

3in = 8

IS = 2.388

VS = 2.809

GS = 2.901

CENTROID *

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.307	1.447	1.531
MINIMUM X	:	-1.081	-.941	-.857
MAXIMUM Y	:	1.471	1.322	1.108
MINIMUM Y	:	-1.338	-1.166	-1.001
CENTROID X	:	-.943	-1.083	-1.167
CENTROID Y	:	.313	.462	.297
POA TO CENTROID in.	:	.994	1.177	1.204
MIN RADIUS	:	.270	.472	.467
MEAN RADIUS	:	1.100	1.001	.921
MAX RADIUS	:	1.837	1.484	1.551
HORIZONTAL SPREAD	:	2.388	2.388	2.388
VERTICAL SPREAD	:	2.809	2.488	2.109
EXTREME SPREAD	:	2.901	2.722	2.388
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		4	
NUMBER IN THREE INCH CIRCLE	=		8	

R92-28112

FROM:	SHIP TO:
CDR, 1ST BN 75TH RANGER REGT ATTN CPT CHINN AORG-FB-ACD HAAF	CDR, 1ST BN 75TH RANGER REGT ATTN CPT CHINN AORG-FB-ACD HAAF
GA 31409	GA 31409

CUSTOMER CONCERN	AMMO	FUNCTION	FINISH	ACCURACY	FIT	INSPECT
CYCLE	A1	B1				
TRIGGER GROUP		B2			E1	F1
BOLT ASSY.		B3			E2	F2
BARREL ASSY.		B4		D1	E3	F3
REC. ASSY.		B5		D2	E4	F4
WOOD			C1	D3	E5	F5
METAL			C2			
MAIN FAULT						

[illegible]

[illegible]

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6225491

OP. #	OP. NAME	READINGS	DATE	INITIAL
575 & 580	Assemble Action and Stock		9 12 88	FB
600	Proof		9 19 88	RW
607	Check Headspace		9 19 88	RW
610	Dis-assemble Gun		9 19 88	RW
612	Magnaflux Barrel Action		9/22/88	PFL
	Magnaflux Bolt		9/22/88	PFL
615	Rollmark Caliber		10/1/88	WC
617	Drill and Tap Sight Holes		10/1/88	FB
618	Polish Barrel		10/7/88	WT
620	Apply Coatings (Barrel Action)		10/9/88	TJA
	Apply Coating (Bolt)		10/31/88	TJA
625	Final Assembly A) Clean inside of Bolt Assembly		11/14/88	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		11/14/88	RW
	C) Inspect Ejector Hole for Chamfer		11/14/88	RW
	D) Oil Firing Pin Ass'y		11/14/88	RW
	E) Adjust Trigger Pull to Min Setting and Stake		12/10/88	LS

op. #	OP. NAME	READINGS					DATE	INITIAL
625 cont.	F) Safety On Force	5	5	5			17 Nov 88	JS
	G) Safety Off Force	3	3	3			17 Nov 88	JS
	H) Trigger Pull Test & Retainability						14 Nov 88	JS
	I) Firing Pin Indent	.020	.020	.020			17 Nov 88	JS
	J) Assemble Stock						11/17/88	RW
	K) Assemble Swivel Studs						1 Dec 88	JS
	L) Attach Front and Rear Sight Assemblies						11/17/88	RW
	M) Iron Sight Alignment						11/17/88	RW
	N) Detach Front & Rear Sights & place in numbered container						11/17/88	RW
	O) Attach Scope to Rifle						11/17/88	WB
	P) Detach & Attach Scope 20 Times						11/17/88	WB
640	Gallery Target & Test	55 R		97 L			11-28-88	AC
	A) Time							
	B) Malfunctions			NONE				
	C) Pierced Primers			NONE				
	D) Optical Clarity of Scope			OK			11-28-88	AC
645	Inspect for Live Ammo			NONE			11-28-88	AC
655	Final Inspection							
	A) Headspace						1 Dec 88	JS
	B) Trigger Pull	2.55	2.47	2.48	2.48	2.48	1 Dec 88	JS
	C) Function						1 Dec 88	JS
660	Pack						15 Dec 88	JS

SWS TRIGGER PULL TEST

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

SERIAL NO. C6225491
DATE 14 NOV 88
TESTER JSB

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.22	2.28	2.17	2.55	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.25	2.33	2.18	2.47	
PULL #3	2.23	2.24	2.20	2.48	
PULL #4	2.26	2.23	2.23	2.48	
PULL #5	2.24	2.32	2.16	2.48	
TOTAL	11.20	11.40	10.94	12.46	
AVG.	2.24	2.28	2.188	2.492	

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.36	3.31		
PULL #2	3.31	3.30		
PULL #3	3.28	3.30		
PULL #4	3.33	3.31		
PULL #5	3.29	3.29		
TOTAL	16.57	16.51		
AVG.	3.314	3.302		

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.20	4.12		4.01
PULL #2	4.14	4.14		4.06
PULL #3	4.09	4.13		3.99
PULL #4	4.18	4.15		3.93
PULL #5	4.19	4.16		3.97
TOTAL	20.80	20.70		19.96
AVG.	4.16	4.14		3.992

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6225491

CENTROIDAL DISTANCES

0 TO	1	1.21348
1 TO	2	.62502
1 TO	3	.783523
1 TO	4	1.11297
1 TO	5	.609594

#35 <----POA
2)

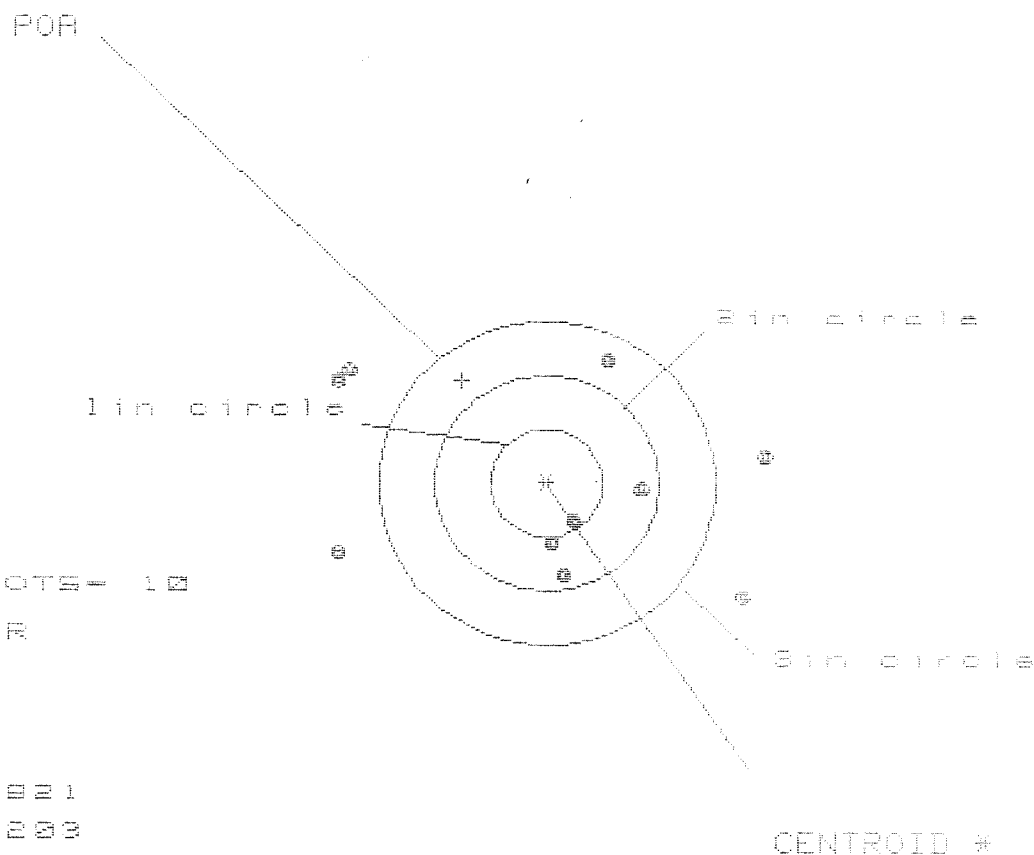
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .4194
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.4478
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .613532

THE AMR FOR THIS RIFLE IS: 1.028

25 Nov 1988

FILE:/PATTERNING/CENTERFIRE_PATT/06225491

CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1 in = 1

2 in = 4

3 in = 5

HS= 2.821

VS= 2.203

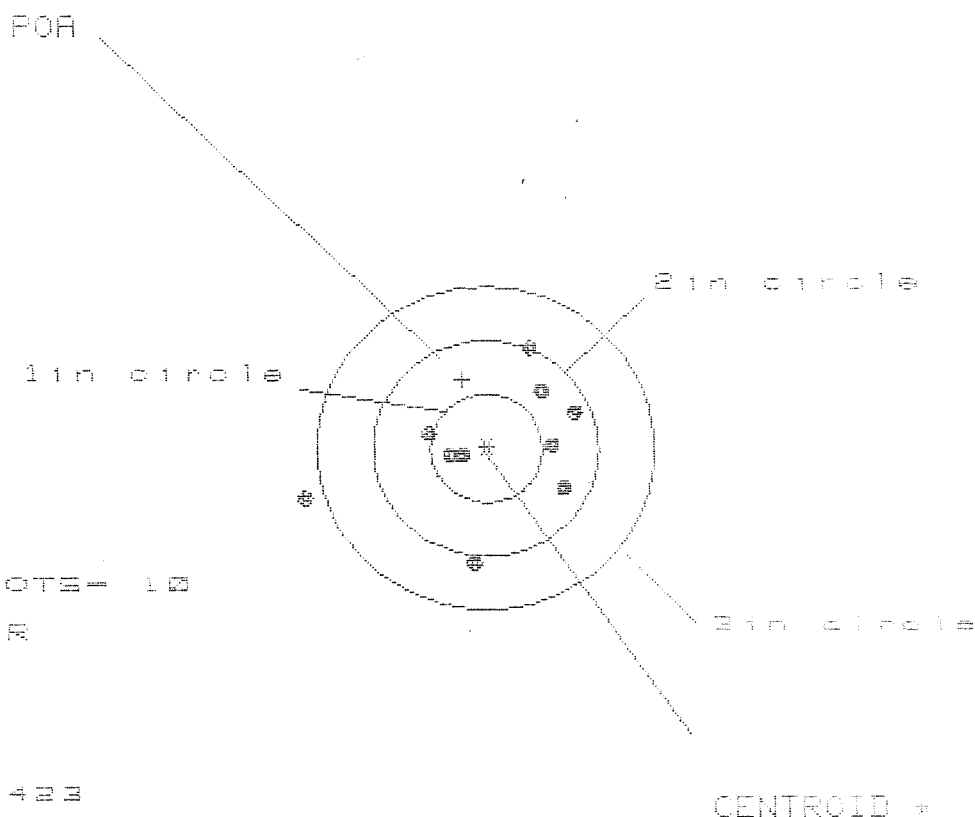
GS= 4.102

PATTERN #	:	1		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.958	1.751	1.944
MINIMUM X	:	-1.863	-2.058	-1.865
MAXIMUM Y	:	1.192	1.296	1.182
MINIMUM Y	:	-1.011	-.987	-.880
CENTROID X	:	.755	.962	.769
CENTROID Y	:	-.950	-1.054	-.940
POA TO CENTROID in.	:	1.214	1.427	1.214
MIN RADIUS	:	.388	.224	.390
MEAN RADIUS	:	1.400	1.265	1.237
MAX RADIUS	:	2.082	2.236	2.012
HORIZONTAL SPREAD	:	3.821	3.809	3.809
VERTICAL SPREAD	:	2.203	2.203	2.062
EXTREME SPREAD	:	4.102	4.027	3.911
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		4	
NUMBER IN THREE INCH CIRCLE	=		5	

28 Nov 1988

FILE:/PATTERNING/CENTERFIRE_PATT/0828548J

CENTERFIRE PATTERNS # 2



OF SHOTS = 10

IN CIR

1 in = 2

2 in = 7

3 in = 9

HE = 2.422

VS = 2.031

GS = 2.545

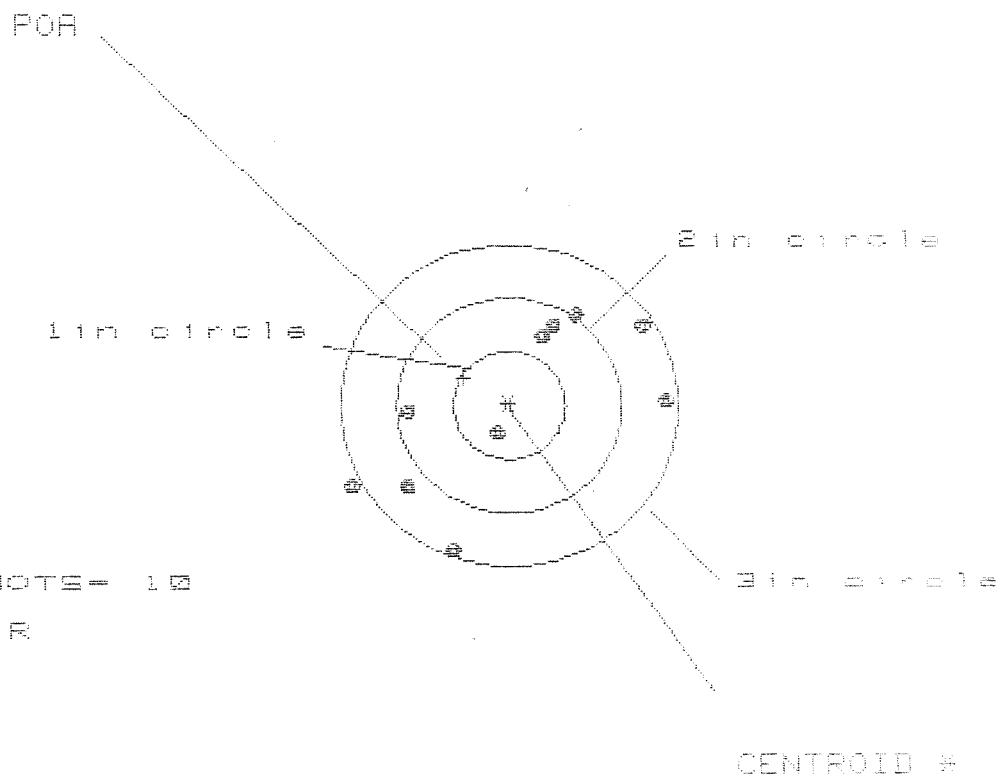
CENTROID +

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.810	.631	.594
MINIMUM X	:	-1.613	-.697	-.734
MAXIMUM Y	:	.960	.909	.768
MINIMUM Y	:	-1.071	-1.122	-.577
CENTROID X	:	.214	.393	.430
CENTROID Y	:	-.637	-.586	-.445
FOR TO CENTROID in.	:	.672	.706	.619
MIN RADIUS	:	.269	.362	.346
MEAN RADIUS	:	.783	.672	.599
MAX RADIUS	:	1.679	1.159	.778
HORIZONTAL SPREAD	:	2.423	1.328	1.328
VERTICAL SPREAD	:	2.031	2.031	1.345
EXTREME SPREAD	:	2.545	2.080	1.389
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		7	
NUMBER IN THREE INCH CIRCLE	=		9	

29 Nov 1988

FILE:/PATTERNING/CENTERFIRE_PATT/06225491

CENTERFIRE PATTERNS # 3



OF SHOTS = 10

IN CIR

1in = 1

2in = 4

3in = 5

HS = 2.871

VS = 2.266

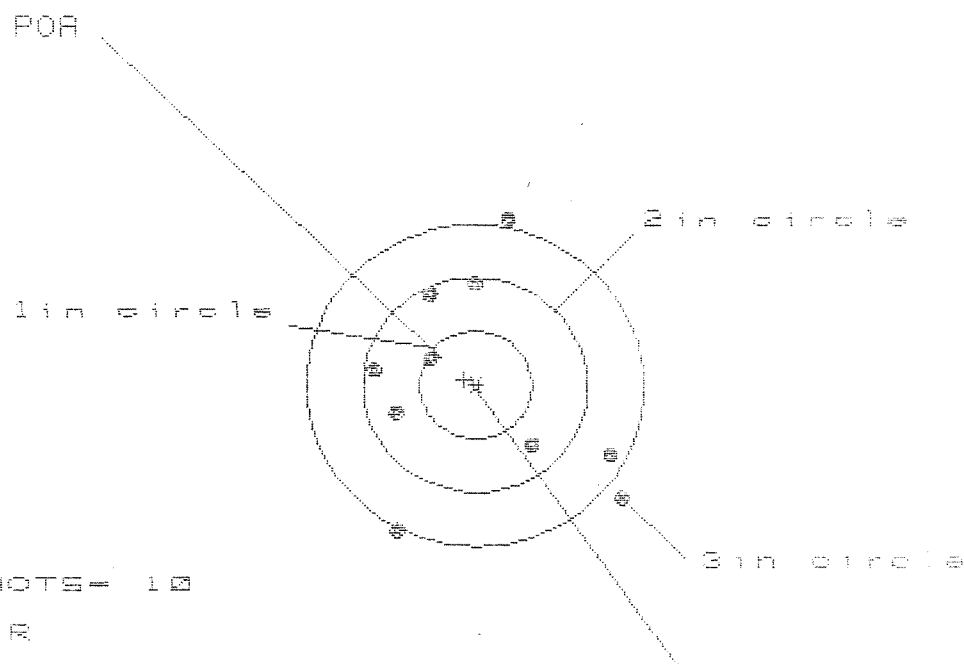
GS = 3.074

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.415	1.253	1.169
MINIMUM X	:	-1.456	-1.073	-1.157
MAXIMUM Y	:	.876	.795	.611
MINIMUM Y	:	-1.398	-1.471	-1.028
CENTROID X	:	.407	.569	.653
CENTROID Y	:	-.248	-.167	.017
POA TO CENTROID in.	:	.477	.593	.653
MIN RADIUS	:	.302	.451	.425
MEAN RADIUS	:	1.105	1.033	.918
MAX RADIUS	:	1.629	1.618	1.547
HORIZONTAL SPREAD	:	2.871	2.326	2.326
VERTICAL SPREAD	:	2.266	2.266	1.639
EXTREME SPREAD	:	3.074	2.776	2.631
NUMBER IN ONE INCH CIRCLE	=	1		
NUMBER IN TWO INCH CIRCLE	=	4		
NUMBER IN THREE INCH CIRCLE	=	5		

25 Nov 1988

FILE:/PATTERNING/CENTERFIRE_PATT/08285451

CENTERFIRE PATTERNS # 4



OF SHOTS= 10

IN CIR

1in = 1

2in = 6

3in = 7

HS= 2.246

VS= 2.888

GS= 3.059

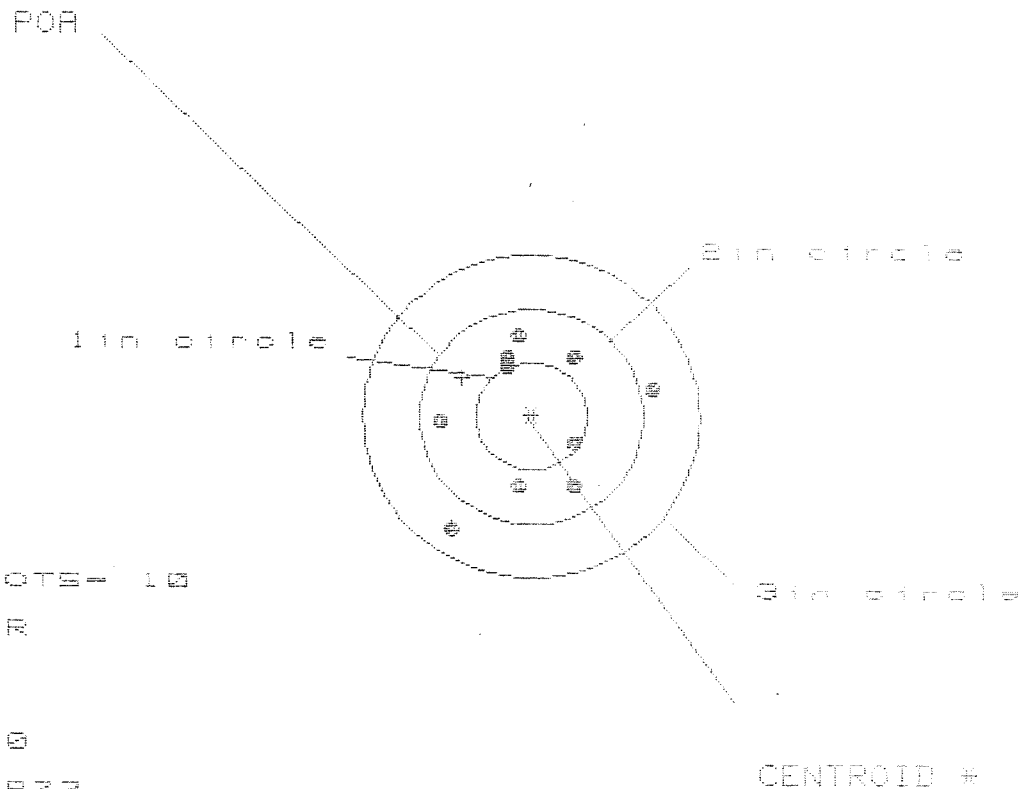
CENTROID #

PATTERN #	4	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.295	1.312	1.367
MINIMUM X	-.951	-.807	-.752
MAXIMUM Y	1.543	1.425	1.030
MINIMUM Y	-1.345	-1.463	-1.284
CENTROID X	.103	-.041	-.096
CENTROID Y	-.048	.070	-.108
POA TO CENTROID in.	.114	.081	.145
MIN RADIUS	.487	.302	.396
MEAN RADIUS	1.096	.992	.928
MAX RADIUS	1.673	1.569	1.470
HORIZONTAL SPREAD	2.246	2.119	2.119
VERTICAL SPREAD	2.888	2.888	2.314
EXTREME SPREAD	3.059	3.059	2.426
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	7		

29 Nov 1988

FILE:/PATTERNING/CENTERFIRE_PATT/0822549)

CENTERFIRE PATTERNS # 5



OF SHOTS= 10

IN CIR

1 in = 2

2 in = 8

3 in = 10

HE= 1.873

VS= 1.805

GS= 2.204

CENTROID #

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.032	.948	.452
MINIMUM X	:	-.841	-.925	-.806
MAXIMUM Y	:	.750	.633	.649
MINIMUM Y	:	-1.054	-.766	-.750
CENTROID X	:	.618	.702	.583
CENTROID Y	:	-.356	-.239	-.255
POA TO CENTROID in.	:	.714	.741	.638
MIN RADIUS	:	.476	.433	.376
MEAN RADIUS	:	.754	.675	.633
MAX RADIUS	:	1.295	.956	.873
HORIZONTAL SPREAD	:	1.873	1.873	1.258
VERTICAL SPREAD	:	1.805	1.399	1.399
EXTREME SPREAD	:	2.204	1.889	1.486
NUMBER IN ONE INCH CIRCLE =			2	
NUMBER IN TWO INCH CIRCLE =			8	
NUMBER IN THREE INCH CIRCLE =			10	