

C6498746

MODEL 700<sup>TM</sup> M24

Model **SMS** <sup>TM</sup>

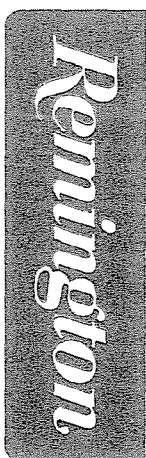
Action

Barrel Length

Capacity

Order No. **5716**

\*Includes 1 in chamber.



File Add Repair Estimate Repair Expedite Repair Inquiry Repair Tools CSR Tools Reports Table Maintenance System Maintenance Help

Repair Number: **RE00074611** Serial: C6498746 Model: 700 Center Fire Caliber: 7 Repairman:   
 62 NATO M24 SWS Produced: 06/19/1990 Status: Closed 12/29/2003 10:35:43 AM

Verify Repair

**Address Information**

Customer: ☐ Received From Return To ☐ Received From

Name: **HHC 3/327** **HHC 3/327**

Address 1:

Address 2:  PO Box:

City: **FORT CAMPBELL** **FORT CAMPBELL**

State: **KY** Zip Code: **42223** Country: **US** State: **KY** Zip Code: **42223** Country: **US**

FFL:

**Contact / Condition Problems Estimate History / Status Shipping / Billing**

**Contact Information**

Phone:

Fax:

Email:

Comments:

**Received Condition**

Fair

Condition Notes:

CSR Notes:

**Accessories Received**

| Code | Desc        | Qty |
|------|-------------|-----|
| A007 | With Studs  | 3   |
| A010 | Hard Case   | 1   |
| A017 | Scope Bases | 3   |
| A026 | Scope       | 1   |
| A045 | Bi Pod      | 1   |

**Repair Search Refresh Close**

negleij 1/5/2004 9:04 AM CAPS NOM INS

start

Serial Number: **C6498746**

Model: **700**



**RE00074611**

SNIPER WEAPON SYSTEM - UNIQUE STATISTICAL INFORMATION

FIREARM SERIAL NUMBER / DATASET NAME: C6498746.\_\_0  
FILE DATE AND TIME: 01/27/2004 09:27

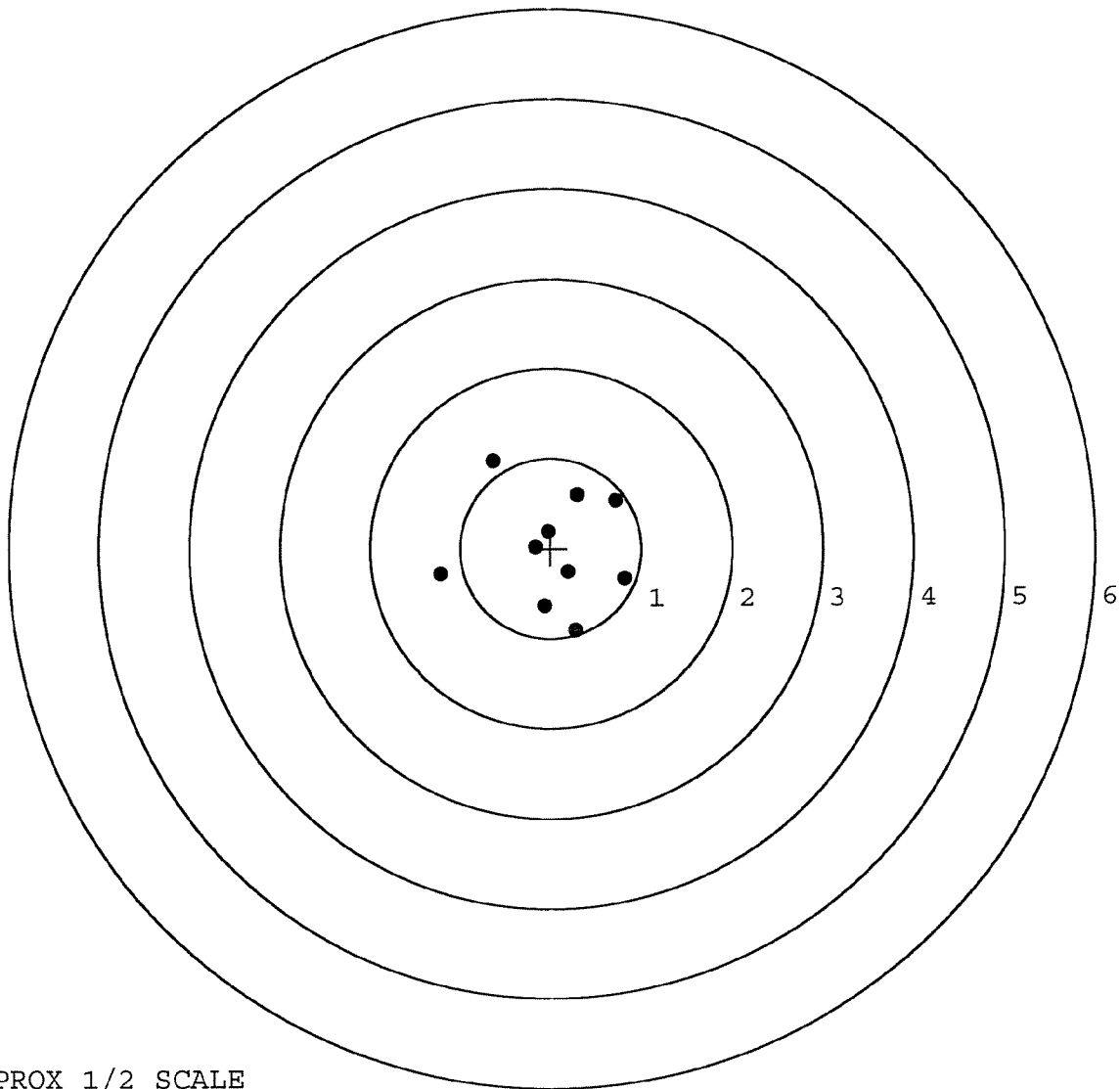
THE FOLLOWING DATA IS ALL REPORTED IN UNITS OF INCHES

|                                                             |       |
|-------------------------------------------------------------|-------|
| The Average X Centroid of the Five Target Set:              | 0.041 |
| The Average Y Centroid of the Five Target Set:              | 0.004 |
| The Average Point of Impact of the Five Target Set:         | 0.041 |
| The Average Mean Radius of the Five Target Set:             | 0.615 |
| The Distance from POA to Centroid Target #1:                | 0.023 |
| The Distance from Centroid Target #2 to Centroid Target #1: | 0.150 |
| The Distance from Centroid Target #3 to Centroid Target #1: | 0.034 |
| The Distance from Centroid Target #4 to Centroid Target #1: | 0.153 |
| The Distance from Centroid Target #5 to Centroid Target #1: | 0.121 |

SERIAL NUMBER: C6498746. \_\_0  
TARGET NUMBER: 1  
FILE DATE: 01/27/2004  
FILE TIME: 09:27

| POINT# | X      | Y      |
|--------|--------|--------|
| 1:     | 0.715  | 0.529  |
| 2:     | 0.298  | 0.595  |
| 3:     | -0.637 | 0.968  |
| 4:     | -1.215 | -0.283 |
| 5:     | 0.279  | -0.914 |
| 6:     | -0.070 | -0.641 |
| 7:     | 0.197  | -0.264 |
| 8:     | 0.818  | -0.338 |
| 9:     | -0.170 | 0.014  |
| 10:    | -0.031 | 0.190  |

X CENTROID: 0.018  
Y CENTROID: -0.014  
POA TO CENTROID: 0.023  
HORZ SPREAD: 2.033  
VERT SPREAD: 1.882  
GROUP SPREAD: 2.094  
MIN RADIUS: 0.191  
MAX RADIUS: 1.262  
MEAN RADIUS: 0.714  
# IN 1 IN DIAMETER: 3  
# IN 2 IN DIAMETER: 8  
# in 3 IN DIAMETER: 10

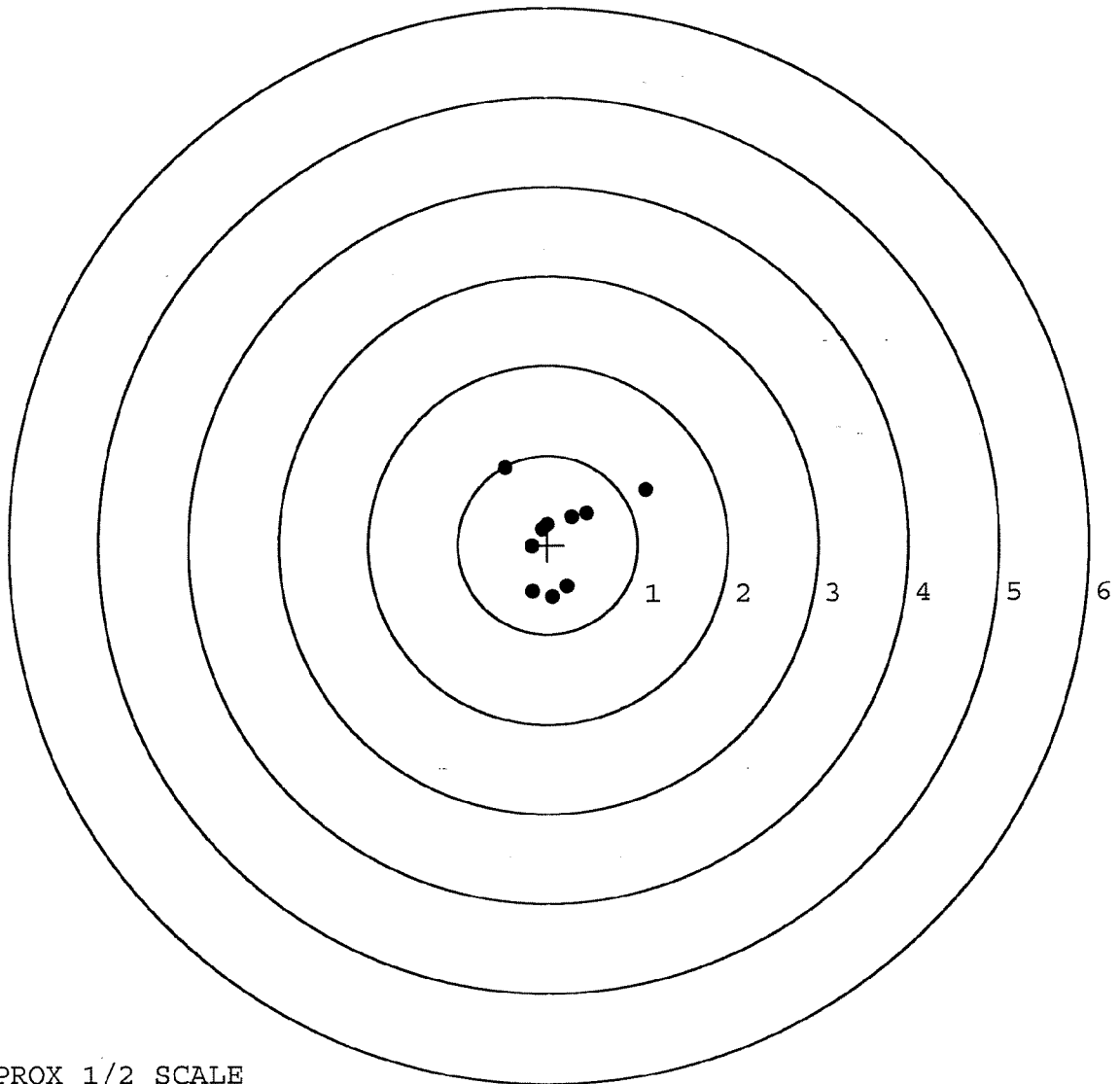


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6498746. \_\_0  
TARGET NUMBER: 2  
FILE DATE: 01/27/2004  
FILE TIME: 09:27

| POINT# | X      | Y      |
|--------|--------|--------|
| 1:     | 1.092  | 0.619  |
| 2:     | -0.469 | 0.864  |
| 3:     | 0.217  | -0.467 |
| 4:     | 0.058  | -0.588 |
| 5:     | -0.167 | -0.533 |
| 6:     | -0.175 | -0.017 |
| 7:     | -0.061 | 0.174  |
| 8:     | 0.439  | 0.354  |
| 9:     | 0.271  | 0.317  |
| 10:    | -0.004 | 0.232  |

X CENTROID: 0.120  
Y CENTROID: 0.095  
POA TO CENTROID: 0.153  
HORZ SPREAD: 1.561  
VERT SPREAD: 1.452  
GROUP SPREAD: 1.707  
MIN RADIUS: 0.184  
MAX RADIUS: 1.104  
MEAN RADIUS: 0.540  
# IN 1 IN DIAMETER: 5  
# IN 2 IN DIAMETER: 9  
# in 3 IN DIAMETER: 10

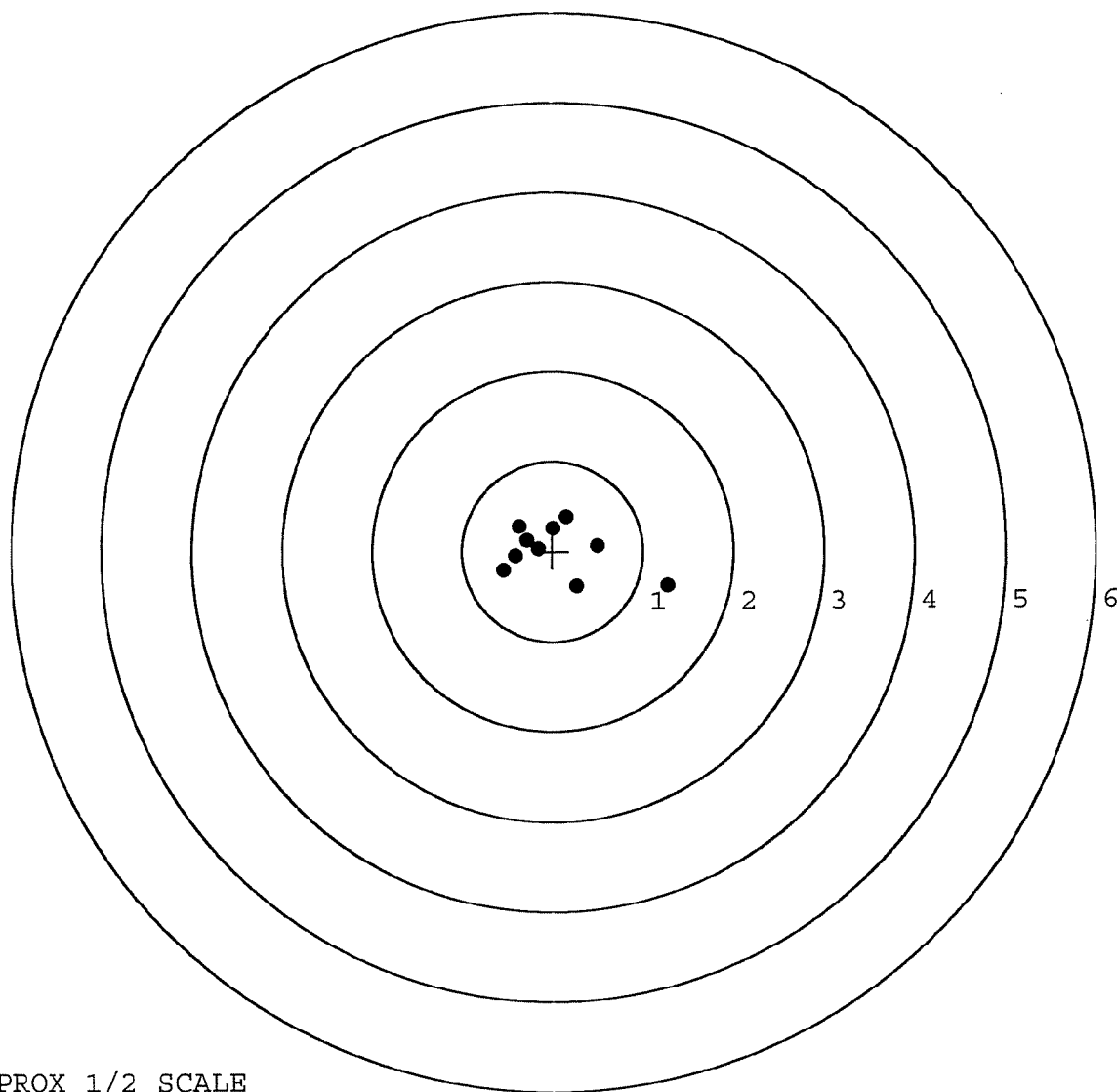


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6498746. \_\_0  
TARGET NUMBER: 3  
FILE DATE: 01/27/2004  
FILE TIME: 09:27

X CENTROID: 0.044  
Y CENTROID: 0.008  
POA TO CENTROID: 0.044  
HORZ SPREAD: 1.810  
VERT SPREAD: 0.773  
GROUP SPREAD: 1.818  
MIN RADIUS: 0.201  
MAX RADIUS: 1.286  
MEAN RADIUS: 0.497  
# IN 1 IN DIAMETER: 8  
# IN 2 IN DIAMETER: 9  
# in 3 IN DIAMETER: 10

| POINT# | X      | Y      |
|--------|--------|--------|
| 1:     | 1.268  | -0.384 |
| 2:     | 0.496  | 0.062  |
| 3:     | 0.272  | -0.391 |
| 4:     | -0.542 | -0.217 |
| 5:     | -0.367 | 0.278  |
| 6:     | 0.154  | 0.382  |
| 7:     | 0.011  | 0.259  |
| 8:     | -0.156 | 0.032  |
| 9:     | -0.413 | -0.058 |
| 10:    | -0.286 | 0.120  |



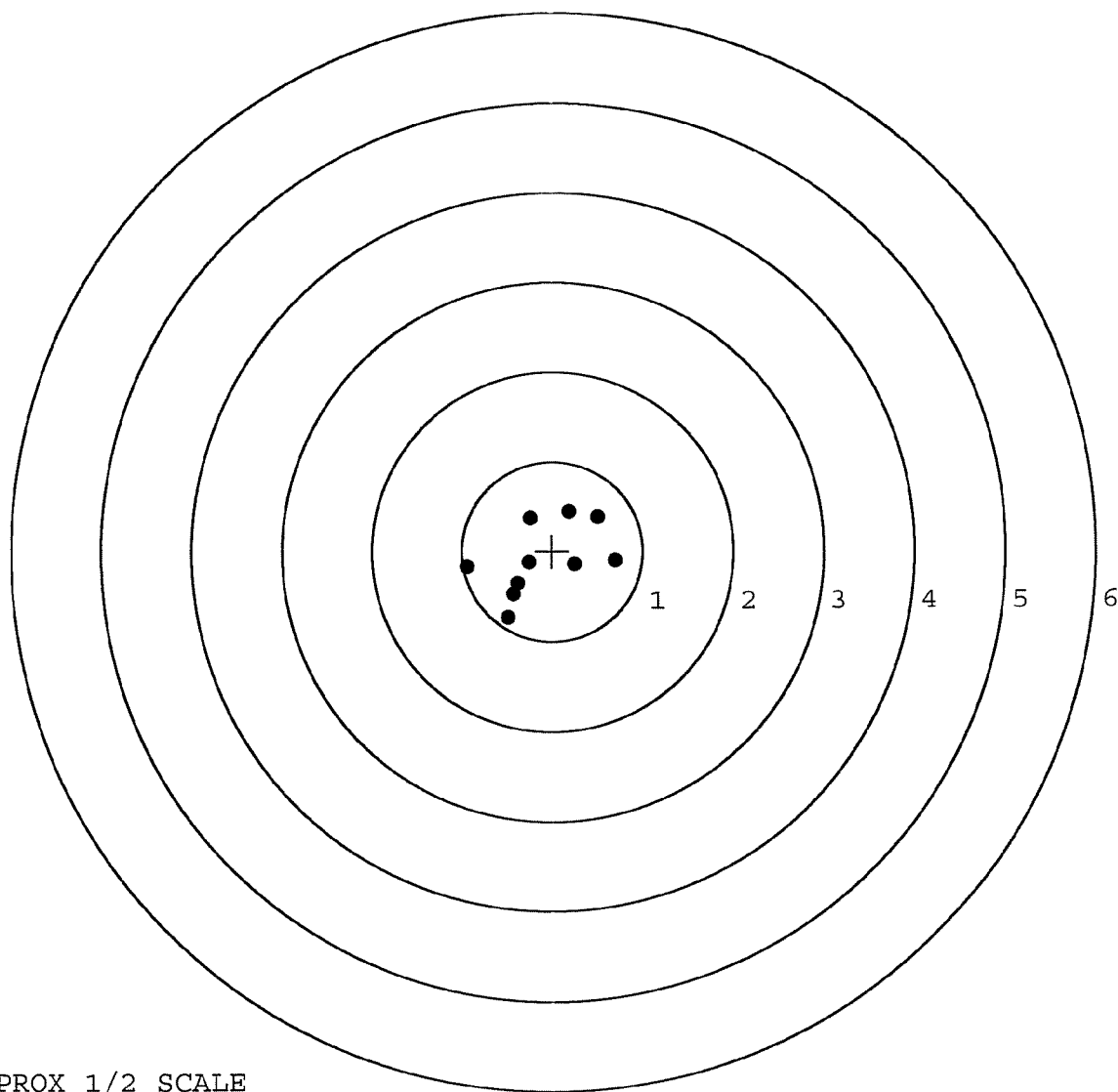
TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6498746.\_\_\_0  
TARGET NUMBER: 4  
FILE DATE: 01/27/2004  
FILE TIME: 09:27

X CENTROID: -0.111  
Y CENTROID: -0.096  
POA TO CENTROID: 0.147  
HORZ SPREAD: 1.645  
VERT SPREAD: 1.186  
GROUP SPREAD: 1.646  
MIN RADIUS: 0.152  
MAX RADIUS: 0.839  
MEAN RADIUS: 0.567

| POINT# | X      | Y      |
|--------|--------|--------|
| 1:     | 0.502  | 0.381  |
| 2:     | 0.189  | 0.440  |
| 3:     | 0.699  | -0.109 |
| 4:     | 0.247  | -0.147 |
| 5:     | -0.245 | 0.372  |
| 6:     | -0.946 | -0.176 |
| 7:     | -0.488 | -0.746 |
| 8:     | -0.427 | -0.485 |
| 9:     | -0.260 | -0.127 |
| 10:    | -0.381 | -0.366 |

# IN 1 IN DIAMETER: 4  
# IN 2 IN DIAMETER: 10  
# in 3 IN DIAMETER: 10

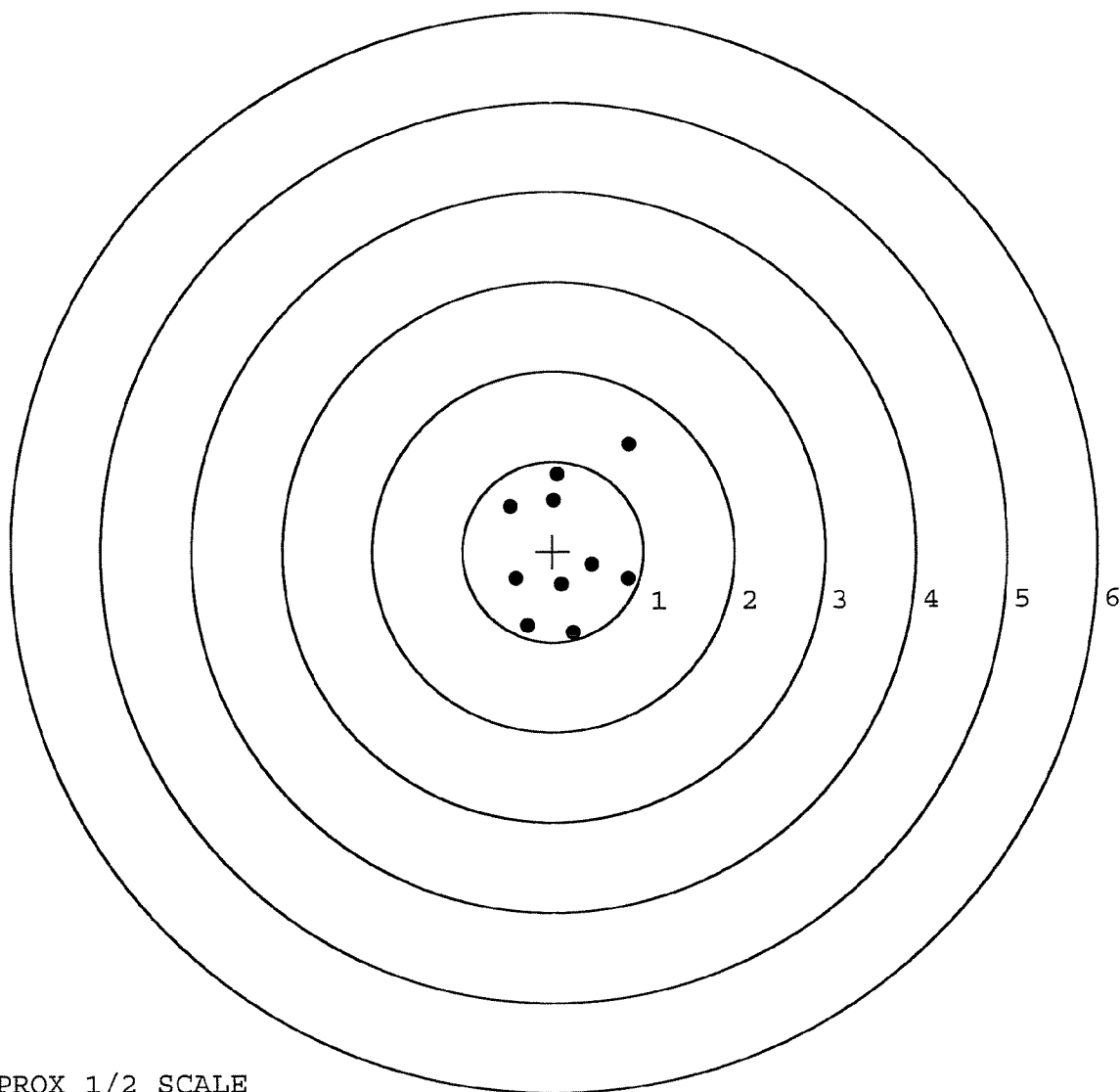


TARGET APPROX 1/2 SCALE

SERIAL NUMBER: C6498746.\_\_\_0  
TARGET NUMBER: 5  
FILE DATE: 01/27/2004  
FILE TIME: 09:27

| POINT# | X      | Y      |
|--------|--------|--------|
| 1:     | 0.842  | 1.188  |
| 2:     | 0.057  | 0.859  |
| 3:     | 0.015  | 0.568  |
| 4:     | -0.468 | 0.497  |
| 5:     | 0.828  | -0.312 |
| 6:     | 0.432  | -0.147 |
| 7:     | 0.096  | -0.373 |
| 8:     | 0.224  | -0.902 |
| 9:     | -0.286 | -0.826 |
| 10:    | -0.407 | -0.306 |

X CENTROID: 0.133  
Y CENTROID: 0.025  
POA TO CENTROID: 0.136  
HORZ SPREAD: 1.310  
VERT SPREAD: 2.090  
GROUP SPREAD: 2.308  
MIN RADIUS: 0.344  
MAX RADIUS: 1.362  
MEAN RADIUS: 0.755  
# IN 1 IN DIAMETER: 2  
# IN 2 IN DIAMETER: 9  
# in 3 IN DIAMETER: 10



TARGET APPROX 1/2 SCALE



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

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

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

**MODEL 700™ H24**

**SERIAL NO. C6498746**

**ORDER NO. 5716**

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

Ø1



5716 C6498746

UPC



0 47700 25716 7

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6498746

| OP. #     | OP. NAME                                                 | READINGS | DATE    | INIT |
|-----------|----------------------------------------------------------|----------|---------|------|
| 575 & 580 | Assemble Action and Stock                                | 5 17     | 90      | RW   |
| 600       | Proof                                                    | 5 17     | 90      | RW   |
| 607       | Check Headspace                                          | 5 17     | 90      | RW   |
| 610       | Dis-assemble Gun                                         | 5 17     | 90      | RW   |
| 612       | Magnaflux Barrel Action                                  |          | 5/22/90 | KCR  |
|           | Magnaflux Bolt                                           |          | 6/22/90 | KCR  |
| 615       | Rollmark Caliber                                         |          | 5/22/90 | Z.S. |
| 617       | Drill and Tap Sight Holes                                |          | 5/23/90 | FB   |
| 618       | Polish Barrel RB                                         |          | 5/24/90 | WB   |
| 620       | Apply Coatings (Barrel Action)                           |          | 5/29/90 | JA   |
|           | Apply Coating (Bolt)                                     |          | 5/29/90 | JA   |
| 625       | Final Assembly                                           |          |         |      |
|           | A) Clean inside of Bolt Assembly                         |          | 6/4/90  | RW   |
|           | B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head |          | 6/4/90  | RW   |
|           | C) Inspect Ejector Hole for Chamfer                      |          | 6/4/90  | RW   |
|           | D) Oil Firing Pin Ass'y                                  |          | 6/4/90  | RW   |
|           | E) Adjust Trigger Pull to Min Setting and Stake          |          | 6/6/90  | 94   |

| op. #        | OP. NAME                                                    | READINGS |       |       |      |      | DATE    | INIT |
|--------------|-------------------------------------------------------------|----------|-------|-------|------|------|---------|------|
| 625<br>cont. | F) Safety On Force                                          | 4 1/4    | 4 1/4 | 4     |      |      | 6/7/90  | WB   |
|              | G) Safety Off Force                                         | 2 1/2    | 2 1/4 | 2 1/4 |      |      | 6/7/90  | WB   |
|              | H) Trigger Pull Test & Retainability                        |          |       |       |      |      | 6/6/90  | JM   |
|              | I) Firing Pin Indent                                        | .0225    | .023  | .023  |      |      | 6/7/90  | WB   |
|              | J) Assemble Stock                                           |          |       |       |      |      | 6/11/90 | RW   |
|              | K) Assemble Swivel Studs                                    |          |       |       |      |      | 6/14/90 | JM   |
|              | L) Attach Front and Rear Sight Assemblies                   |          |       |       |      |      | 6/10/90 | RW   |
|              | M) Iron Sight Alignment                                     |          |       |       |      |      | 6/11/90 | RW   |
|              | N) Detach Front & Rear Sights & place in numbered container |          |       |       |      |      | 6/11/90 | RW   |
|              | O) Attach Scope to Rifle                                    |          |       |       |      |      | 6/11/90 | JM   |
|              | P) Detach & Attach Scope 20 Times                           |          |       |       |      |      | 6/11/90 | JM   |
| 640          | Gallery Target & Test                                       |          |       |       |      |      | 6-12-90 | A    |
|              | A) Time                                                     |          |       |       |      |      | "       | A    |
|              | B) Malfunctions                                             |          |       |       |      |      | "       | A    |
|              | C) Pierced Primers                                          |          |       |       |      |      | "       | A    |
|              | D) Optical Clarity of Scope                                 |          |       |       |      |      | "       | A    |
| 645          | Inspect for Live Ammo                                       |          |       |       |      |      | 6-12-90 | A    |
| 655          | Final Inspection                                            |          |       |       |      |      |         |      |
|              | A) Headspace                                                |          |       |       |      |      | 6/14/90 | JM   |
|              | B) Trigger Pull                                             | 2.80     | 2.80  | 2.81  | 2.76 | 2.79 | 6/14/90 | JM   |
|              | C) Function                                                 |          |       |       |      |      | 6/14/90 | JM   |
| 660          | Pack                                                        |          |       |       |      |      | 6-20-90 | DH   |

SWS TRIGGER PULL TEST

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

SERIAL NO. C6498746

DATE 6/6/90

TESTER JLL

|         | 2.50#<br>INITIAL | 2.50# AFTER<br>50 CYCLES | FINAL TEST &<br>TO RESET 2.50# |      | COMMENTS                                                               |
|---------|------------------|--------------------------|--------------------------------|------|------------------------------------------------------------------------|
| PULL #1 | 2.40             | 2.35                     | 2.25                           | 2.80 | MIN. SETTING,<br>NO AVG. OF 5<br>READINGS ACCEPT-<br>ABLE LESS THAN 2# |
| PULL #2 | 2.48             | 2.48                     | 2.20                           | 2.80 |                                                                        |
| PULL #3 | 2.30             | 2.23                     | 2.24                           | 2.81 |                                                                        |
| PULL #4 | 2.14             | 2.26                     | 2.30                           | 2.76 |                                                                        |
| PULL #5 | 2.16             | 2.20                     | 2.25                           |      |                                                                        |
| TOTAL   | 11.48            | 11.52                    | 11.26                          | 2.79 |                                                                        |
| AVG.    | 2.296            | 2.304                    | 2.252                          |      |                                                                        |

|         | 3.00#<br>INITIAL | 3.00# AFTER<br>20 CYCLES |  | COMMENTS |
|---------|------------------|--------------------------|--|----------|
| PULL #1 | 3.21             | 3.24                     |  |          |
| PULL #2 | 3.20             | 3.19                     |  |          |
| PULL #3 | 3.25             | 3.30                     |  |          |
| PULL #4 | 3.22             | 3.24                     |  |          |
| PULL #5 | 3.29             | 3.33                     |  |          |
| TOTAL   | 16.17            | 16.30                    |  |          |
| AVG.    | 3.234            | 3.26                     |  |          |

|         | 4.00#<br>INITIAL | 4.00# AFTER<br>20 CYCLES | MAX SETTING<br>GREATER THAN 4# | RESET TO 4# FOR<br>TARGET & ACCURACY |
|---------|------------------|--------------------------|--------------------------------|--------------------------------------|
| PULL #1 | 4.14             | 4.37                     |                                | 4.43                                 |
| PULL #2 | 4.50             | 4.34                     |                                | 4.33                                 |
| PULL #3 | 4.36             | 4.46                     |                                | 4.48                                 |
| PULL #4 | 4.40             | 4.27                     |                                | 4.45                                 |
| PULL #5 | 4.47             | 4.48                     |                                | 4.46                                 |
| TOTAL   | 21.87            | 21.92                    |                                | 22.15                                |
| AVG.    | 4.374            | 4.384                    |                                | 4.43                                 |

CENTROIDAL DISTANCE CALCULATIONS  
FOR RIFLE # C6498746  
13 Jun 1990

CENTROIDAL DISTANCES

|      |   |         |
|------|---|---------|
| 0 TO | 1 | .509771 |
| 1 TO | 2 | .586924 |
| 1 TO | 3 | 1.32279 |
| 1 TO | 4 | .711258 |
| 1 TO | 5 | .842217 |

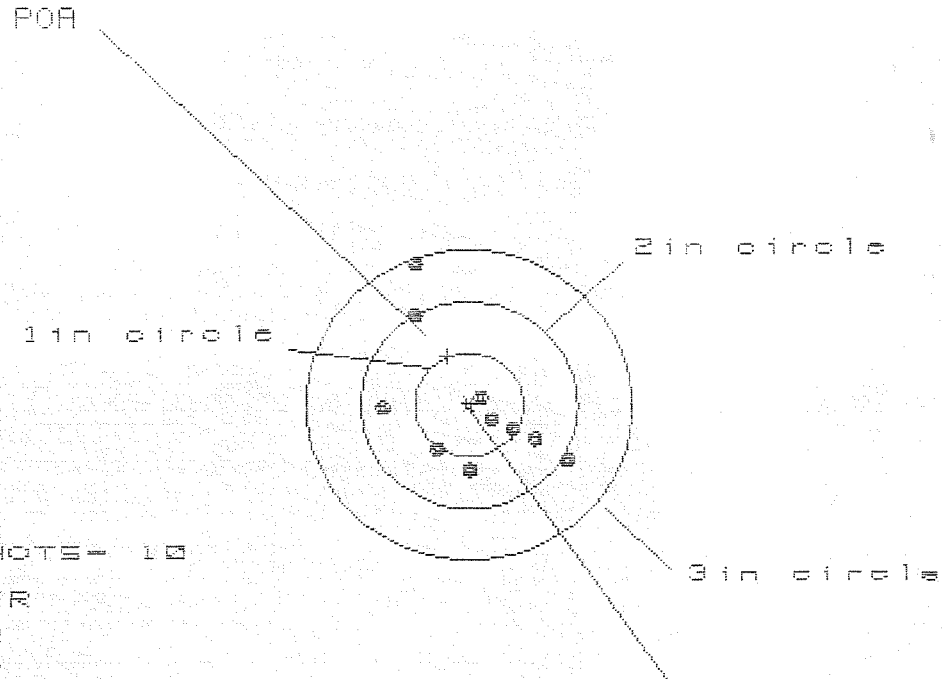
3 5# <----POA  
4 1

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.3996  
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.2046  
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .448934  
THE AMR FOR THIS RIFLE IS: .8118

13 Jun 1998

FILE:/PATTERNING/CENTERFIRE\_PATT/C6438746

# CENTERFIRE PATTERNS # 1



# OF SHOTS- 10

# IN CIR

1in = 2

2in = 7

3in = 10

HS= 1.669

VS= 2.003

GS= 2.382

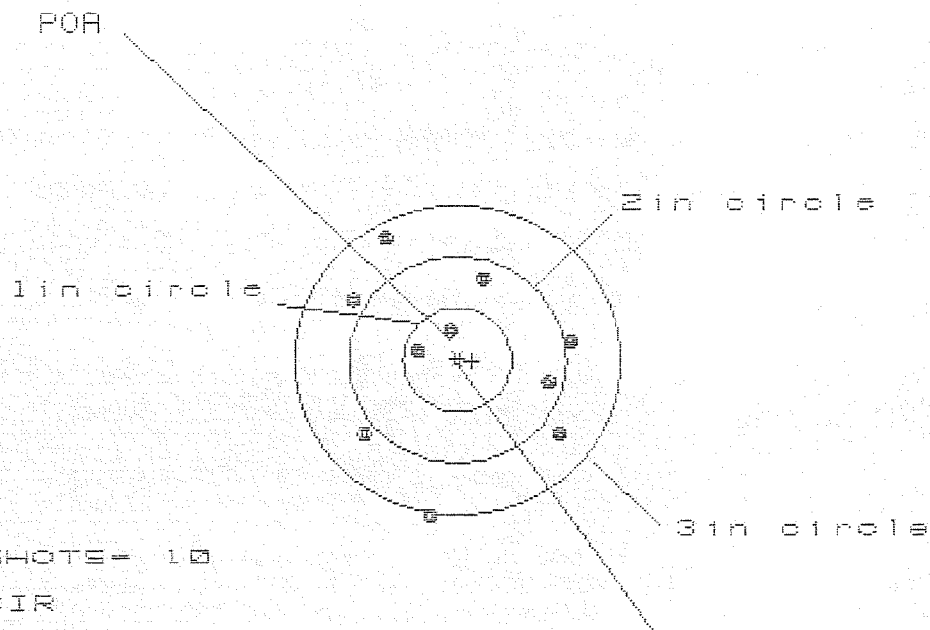
CENTROID #

|                             |   |       |       |       |
|-----------------------------|---|-------|-------|-------|
| PATTERN #                   | : | 1     |       |       |
| SHOTS (BEST OF)             | : | 10    | 9     | 8     |
| MAXIMUM X                   | : | .868  | .813  | .624  |
| MINIMUM X                   | : | -.801 | -.856 | -.755 |
| MAXIMUM Y                   | : | 1.374 | 1.035 | .982  |
| MINIMUM Y                   | : | -.629 | -.477 | -.530 |
| CENTROID X                  | : | .195  | .250  | .149  |
| CENTROID Y                  | : | -.471 | -.623 | -.570 |
| POR TO CENTROID in.         | : | .509  | .672  | .589  |
| MIN RADIUS                  | : | .119  | .141  | .229  |
| MEAN RADIUS                 | : | .702  | .585  | .558  |
| MAX RADIUS                  | : | 1.461 | 1.185 | 1.091 |
| HORIZONTAL SPREAD           | : | 1.669 | 1.669 | 1.379 |
| VERTICAL SPREAD             | : | 2.003 | 1.512 | 1.512 |
| EXTREME SPREAD              | : | 2.382 | 2.016 | 1.640 |
| NUMBER IN ONE INCH CIRCLE   | = |       | 2     |       |
| NUMBER IN TWO INCH CIRCLE   | = |       | 7     |       |
| NUMBER IN THREE INCH CIRCLE | = |       | 10    |       |

13 Jun 1998

FILE:/PATTERNING/CENTERFIRE\_PATT/08438746

# CENTERFIRE PATTERNS # 2



# OF SHOTS= 10

# IN CIR

1in = 2

2in = 4

3in = 9

HS= 2.007

VS= 2.636

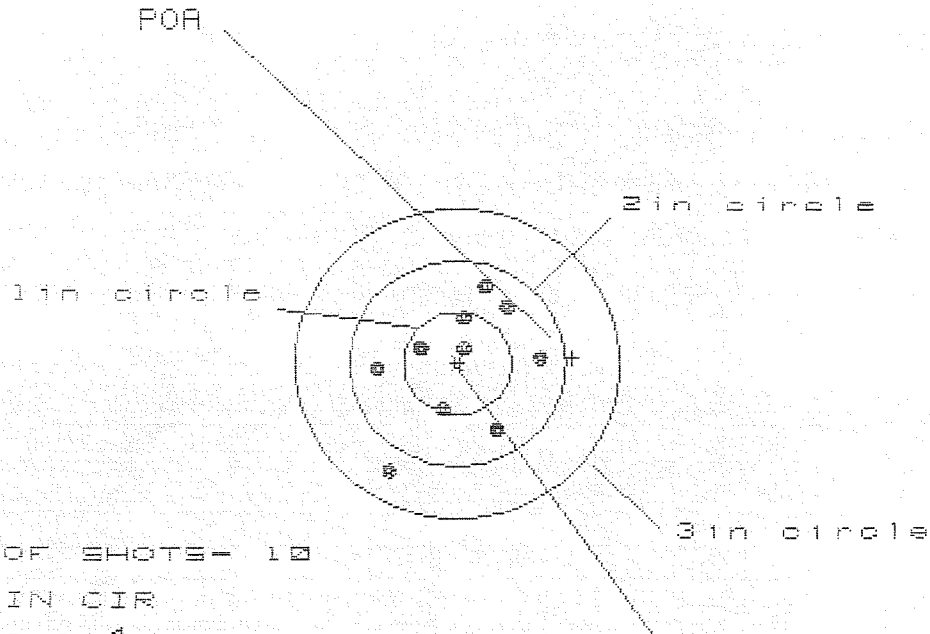
GS= 2.667

|                             |   |        |       |        |
|-----------------------------|---|--------|-------|--------|
| PATTERN #                   | : | 2      |       |        |
| SHOTS (BEST OF)             | : | 10     | 9     | 8      |
| MAXIMUM X                   | : | 1.081  | 1.052 | .965   |
| MINIMUM X                   | : | -.926  | -.955 | -1.042 |
| MAXIMUM Y                   | : | 1.159  | .995  | .790   |
| MINIMUM Y                   | : | -1.477 | -.890 | -.766  |
| CENTROID X                  | : | -.137  | -.108 | -.021  |
| CENTROID Y                  | : | .013   | .177  | .053   |
| POA TO CENTROID in.         | : | .138   | .207  | .057   |
| MIN RADIUS                  | : | .301   | .155  | .307   |
| MEAN RADIUS                 | : | .966   | .879  | .847   |
| MAX RADIUS                  | : | 1.500  | 1.274 | 1.186  |
| HORIZONTAL SPREAD           | : | 2.007  | 2.007 | 2.007  |
| VERTICAL SPREAD             | : | 2.636  | 1.885 | 1.556  |
| EXTREME SPREAD              | : | 2.667  | 2.480 | 2.272  |
| NUMBER IN ONE INCH CIRCLE   | = |        | 2     |        |
| NUMBER IN TWO INCH CIRCLE   | = |        | 4     |        |
| NUMBER IN THREE INCH CIRCLE | = |        | 9     |        |

13 Jun 1998

FILE:/PATTERNING/CENTERFIRE\_PATT/CG498746

# CENTERFIRE PATTERNS # 3



# OF SHOTS- 10

# IN CIR

1in = 4

2in = 9

3in = 10

HS= 1.507

VS= 1.851

ES= 2.020

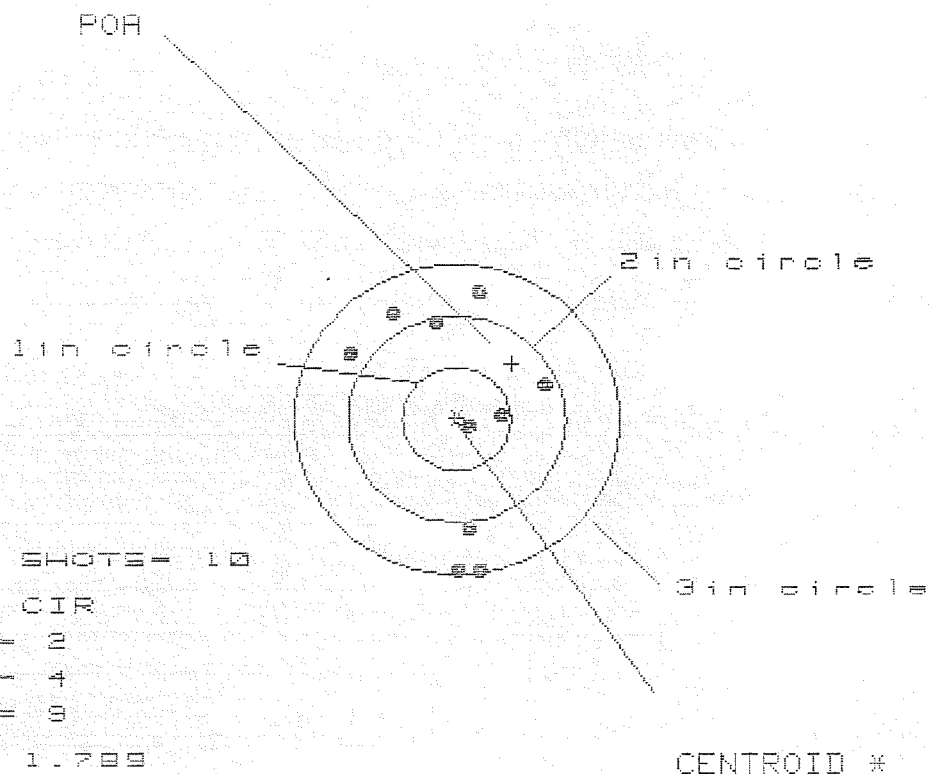
CENTROID #

| PATTERN #                     | 1      | 3     | 9     | 8      |
|-------------------------------|--------|-------|-------|--------|
| SHOTS (BEST OF)               | 10     | 9     | 9     | 8      |
| MAXIMUM X                     | .756   | .690  | .690  | .709   |
| MINIMUM X                     | -.751  | -.817 | -.817 | -.798  |
| MAXIMUM Y                     | .793   | .676  | .676  | .521   |
| MINIMUM Y                     | -1.057 | -.733 | -.733 | -.649  |
| CENTROID X                    | -1.061 | -.995 | -.995 | -1.014 |
| CENTROID Y                    | -.056  | .062  | .062  | -.023  |
| POA TO CENTROID in.           | 1.062  | .997  | .997  | 1.014  |
| MIN RADIUS                    | .198   | .063  | .063  | .149   |
| MEAN RADIUS                   | .648   | .560  | .560  | .551   |
| MAX RADIUS                    | 1.211  | .843  | .843  | .807   |
| HORIZONTAL SPREAD             | 1.507  | 1.507 | 1.507 | 1.507  |
| VERTICAL SPREAD               | 1.851  | 1.409 | 1.409 | 1.170  |
| EXTREME SPREAD                | 2.020  | 1.512 | 1.512 | 1.512  |
| NUMBER IN ONE INCH CIRCLE =   |        | 4     | 4     | 4      |
| NUMBER IN TWO INCH CIRCLE =   |        | 9     | 9     | 9      |
| NUMBER IN THREE INCH CIRCLE = |        | 10    | 10    | 10     |

13 Jun 1990

FILE:/PATTERNING/CENTERFIRE\_PATT/06498746

# CENTERFIRE PATTERNS # 4



# OF SHOTS= 10

# IN CIR

1in = 2

2in = 4

3in = 9

HS= 1.789

VS= 2.687

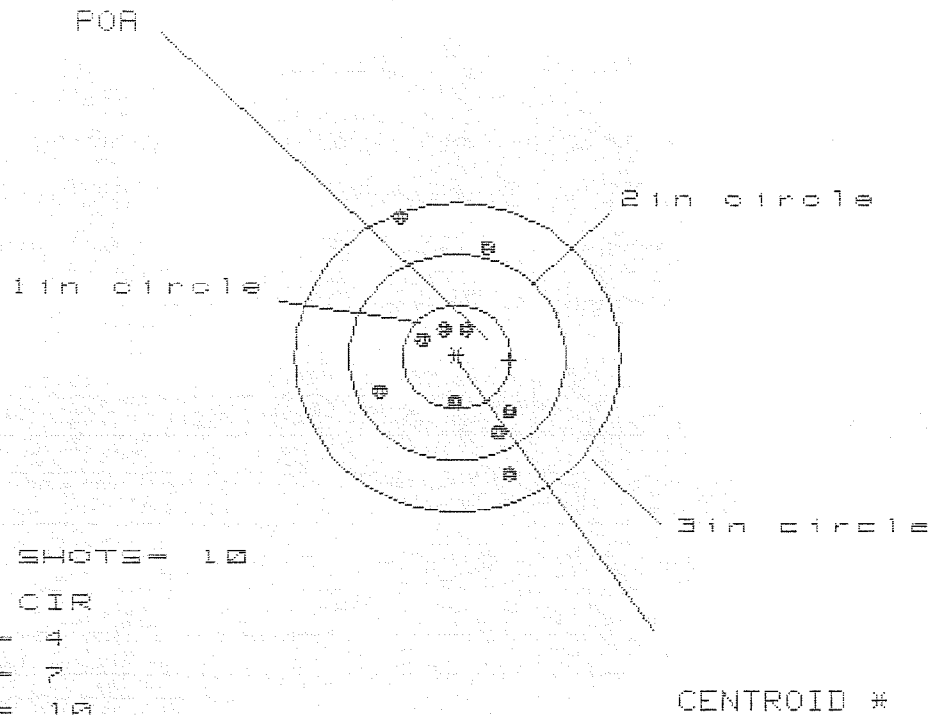
GS= 2.687

| PATTERN #                     | 4      | 9      | 8      |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF)               | 10     | 9      | 8      |
| MAXIMUM X                     | .813   | .837   | .837   |
| MINIMUM X                     | -.976  | -.952  | -.952  |
| MAXIMUM Y                     | 1.199  | 1.033  | .828   |
| MINIMUM Y                     | -1.488 | -1.643 | -1.467 |
| CENTROID X                    | -.513  | -.537  | -.537  |
| CENTROID Y                    | -.539  | -.373  | -.168  |
| POA TO CENTROID in.           | .744   | .654   | .563   |
| MIN RADIUS                    | .109   | .263   | .459   |
| MEAN RADIUS                   | 1.001  | .938   | .832   |
| MAX RADIUS                    | 1.504  | 1.643  | 1.472  |
| HORIZONTAL SPREAD             | 1.789  | 1.789  | 1.789  |
| VERTICAL SPREAD               | 2.687  | 2.676  | 2.295  |
| EXTREME SPREAD                | 2.687  | 2.685  | 2.297  |
| NUMBER IN ONE INCH CIRCLE =   | 2      |        |        |
| NUMBER IN TWO INCH CIRCLE =   | 4      |        |        |
| NUMBER IN THREE INCH CIRCLE = | 9      |        |        |

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# CENTERFIRE PATTERNS # 5



# OF SHOTS= 10

# IN CIR

1in = 4

2in = 7

3in = 10

HS= 1.203

VS= 2.425

GS= 2.604

| PATTERN #                     | 5      | 9     | 8     |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF)               | 10     | 9     | 8     |
| MAXIMUM X                     | .454   | .397  | .445  |
| MINIMUM X                     | -.749  | -.806 | -.758 |
| MAXIMUM Y                     | 1.322  | 1.207 | 1.088 |
| MINIMUM Y                     | -1.103 | -.956 | -.729 |
| CENTROID X                    | -.482  | -.425 | -.473 |
| CENTROID Y                    | .030   | -.117 | .002  |
| POA TO CENTROID in.           | .483   | .441  | .473  |
| MIN RADIUS                    | .271   | .265  | .300  |
| MEAN RADIUS                   | .742   | .664  | .604  |
| MAX RADIUS                    | 1.417  | 1.224 | 1.116 |
| HORIZONTAL SPREAD             | 1.203  | 1.203 | 1.203 |
| VERTICAL SPREAD               | 2.425  | 2.163 | 1.817 |
| EXTREME SPREAD                | 2.604  | 2.171 | 1.824 |
| NUMBER IN ONE INCH CIRCLE =   | 4      |       |       |
| NUMBER IN TWO INCH CIRCLE =   | 7      |       |       |
| NUMBER IN THREE INCH CIRCLE = | 10     |       |       |