

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
 K.W. Soucy
 G.J. Hill
 J.R. Snedeker
 R.S. Murphy
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 870211
 JANUARY 30, 1987

MODEL 700 CLASSIC 338 WIN MAG TRIAL AND PILOT RIFLES
 VISUAL, ACCURACY AND FUNCTION

MODEL 700 CLASSIC 338 WIN MAG TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 Classic, 338 Win Mag caliber rifle, to be acceptable. The Trial and Pilot Evaluation consisted of Visual Inspection, Accuracy, and Function. The eight rifle sample was found to be within Remington Specifications for each phase of the Trial and Pilot Evaluation.

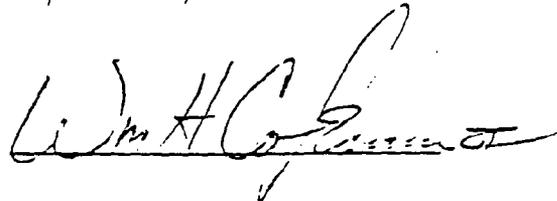
Prepared by: F.L. SUPRY
Date Prepared: 1/30/87

proofread and cleared by:

J.R. SNEDEKER, Research Supervisor
Test, Measurement & Mech. Analysis Lab



W.H. COLEMAN, II
New Products Research Lab Director



REPORT# 870211

WORK ORDER# B-0504-000
DATE: JANUARY 30, 1987

TO: J.R. SNEDEKER

FROM: F.L. SUPRY

TITLE: ACCURACY AND FIELD FUNCTION: MODEL 700 CLASSIC 338 WIN MAG

ABSTRACT:

On January 21, 1987 a request was received to conduct a Visual, Accuracy and Function evaluation of the Model 700 Classic 338 WIN MAG caliber, Trial and Pilot rifles currently in the warehouse. Eight rifles were randomly selected from the warehouse.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The eight rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. VISUAL:

a. The overall appearance of the rifles was very good.

B. ACCURACY:

a. Average group size = 2.43 inches center to center

C. FUNCTION:

a. No malfunctions occurred.

TEST REPORT:

1. ACCURACY:

- A. The Remington specification for group size is 3.5 inches, center to center.
- B. Three (3) rifles were tested for 100 yard accuracy and the following results were established:

| | GROUP NUMBER | | | AVERAGE |
|-------------------|--------------|----------|----------|----------|
| | 1 | 2 | 3 | |
| Rifle# B6830009 - | 1.65 in. | 2.29 in. | 2.69 in. | 2.21 in. |
| Rifle# B6833596 - | 2.65 in. | 3.79 in. | 1.81 in. | 2.65 in. |
| Rifle# B6830876 - | 2.64 in. | 2.79 in. | 1.88 in. | 2.44 in. |

2. FUNCTION:

- A. Three rifles were subjected to a 30 round per rifle, Function Test and the following results were obtained:
 - a. No malfunctions occurred.

TEST PROCEDURE:

1. ACCURACY

- A. The following three (3) rifles were used in the 100 yard accuracy test:

| | | |
|----------|----------|----------|
| B6830009 | B6833596 | B6830876 |
|----------|----------|----------|
- B. The accuracy was shot by the Custom Shop, at the R & D 100 yard range.
- C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.
- D. Winchester ammunition; index X3381, code 9WC61, 200 grain soft point, was used for the 100 yard accuracy test.
- E. Before shooting the 100 yard accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.

TEST PROCEDURE: (continued)

1. ACCURACY (continued)

- F. A total of three (3), five (5) shot groups were shot with each rifle. The rifles were cooled between each group, and one (1) "warmer" shot was fired before the next group was shot.
- G. The patterns were analyzed for group size, and averages were calculated for each rifle.

2. VISUAL:

- A. The visual inspection committee consisted of G.Hill, J. Willoughby (P. E. & C.); F. Supry, and J. Selan (R. & D.).
- B. Five (5) rifles were selected, using random number tables, from a sample lot of eight rifles.
- C. The rifles used in the Visual Inspection were:
B6833465 B6830372 B6829175 B6833550 B6831373
- D. Each rifle was wiped down with a clean white Coyne towel, and examined by each member of the Visual Inspection Committee. All comments were recorded, and are included in this report.

3. FUNCTION:

- A. The following three rifles were selected for the Function Test:
B6830009 B6833596 B6830876
- B. The three rifles were subjected to the loading and firing of 30 rounds of Winchester ammunition (15 rounds of 200 grain, and 15 rounds of 225 grain). Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool and then the procedure repeated with the remaining ammunition type.
- C. The following ammunition was used in the function test:
 - a. X3381 200 grain soft point
 - b. X3382 225 grain soft point

VISUAL INSPECTION MODEL 700 CLASSIC 338 WIN MAG CALIBER

| <u>SERIAL NUMBER</u> | <u>-----COMMENTS-----</u> |
|----------------------|---|
| B6833465 | SMALL NICKS IN RIGHT SIDE OF BBL GROOVE - BURNISH MARK ON THE RECOIL PAD - SLIGHT TURN MARKS ON RIGHT SIDE OF BBL, UNDER THE FRONT SIGHT BASE. |
| B6830372 | ROUGH FILL IN THE BOLT HANDLE SLOT - FLOOR PLATE SLIGHTLY LOOSE - PITS ON THE BOLT PLUG. |
| B6829175 | FIBER THREAD UNDER THE RECOIL PAD - SLIGHT MAR ON THE SIGHT SCREW - INCOMPLETE POLISH ON THE FIRING PIN HEAD - FLOOR PLATE SLIGHTLY LOOSE. |
| B6833550 | SLIGHT BREAKOUT OF STOCK AT THE RAIL ON THE RIGHT SIDE OF THE RECEIVER - RECEIVER SEEMS TO SET TOO DEEP IN THE STOCK - FLOOR PLATE TAKEDOWN SCREW MARRED. |
| B6831373 | NICK ON THE FLOOR PLATE - EXCESSIVE SANDING IN THE BOLT HANDLE SLOT AREA - FIBER THREAD UNDER RECOIL PAD. |

IN GENERAL THESE WERE VERY GOOD LOOKING RIFLES. THE CHECKERING WAS CLEAR, AND THE WOOD AND METAL FINISHES WERE EXCELLENT. THE VISUAL INSPECTION COMMITTEE FINDS THE VISUAL INSPECTION OF THE MODEL 700 CLASSIC 338 WIN MAG TO BE ACCEPTABLE.

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.**PETERS****"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____**

xc: W.H. Coleman, II/File
 K.W. Soucy
 G.J. Hill
 J.R. Snedeker
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 870641
MARCH 12, 1987

MODEL 700 LEFT HAND - TRIAL AND PILOT EVALUATION
243 WIN AND 308 WIN CALIBERS

MODEL 700 LEFT HAND 243 WIN AND 308 WIN TRIAL AND PILOT EVALUATION

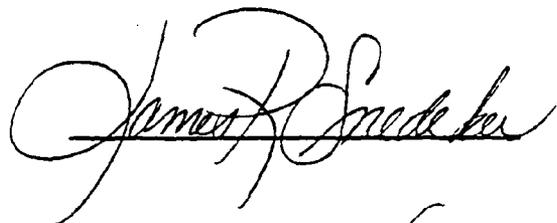
ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 left hand 243 win caliber, and the Model 700 left hand 308 win caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Visual Inspection, Accuracy, and Function. The ten rifle sample (five rifles of each caliber) was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

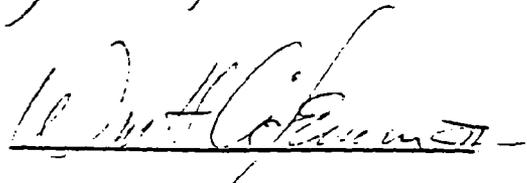
Prepared by: F.L. Supry
Date prepared: 12 march 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab



W.H. Coleman, II
New Products Research Lab Director



REPORT# 870641

WORK ORDER# 81411-905

To: J.R. Snedeker

From: F.L. Supry

MODEL 700 LEFT HAND (243 WIN, AND 308 WIN) TRIAL AND PILOT EVALUATION

INTRODUCTION:

On March 5, 1987 a request was received to conduct a Visual, Accuracy, and Function Evaluation of the Model 700 left hand (243 Win and 308 Win caliber) Trial and Pilot rifles. Five rifles of each caliber were randomly selected from production.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The ten rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. VISUAL:

a. The overall appearance of the rifles was good.

B. ACCURACY: (Average group size)

- a. 243 Win = 1.972 inches.
- b. 308 Win = 1.749 inches.

C. FUNCTION:

a. No malfunctions occurred.

TEST REPORT:

1. VISUAL:

- A. The visual inspection committee felt that the following two items need to be checked more thoroughly:
 - a. Finish peeling by the grip checkering.
 - b. Rear sight being raised off the ramp.
- B. Data sheets containing the comments on each rifle inspected is included in the appendix of this report.

2. ACCURACY:

- A. The Remington Specification for group size is as follows:
 - a. 243 Win caliber: 2.2 inches, center to center.
 - b. 308 Win caliber: 3.5 inches, center to center.
- B. Three rifles of each caliber were tested for 100 yard accuracy and the following results were obtained.

| 243 WIN CALIBER | GROUP | | | AVG |
|-------------------|-------|-------|-------|-------|
| | 1 | 2 | 3 | |
| Rifle# B6850372 - | 2.305 | 2.329 | 1.505 | 2.046 |
| Rifle# B6849949 - | 1.815 | 1.666 | 1.603 | 1.695 |
| Rifle# B6849906 - | 2.603 | 1.527 | 2.395 | 2.175 |

OVERALL GROUP SIZE AVERAGE = 1.972 INCHES

308 WIN CALIBER

| | | | | |
|-------------------|-------|-------|-------|-------|
| Rifle# B6851090 - | 2.337 | 1.852 | 1.713 | 1.968 |
| Rifle# B6851007 - | 1.497 | 2.266 | 1.188 | 1.650 |
| Rifle# B6851094 - | 1.324 | 2.204 | 1.356 | 1.628 |

OVERALL GROUP SIZE AVERAGE = 1.749

3. FUNCTION:

- A. Three rifles of each caliber were subjected to a 30 round per rifle, function test and the following results were obtained:
 - a. No malfunctions occurred.

TEST PROCEDURE:

1. VISUAL:

- A. The visual inspection committee consisted of G. Hill, G. Barnes (P.E. & C.); J. Baggetta, C. Stephens, and F. Supry (R. & D.).
- B. All five rifles of each caliber were used in the visual inspection. The rifles were as follows:
- a. 243 Win caliber:
B6849906 B6849999 B6849949 B6849965 B6850372
 - b. 308 Win caliber:
B6851094 B6851145 B6851007 B6850969 B6851090
- C. Each rifle was wiped down with a clean white Coyne towel, and examined by each member of the visual inspection committee. All comments were recorded, and are included in the appendix of this report.

2. ACCURACY:

- A. The following rifles were used in the 100 yard accuracy test:
- a. 243 Win caliber:
B6850372 B6849949 B6849906
 - b. 308 Win caliber:
B6851090 B6851007 B6851094
- B. The accuracy was shot by C. Stephens, at the R&D 100 yard range located in building 52-1.
- C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.
- D. Remington ammunition; index R243W3, code W20LD0948, and index R308W3, code C13TC6305 was used for the 100 yard accuracy test.
- E. Before shooting the accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.
- F. A total of three, five shot groups were shot with each rifle. The rifles were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- G. The targets were analyzed for group size and the averages calculated, using the HP 9000 computer and digitizing tablet.

TEST PROCEDURE: (continued)

3. FUNCTION:

A. The following rifles were selected for the function test:

- a. 243 Win Caliber:
B6849906 B6849999 B6849965
- b. 308 Win caliber:
B6851007 B6851145 B6850969

B. Each of the rifles was subjected to the loading and firing of 30 rounds of Remington ammunition (15 rounds of 80 grain and 15 rounds of 100 grain for the 243 Win caliber rifles, and 15 rounds of 55 grain and 15 rounds of 180 grain for the 308 Win caliber rifles). Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool, and then the procedure was repeated with the remaining ammunition type.

C. The following ammunition was used in the function test:

- a. R243W1 - 80 grain pointed soft point.
- b. R243W3 - 100 grain pointed soft point.
- c. R308W5 - 55 grain Win accelerator.
- d. R308W2 - 180 grain soft point.

REPORT# 870641

WORK ORDER# 81411-905

APPENDIX

REPORT# 870641

WORK ORDER# 81411-905

VISUAL INSPECTION MODEL 700 LEFT HAND 243 WIN AND 308 WIN CALIBERS

243 WIN CALIBER:

| <u>SERIAL NUMBER</u> | <u>COMMENTS</u> |
|----------------------|--|
| B6849906 | FINISH PEELING AT GRIP CHECKERING. BRIGHT MARK ON THE BARREL. SMALL PIMPLES IN THE FINISH NEAR THE STUD, AT THE FORE END TIP. |
| B6849999 | SMALL CHIP ON GRIP CAP. SMALL PIMPLES IN THE FINISH, ON THE RIGHT SIDE OF THE STOCK NEAR THE TRIGGER GUARD. SLIGHT CRACK IN THE BOLT HANDLE SLOT, AND SANDING BREAKTHROUGH IN THE SAME AREA. |
| B6849949 | REAR SIGHT RAISED OFF THE SLIDE. MAR ON THE TRIGGER GUARD. BLEED OUT ON THE CROSS PIN. SLIGHT DING IN THE STOCK, LEFT SIDE NEAR FORE END TIP. |
| B6849965 | GAP BOTH SIDES OF THE BUTT PLATE. SCRATCH LEFT SIDE OF STOCK BY THE RECEIVER. |
| B6850372 | FINISH PEELING RIGHT SIDE OF STOCK NEAR THE CHECKERING. |

308 WIN CALIBER:

| | |
|----------|---|
| B6851094 | SLIGHT DING ON THE FLOOR PLATE, RIGHT SIDE. |
| B6851145 | MAR ON THE FLOOR PLATE, LEFT SIDE. TWO SLIGHT DINGS ON THE BUTT PLATE. BUTT PLATE INSERT NOT FLUSH. |
| B6851007 | FINISH RUN NEAR THE CHECKERING. SPACE UNDER FORE END TIP. |
| B6850969 | DENT ON THE TOP OF THE STOCK, NEAR THE REAR SWIVEL. TWO SLIGHT DINGS ON THE RIGHT SIDE OF THE TRIGGER GUARD. REAR SIGHT RAISED OFF OF RAMP. |
| B6851090 | SLIGHT DING, LEFT SIDE OF STOCK, NEAR THE BOLT HANDLE SLOT. EXCESSIVE WOOD MARGIN AT THE SAFETY SLOT. BOLT HANDLE SLOT IS ROUGH. |

xc: W.H. Coleman, II/File
K.W. Soucy
G.J. Hill
J.R. Snedeker
F.L. Supry
File

RESEARCH TEST AND MEASUREMENT REPORT

**REPORT# 870641
MARCH 12, 1987**

**MODEL 700 LEFT HAND - TRIAL AND PILOT EVALUATION
243 WIN AND 308 WIN CALIBERS**

MODEL 700 LEFT HAND 243 WIN AND 308 WIN TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 left hand 243 win caliber, and the Model 700 left hand 308 win caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Visual Inspection, Accuracy, and Function. The ten rifle sample (five rifles of each caliber) was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

Prepared by: F.L. Supry
Date prepared: 12 march 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. Coleman, II
New Products Research Lab Director

RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

| | |
|---|---|
| <input type="checkbox"/> Developmental <input type="checkbox"/> Design Acceptance <input type="checkbox"/> Pre-Pilot <input type="checkbox"/> Pilot <input checked="" type="checkbox"/> Production Acceptance | AREA OF TESTING <input type="checkbox"/> Safety Related <input type="checkbox"/> Litigation <input type="checkbox"/> Competitive Evaluation <input type="checkbox"/> Warehouse Audit <input type="checkbox"/> New Design <input type="checkbox"/> Cost Reduction <input type="checkbox"/> Design Change Stake _____ <input type="checkbox"/> Plant Assistance <input checked="" type="checkbox"/> Other <u>T & P</u> |
|---|---|

| | | |
|--|---|--|
| FIREARM STAT'S MODEL: <u>700 left hand</u> CAL or GAGE: <u>243 & 308</u> BARREL TYPE: _____ PROOFED: YES <input checked="" type="checkbox"/> NO _____ | REPORT REQ'D. FORMAL <input checked="" type="checkbox"/> TEST RESULTS ONLY _____ | DATE REQUESTED: <u>3/5/87</u> DATE NEEDED BY: _____ REQUESTED BY: <u>GJ Hill</u> WORK ORDER NO: _____ |
|--|---|--|

| | | | |
|---|---|---|---|
| TEST TYPE | | | |
| <input type="checkbox"/> Strength Test | <input type="checkbox"/> Ammunition Test | <input type="checkbox"/> Dry Cycle Test | <input type="checkbox"/> Photo/Video |
| <input checked="" type="checkbox"/> Function Test | <input type="checkbox"/> Environmental Test | <input type="checkbox"/> Measurements | <input checked="" type="checkbox"/> Other <u>VISUAL</u> |
| <input checked="" type="checkbox"/> Accuracy Test | <input type="checkbox"/> Customer Complaint | <input type="checkbox"/> Endurance Test | _____ |

EXPLAIN IN DETAIL THE REASON FOR THIS TEST:

Trial & Pilot of left hand model 700's in the 243 & 308 calibers.

① Visual, ② ACCURACY, ③ FUNCTION

- ① All ten
- ② 3 of each caliber at 100 yards
- ③ All ten

-GUNS REQUIRED:

5 of each caliber

| | |
|---|---|
| NOTE: NO firearms or parts will be tested in the Labs unless they are accompanied by a Work Request, and both are delivered to the Labs by the designer or engineer. All Work Requests are to be filled out in detail. No Exceptions. | DATE COMPLETED: _____ TEST COMPLETED BY: _____ REPORT DATE: _____ |
|---|---|

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
K.W. Soucy
G.J. Hill
J.R. Snedeker
J.F. Matousek, Jr
F.L. Supry
File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 871112
APRIL 29, 1987

MODEL 700 FS TRIAL AND PILOT EVALUATION

308 WIN CALIBER

MODEL 700 FS 308 WIN CALIBER - TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 FS 308 win caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Visual Inspection, Accuracy, and Function. The eight rifle sample (four rifles with gray stocks and four rifles with camo stocks) was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

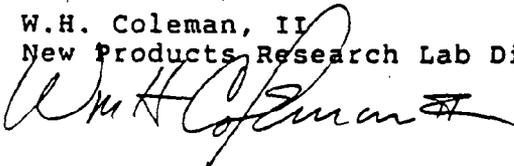
Prepared by: F.L. Supry
Date prepared: 29 April 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab



W.H. Coleman, II
New Products Research Lab Director



REPORT# 871112

WORK ORDER# 81389-914

To: J.R. Snedeker

From: F.L. Supry

MODEL 700 FS 308 WIN CALIBER - TRIAL AND PILOT EVALUATION

INTRODUCTION:

On April 21, 1987 a request was received to conduct a Visual, Accuracy, and Function Evaluation of the Model 700 FS 308 Win caliber, Trial and Pilot rifles. Eight rifles, four of each stock option, were randomly selected from production.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The eight rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. VISUAL:

a. The overall appearance of the rifles was good.

B. ACCURACY: (Average group size)

- a. 308 Win (Gray) = 1.857 inches.
- b. 308 Win (Camo) = 1.832 inches.

C. FUNCTION:

a. No malfunctions occurred.

REPORT# 871112

WORK ORDER# 81389-914

TEST REPORT:

1. VISUAL:

- A. The visual inspection committee felt that the following three items need to be checked more thoroughly:
 - a. "F" stamp upsetting the receiver, near the bolt handle slot.
 - b. The Proof Stamp was light.
 - c. The swivels were off center.
- B. Data sheets containing the comments on each rifle inspected is included in the appendix of this report.

2. ACCURACY:

- A. The Remington Specification for group size is as follows:
 - a. 308 Win caliber: 3.5 inches, center to center.
- B. Two rifles of each stock option were tested for 100 yard accuracy and the following results were obtained.

| | | <u>GROUP</u> | | <u>AVG</u> |
|-----------------|---------|--------------|-------|------------|
| Gray Stock | 1 | 2 | 3 | |
| Rifle# B6848853 | - 1.738 | 1.409 | 1.444 | 1.530 |
| Rifle# B6848285 | - 2.542 | 2.382 | 1.626 | 2.183 |

OVERALL GROUP SIZE AVERAGE = 1.857 INCHES

Camo Stock

| | | | | |
|-----------------|---------|-------|-------|-------|
| Rifle# B6849758 | - 1.813 | 1.606 | 2.421 | 1.947 |
| Rifle# B6848296 | - 1.359 | 1.804 | 1.986 | 1.716 |

OVERALL GROUP SIZE AVERAGE = 1.832

3. FUNCTION:

- A. The rifles were subjected to a 30 round per rifle, function test and the following results were obtained:
 - a. No malfunctions occurred.

TEST PROCEDURE:

1. VISUAL:

- A. The visual inspection committee consisted of G. Hill, G. Barnes, P. Johnson, R. Long (P.E. & C.); R. Howe, and F. Supry (R. & D.).
- B. All four rifles of each stock option were used in the visual inspection. The rifles were as follows:
- a. Gray Stock:
B6848853 B6848285 B6849351 B6849316
- b. Camo Stock:
B6849330 B6849758 B6848296 B6849254
- C. Each rifle was wiped down with a clean white Coyne towel, and examined by each member of the visual inspection committee. All comments were recorded, and are included in the appendix of this report.

2. ACCURACY:

- A. The following rifles were used in the 100 yard accuracy test:
- a. Gray Stock:
B6848285 B6848853
- b. Camo Stock:
B6848296 B6849758
- B. The accuracy was shot by C. Stephens, at the R&D 100 yard range located in building 52-1.
- C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.
- D. Remington ammunition; index R308W3, code C13TC6305 was used for the 100 yard accuracy test.
- E. Before shooting the accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.
- F. A total of three, five shot groups were shot with each rifle. The rifles were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- G. The targets were analyzed for group size and the averages calculated, using the HP 9000 computer and digitizing tablet.

REPORT# 871112

WORK ORDER# 81389-914

TEST PROCEDURE: (continued)

3. FUNCTION:

A. All four rifles of each stock option were used in the function test. The rifles were as follows:

a. Gray Stock:

B6848853 B6848285 B6849351 B6849316

b. Camo Stock:

B6849330 B6849758 B6848296 B6849254

B. Each of the rifles was subjected to the loading and firing of 30 rounds of Remington 308 Win caliber ammunition (15 rounds of 55 grain and 15 rounds of 180 grain). Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool, and then the procedure was repeated with the remaining ammunition type.

C. The following ammunition was used in the function test:

a. R308W5 - 55 grain Win accelerator.

b. R308W2 - 180 grain soft point.

REPORT# 871112

WORK ORDER# 81389-914

APPENDIX

REPORT# 871112

WORK ORDER# 81389-914

VISUAL INSPECTION MODEL 700 FS 308 WIN CALIBERS

Gray Stock:

| <u>SERIAL NUMBER</u> | <u>COMMENTS</u> |
|----------------------|--|
| B6848853 | MISMATCH ON THE TRIGGER GUARD. POOR COLOR ON THE BOLT. LIGHT PROOF MARK. |
| B6848285 | POOR COLOR ON THE BOLT. LIGHT PROOF MARK. |
| B6849351 | LIGHT PROOF MARK. GOUGE IN THE SAFETY SLOT. |
| B6849316 | MAR ON THE TRIGGER GUARD. LIGHT PROOF MARK. |

Camo Stock:

| | |
|----------|---|
| B6849330 | SLIGHT BLEMISH OVER SERIAL NUMBER. LIGHT PROOF MARK. REAR SWIVEL OFF CENTER. BRIGHT MAR ON THE BOLT PLUG. |
| B6849758 | LIGHT PROOF MARK. REAR SWIVEL OFF CENTER. BRIGHT MAR ON THE BOLT PLUG. |
| B6848296 | LIGHT PROOF MARK. BRIGHT MAR ON THE BOLT PLUG. |
| B6849254 | LIGHT PROOF MARK. BRIGHT MAR ON THE BOLT PLUG. |

GENERAL COMMENTS:

THE BRIGHT MAR ON THE BOLT PLUGS WAS CAUSED BY THE "F" STAMP ON THE RECEIVER BEING STAMPED CLOSE TO THE EDGE, UPSETTING THE SLOT.

THE STYLE OF BARREL FINISH CONTRIBUTES TO THE PROOF MARK BEING LIGHT.

THE SWIVELS ARE PUT IN SLIGHTLY OFF CENTER BY THE VENDOR.

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.



PETERS



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
K.W. Soucy
G.J. Hill
T.C. Douglas
J.R. Snedeker
J.F. Matousek, Jr.
F.L. Supry
File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 871383
MAY 28, 1987

MODEL 700 "POLICE" 223 REM CALIBER BOLT ACTION RIFLES

TRIAL AND PILOT EVALUATION

MODEL 700 "POLICE" 223 REM CALIBER - TRIAL AND PILOT EVALUATION

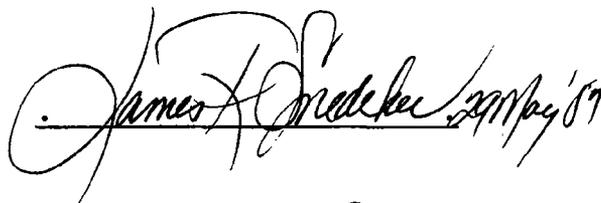
ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 "Police" 223 Rem caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Accuracy, and Function. The five rifle sample was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

Prepared by: F.L. Supry
Date prepared: 28 May 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab



W.H. Coleman, II
New Products Research Lab Director



REPORT# 871383

WORK ORDER# 82034-905

To: J.R. Snedeker

From: F.L. Supry

MODEL 700 "POLICE" 223 REM CALIBER - TRIAL AND PILOT EVALUATION

INTRODUCTION:

On May 18, 1987 a request was received to conduct an Accuracy, and Function Evaluation of the Model 700 "Police" 223 Rem caliber, Trial and Pilot rifles. Five rifles were randomly selected from production.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The five rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. ACCURACY: (Average group size)

a. 223 Rem = 1.009 inches.

C. FUNCTION:

a. No malfunctions occurred.

REPORT# 871383

WORK ORDER# 82034-905

TEST REPORT

1. ACCURACY:

A. The Remington Specification for group size is as follows:

a. 223 Rem caliber: 1.5 inches, center to center.

B. Three rifles tested for 100 yard accuracy and the following results were obtained.

| | | GROUP | | | AVG |
|--------|----------|---------|-------|-------|-------|
| | | 1 | 2 | 3 | |
| Rifle# | B6853162 | - 0.795 | 1.144 | 0.911 | 0.950 |
| Rifle# | B6853148 | - 1.571 | 0.881 | 1.465 | 1.304 |
| Rifle# | B6853242 | - 1.089 | 0.560 | 0.672 | 0.774 |

OVERALL GROUP SIZE AVERAGE = 1.009 INCHES

3. FUNCTION:

A. The rifles were subjected to a 30 round per rifle, function test and the following results were obtained:

a. No malfunctions occurred.

TEST PROCEDURE:

1. ACCURACY:

A. The following rifles were used in the 100 yard accuracy test:

B6853162 B6853148 B6853242

B. The accuracy was shot by J.E. Selan, at the R&D 100 yard range located in building 52-1.

C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.

D. Remington ammunition; index R223R3 , code A06ID was used for the 100 yard accuracy test.

REPORT# 871383

WORK ORDER# 82034-905

TEST PROCEDURE: (continued)

1. ACCURACY: (continued)

- E. Before shooting the accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.
- F. A total of three, five shot groups were shot with each rifle. The rifles were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- G. The targets were analyzed for group size and the averages calculated, using the HP 9000 computer and digitizing tablet.

2. FUNCTION:

- A. Three rifles were used in the function test. The rifles were as follows:

B6853162 B6853148 B6853242

- B. Each of the rifles was subjected to the loading and firing of 30 rounds of Remington 223 Rem caliber ammunition (15 rounds of 55 grain metal case, and 15 rounds of 55 grain pointed soft point). Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool, and then the procedure was repeated with the remaining ammunition type.
- C. The following ammunition was used in the function test:
 - a. R223R1 - 55 grain pointed soft point.
 - b. R223R3 - 55 grain metal case.

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.**PETERS**

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
 K.W. Soucy
 G.J. Hill
 T.C. Douglas
 J.R. Snedeker
 J.F. Matousek, Jr.
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 871383
MAY 28, 1987

MODEL 700 "POLICE" 223 REM CALIBER BOLT ACTION RIFLES

TRIAL AND PILOT EVALUATION

MODEL 700 "POLICE" 223 REM CALIBER - TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700 "Police" 223 Rem caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Accuracy, and Function. The five rifle sample was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

Prepared by: F.L. Supry
Date prepared: 28 May 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. Coleman, II
New Products Research Lab Director

REPORT# 871383

WORK ORDER# 82034-905

To: J.R. Snedeker

From: F.L. Supry

MODEL 700 "POLICE" 223 REM CALIBER - TRIAL AND PILOT EVALUATION

INTRODUCTION:

On May 18, 1987 a request was received to conduct an Accuracy, and Function Evaluation of the Model 700 "Police" 223 Rem caliber, Trial and Pilot rifles. Five rifles were randomly selected from production.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The five rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. ACCURACY: (Average group size)

a. 223 Rem = 1.009 inches.

C. FUNCTION:

a. No malfunctions occurred.

REPORT# 871383

WORK ORDER# 82034-905

TEST REPORT

1. ACCURACY:

A. The Remington Specification for group size is as follows:

a. 223 Rem caliber: 1.5 inches, center to center.

B. Three rifles tested for 100 yard accuracy and the following results were obtained.

| | | | GROUP | | AVG |
|-----------------|---|-------|-------|-------|-------|
| | 1 | | 2 | 3 | |
| Rifle# B6853162 | - | 0.795 | 1.144 | 0.911 | 0.950 |
| Rifle# B6853148 | - | 1.571 | 0.881 | 1.465 | 1.304 |
| Rifle# B6853242 | - | 1.089 | 0.560 | 0.672 | 0.774 |

OVERALL GROUP SIZE AVERAGE = 1.009 INCHES

3. FUNCTION:

A. The rifles were subjected to a 30 round per rifle, function test and the following results were obtained:

a. No malfunctions occurred.

TEST PROCEDURE:

1. ACCURACY:

A. The following rifles were used in the 100 yard accuracy test:

B6853162 B6853148 B6853242

B. The accuracy was shot by J.E. Selan, at the R&D 100 yard range located in building 52-1.

C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.

D. Remington ammunition; index R223R3 , code A06ID was used for the 100 yard accuracy test.

TEST PROCEDURE: (continued)

1. ACCURACY: (continued)

- E. Before shooting the accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.
- F. A total of three, five shot groups were shot with each rifle. The rifles were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- G. The targets were analyzed for group size and the averages calculated, using the HP 9000 computer and digitizing tablet.

2. FUNCTION:

- A. Three rifles were used in the function test. The rifles were as follows:

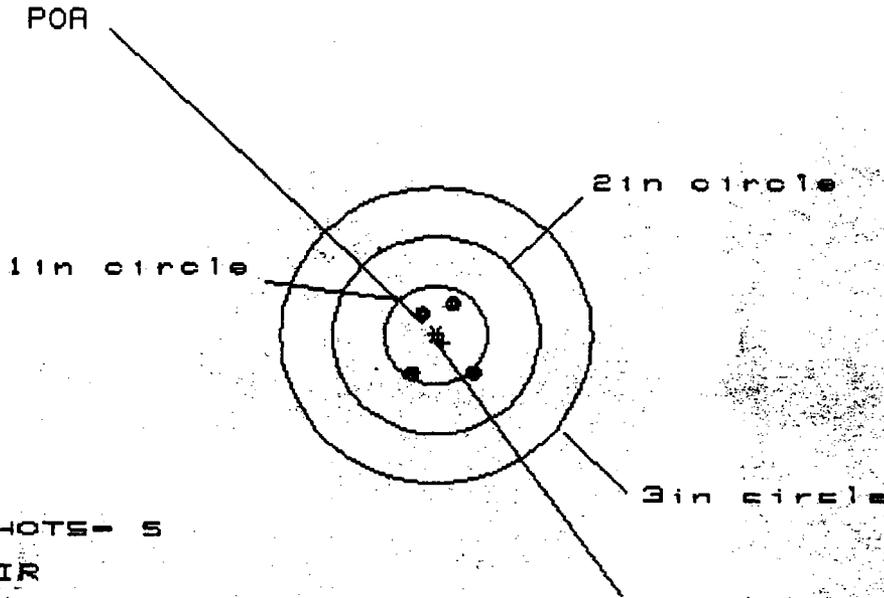
B6853162 B6853148 B6853242

- B. Each of the rifles was subjected to the loading and firing of 30 rounds of Remington 223 Rem caliber ammunition (15 rounds of 55 grain metal case, and 15 rounds of 55 grain pointed soft point). Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool, and then the procedure was repeated with the remaining ammunition type.
- C. The following ammunition was used in the function test:
 - a. R223R1 - 55 grain pointed soft point.
 - b. R223R3 - 55 grain metal case.

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853182

CENTERFIRE PATTERNS # 1



OF SHOTS- 5
 # IN CIR
 1 in = 4
 2 in = 5
 3 in = 5
 HS = .578
 VS = .652
 GS = .795
 AVG = .950

CENTROID *

.223 POLICE M-700
TRIAL & PILOT

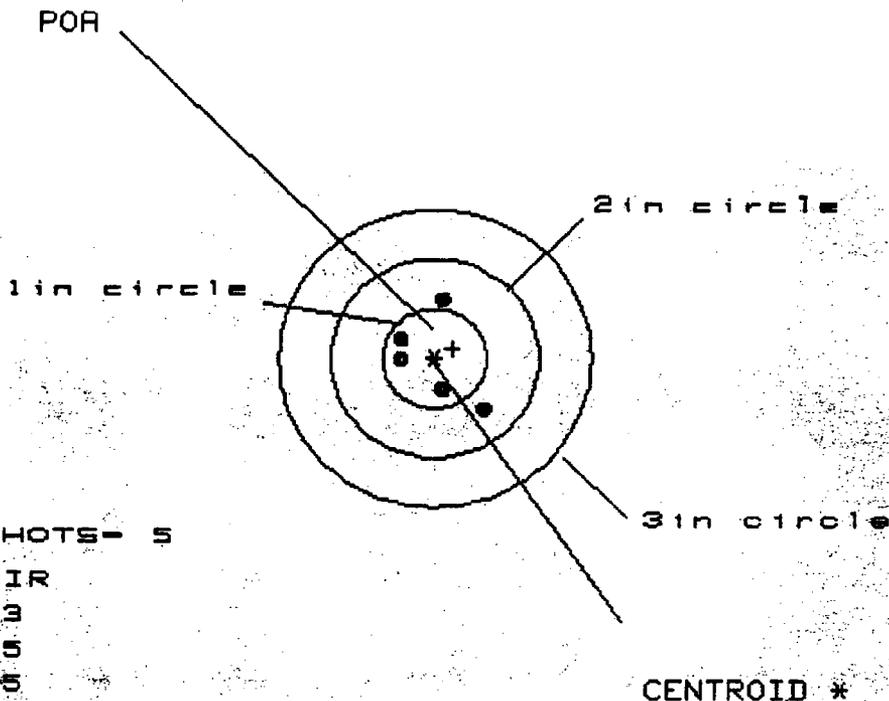
| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .401 | .247 | .188 |
| MINIMUM X | -.278 | -.178 | -.095 |
| MAXIMUM Y | .294 | .204 | .061 |
| MINIMUM Y | -.358 | -.430 | -.055 |
| CENTROID X | -.064 | -.164 | -.105 |
| CENTROID Y | .077 | .167 | .318 |
| POA TO CENTROID IN | .100 | .234 | .328 |
| MIN RADIUS | .222 | .094 | .095 |
| MEAN RADIUS | .359 | .256 | .134 |
| MAX RADIUS | .538 | .465 | .198 |
| HORIZONTAL SPREAD | .679 | .426 | .283 |
| VERTICAL SPREAD | .652 | .634 | .116 |
| EXTREME SPREAD | .795 | .763 | .304 |
| NUMBER IN ONE INCH CIRCLE | 4 | | |
| NUMBER IN TWO INCH CIRCLE | 5 | | |
| NUMBER IN THREE INCH CIRCLE | 5 | | |

100 YDS.
 SAND BAG REST
 AMMO.
 REMINGTON S&W MC
 2ST. 2061D.

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853162

CENTERFIRE PATTERNS # 2



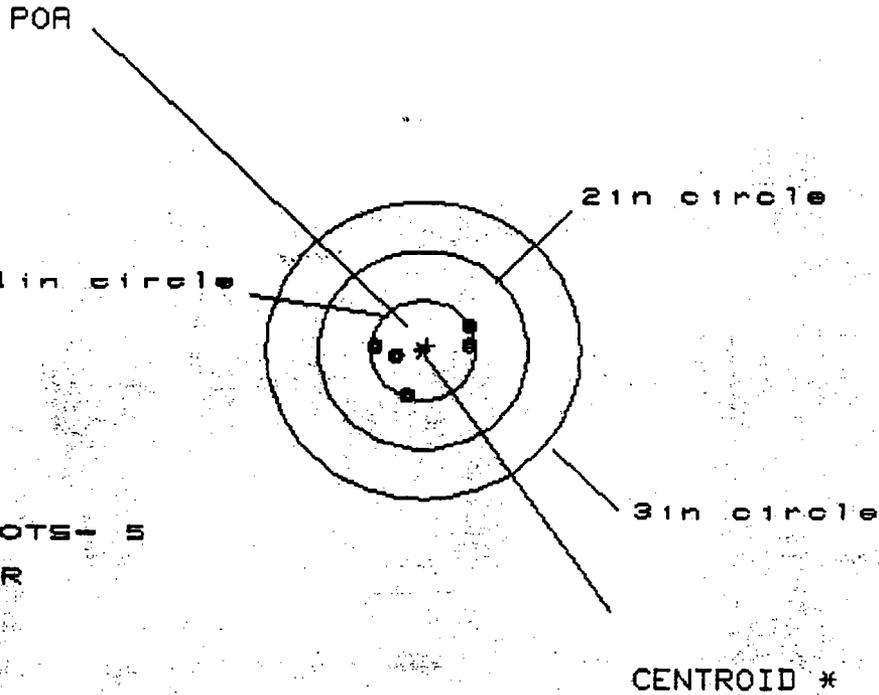
OF SHOTS - 5
 # IN CIR
 1 in = 3
 2 in = 5
 3 in = 0
 HS = .009
 VS = 1.072
 GS = 1.144

| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST DF) | 5 | 4 | 3 |
| MAXIMUM X | .483 | .205 | .261 |
| MINIMUM X | -.926 | -.205 | -.137 |
| MAXIMUM Y | .597 | .478 | .198 |
| MINIMUM Y | -.475 | -.397 | -.238 |
| CENTROID X | -.175 | -.296 | -.364 |
| CENTROID Y | -.097 | .022 | -.137 |
| POA TO CENTROID in | .200 | .297 | .389 |
| MIN RADIUS | .287 | .209 | .131 |
| MEAN RADIUS | .449 | .349 | .242 |
| MAX RADIUS | .678 | .528 | .353 |
| HORIZONTAL SPREAD | .909 | .418 | .398 |
| VERTICAL SPREAD | 1.072 | .675 | .436 |
| EXTREME SPREAD | 1.144 | .875 | .598 |
| NUMBER IN ONE INCH CIRCLE | = | 3 | |
| NUMBER IN TWO INCH CIRCLE | = | 5 | |
| NUMBER IN THREE INCH CIRCLE | = | 5 | |

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853162

CENTERFIRE PATTERNS # 3



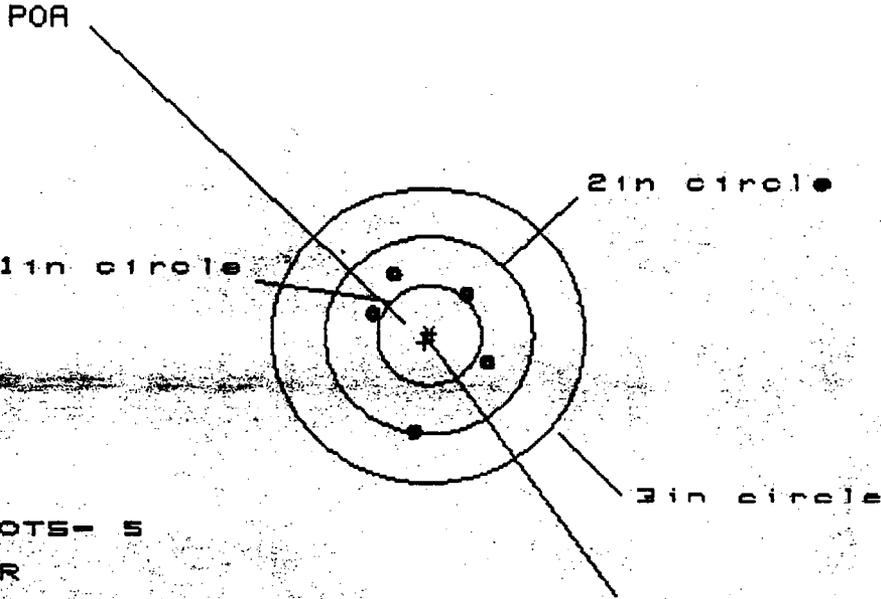
OF SHOTS - 5
 # IN CIR
 1 in = 4
 2 in = 5
 3 in = 5
 HS = .872
 VS = .715
 GS = .911

| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .422 | .528 | .413 |
| MINIMUM X | -.458 | -.344 | -.260 |
| MAXIMUM Y | .293 | .183 | .202 |
| MINIMUM Y | -.422 | -.348 | -.297 |
| CENTROID X | -.041 | -.147 | -.032 |
| CENTROID Y | -.047 | -.120 | -.172 |
| POA TO CENTROID in | .063 | .190 | .175 |
| MIN RADIUS | .253 | .152 | .277 |
| MEAN RADIUS | .428 | .357 | .357 |
| MAX RADIUS | .514 | .549 | .459 |
| HORIZONTAL SPREAD | .872 | .872 | .673 |
| VERTICAL SPREAD | .715 | .502 | .499 |
| EXTREME SPREAD | .911 | .872 | .754 |
| NUMBER IN ONE INCH CIRCLE | | 4 | |
| NUMBER IN TWO INCH CIRCLE | | 5 | |
| NUMBER IN THREE INCH CIRCLE | | 5 | |

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853148

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1in = 0
 2in = 5
 3in = 5
 HS = 1.071
 VS = 1.558
 GS = 1.571
 AVG. = 1.304

CENTROID *

.223 REM. TRAIL & PILOT
POLICE M-700

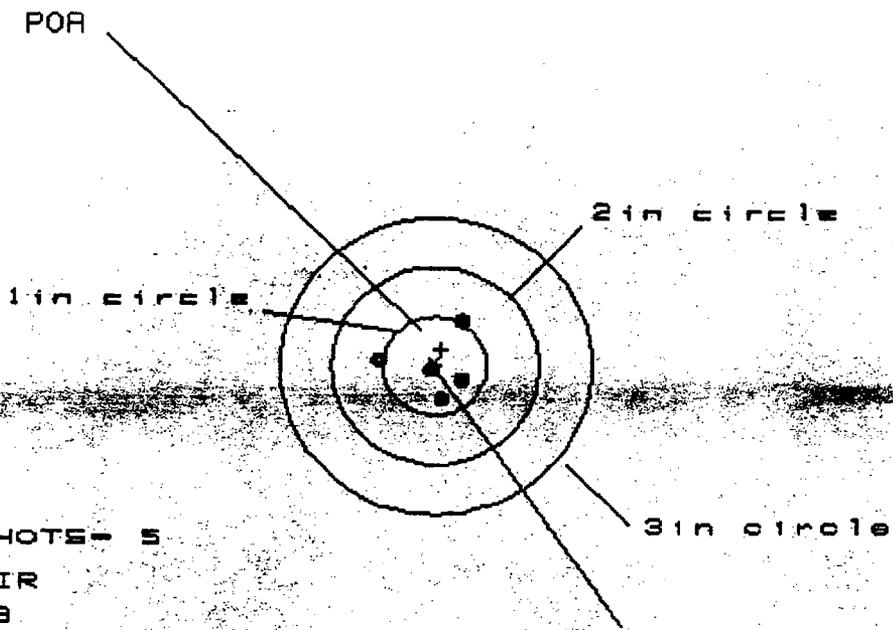
| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .562 | .530 | .411 |
| MINIMUM X | -.509 | -.540 | -.660 |
| MAXIMUM Y | .609 | .372 | .268 |
| MINIMUM Y | -.949 | -.496 | -.372 |
| CENTROID X | .041 | .072 | .192 |
| CENTROID Y | .073 | .310 | .186 |
| POINTED CENTROID (in) | .004 | .318 | .267 |
| MIN RADIUS | .552 | .395 | .365 |
| MEAN RADIUS | .674 | .544 | .529 |
| MAX RADIUS | .957 | .726 | .668 |
| HORIZONTAL SPREAD | 1.071 | 1.071 | 1.071 |
| VERTICAL SPREAD | 1.558 | .868 | .640 |
| EXTREME SPREAD | 1.571 | 1.242 | 1.172 |
| NUMBER IN ONE INCH CIRCLE | = | 0 | |
| NUMBER IN TWO INCH CIRCLE | = | 5 | |
| NUMBER IN THREE INCH CIRCLE | = | 5 | |

100 YDS.
 SAND BAG REST
 AMMO: REMINGTON
 55GR M.C. LOT# 19610

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/88853148

CENTERFIRE PATTERNS # 2



OF SHOTS = 5
 # IN CIR
 1 IN 3
 2 IN 5
 3 IN 5
 HS = .788
 VS = .773
 GS = .881

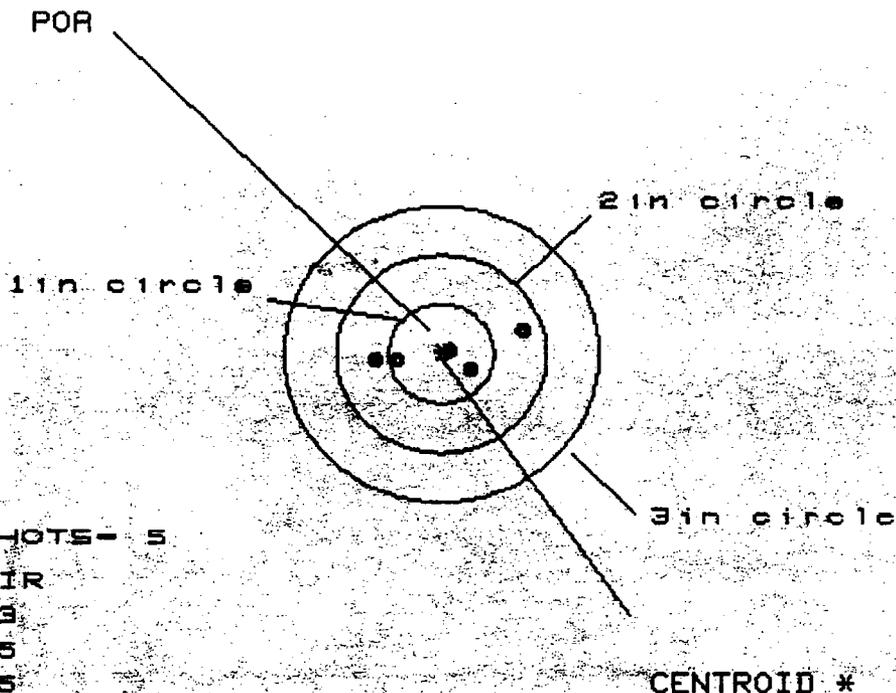
CENTROID *

| PATTERN # | 1 | 2 | 3 | 4 | 5 |
|-----------------------------|---|-------|-------|-------|---|
| SHOTS (BEST OF) | 1 | 5 | 4 | 3 | |
| MAXIMUM X | 1 | .279 | .342 | .189 | |
| MINIMUM X | 1 | -.519 | -.456 | -.177 | |
| MAXIMUM Y | 1 | .471 | .158 | .090 | |
| MINIMUM Y | 1 | -.382 | -.185 | -.132 | |
| CENTROID X | 1 | .058 | .120 | .032 | |
| CENTROID Y | 1 | .165 | .292 | .335 | |
| POA TO CENTROID DIST | 1 | .175 | .307 | .336 | |
| MIN RADIUS | 1 | .118 | .045 | .133 | |
| MEAN RADIUS | 1 | .958 | .275 | .175 | |
| MAX RADIUS | 1 | .539 | .483 | .198 | |
| HORIZONTAL SPREAD | 1 | .798 | .788 | .366 | |
| VERTICAL SPREAD | 1 | .773 | .343 | .222 | |
| EXTREME SPREAD | 1 | .881 | .816 | .369 | |
| NUMBER IN ONE INCH CIRCLE | 3 | | | | |
| NUMBER IN TWO INCH CIRCLE | 5 | | | | |
| NUMBER IN THREE INCH CIRCLE | 5 | | | | |

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853148

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 3
 2 in = 5
 3 in = 5
 HB = 1.448
 VS = .343
 GS = 1.465

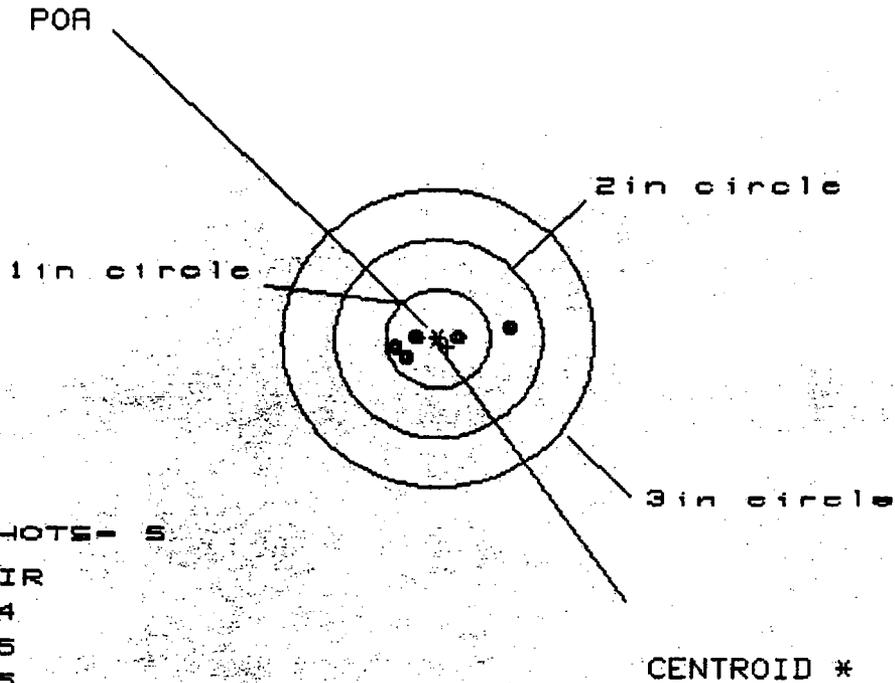
| PATTERN # | 1 | 2 | 3 |
|-------------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .789 | .454 | .297 |
| MINIMUM X | -.656 | -.471 | -.377 |
| MAXIMUM Y | .199 | .107 | .118 |
| MINIMUM Y | -.144 | -.095 | -.094 |
| CENTROID X | .075 | .070 | .113 |
| CENTROID Y | .063 | .067 | .107 |
| POA TO CENTROID IN. | .086 | .086 | .133 |
| MIN RADIUS | .078 | .124 | .142 |
| MEAN RADIUS | .453 | .453 | .276 |
| MAX RADIUS | .807 | .712 | .578 |
| HORIZONTAL SPREAD | 1.448 | .925 | .674 |
| VERTICAL SPREAD | .343 | .282 | .282 |
| EXTREME SPREAD | 1.465 | .934 | .676 |
| NUMBER IN ONE INCH CIRCLE = | 3 | 3 | 3 |
| NUMBER IN TWO INCH CIRCLE = | 5 | 5 | 5 |
| NUMBER IN THREE INCH CIRCLE = | 5 | 5 | 5 |



18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853242

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1 in = 4
 2 in = 5
 3 in = 5
 HS = 1.000
 VS = .244
 GS = 1.089
 AVG = .7737

| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .584 | .341 | .266 |
| MINIMUM X | -.396 | -.224 | -.172 |
| MAXIMUM Y | .097 | .088 | .082 |
| MINIMUM Y | -.147 | -.123 | -.129 |
| CENTROID X | .088 | -.250 | -.186 |
| CENTROID Y | .080 | .056 | .062 |
| POA TO CENTROID (in) | .119 | .265 | .195 |
| MIN RADIUS | .172 | .090 | .124 |
| MEAN RADIUS | .359 | .204 | .203 |
| MAX RADIUS | .591 | .344 | .270 |
| HORIZONTAL SPREAD | 1.000 | .565 | .438 |
| VERTICAL SPREAD | .244 | .211 | .211 |
| EXTREME SPREAD | 1.089 | .569 | .472 |
| NUMBER IN ONE INCH CIRCLE | 4 | 4 | 4 |
| NUMBER IN TWO INCH CIRCLE | 5 | 5 | 5 |
| NUMBER IN THREE INCH CIRCLE | 5 | 5 | 5 |

.223 - POLICE M-700

TRIAL & PILOT

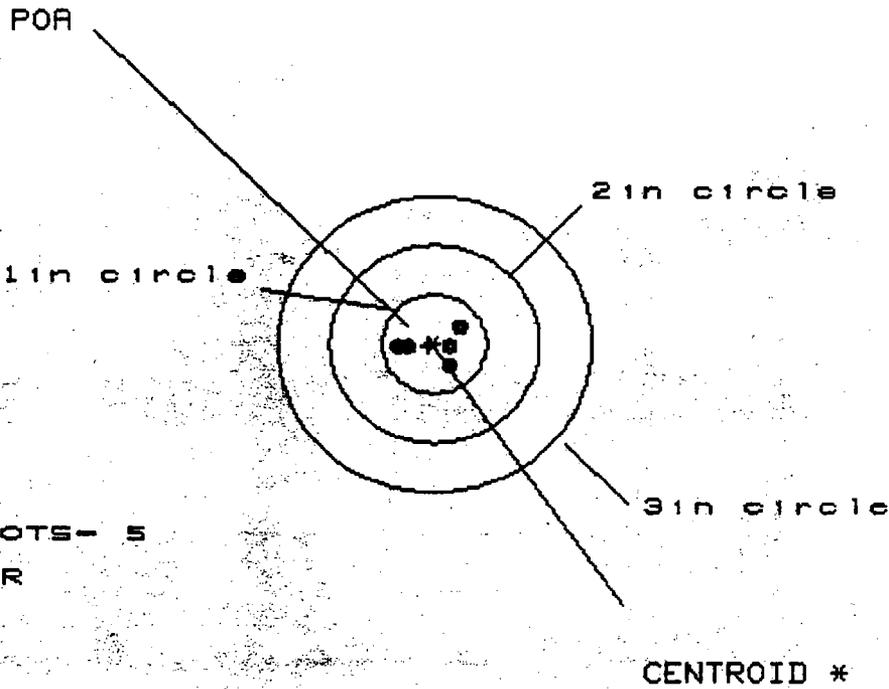
100 YDS.
SAND BAG REST

AMMO:
REMINGTON 55GR MC
40T. 40610

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853242

CENTERFIRE PATTERNS # 2



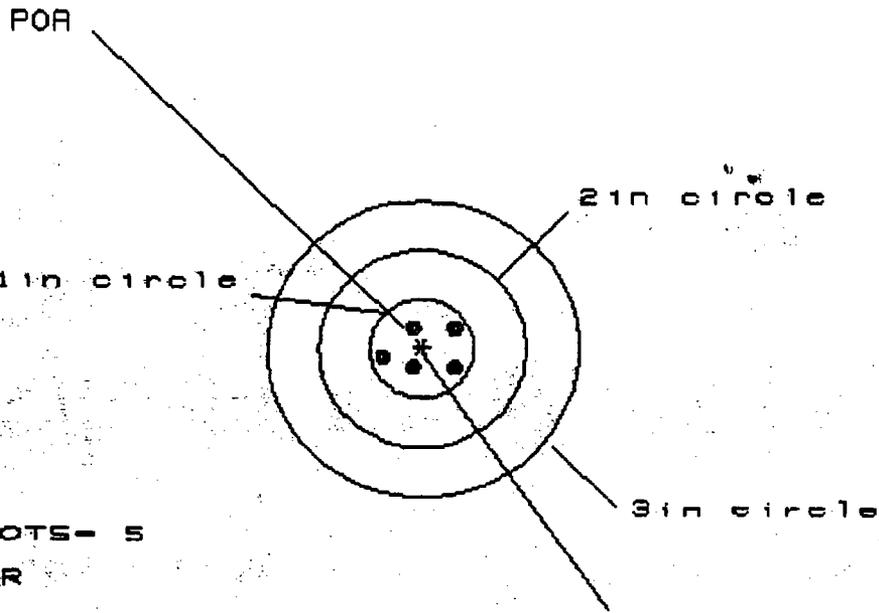
OF SHOTS - 5
 # IN CIR
 1 IN 5
 2 IN 5
 3 IN 5
 MEI .520
 VSI .379
 GSI .560

| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .202 | .122 | .149 |
| MINIMUM X | -.318 | -.313 | -.272 |
| MAXIMUM Y | .204 | .203 | .053 |
| MINIMUM Y | -.175 | -.176 | -.109 |
| CENTROID X | .055 | .135 | .094 |
| CENTROID Y | .024 | .025 | -.042 |
| POA TO CENTROID IN. | .059 | .137 | .183 |
| MIN RADIUS | .189 | .111 | .156 |
| MEAN RADIUS | .253 | .214 | .200 |
| MAX RADIUS | .318 | .313 | .279 |
| HORIZONTAL SPREAD | .520 | .435 | .421 |
| VERTICAL SPREAD | .379 | .379 | .172 |
| EXTREME SPREAD | .560 | .482 | .430 |
| NUMBER IN ONE INCH CIRCLE | 5 | 5 | 5 |
| NUMBER IN TWO INCH CIRCLE | 5 | 5 | 5 |
| NUMBER IN THREE INCH CIRCLE | 5 | 5 | 5 |

18 May 1987

FILE:/PATTERNING/CENTERFIRE_PATT/86853242

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 IN 5
 2 IN 5
 3 IN 5
 HM - .542
 VS - .339
 GS - .672

CENTROID *

| PATTERN # | 1 | 3 | 4 | 3 |
|-----------------------------|-------|-------|-------|---|
| SHOTS (BEST OF) | 5 | | | |
| MAXIMUM X | .282 | .194 | .244 | |
| MINIMUM X | -.350 | -.216 | -.151 | |
| MAXIMUM Y | .183 | .171 | .216 | |
| MINIMUM Y | -.156 | -.168 | -.111 | |
| CENTROID X | .014 | .074 | .009 | |
| CENTROID Y | -.013 | -.001 | -.058 | |
| POA TO CENTROID (in) | .019 | .074 | .059 | |
| MIN RADIUS | .166 | .226 | .148 | |
| MEAN RADIUS | .276 | .250 | .224 | |
| MAX RADIUS | .353 | .268 | .268 | |
| HORIZONTAL SPREAD | .632 | .418 | .395 | |
| VERTICAL SPREAD | .339 | .339 | .327 | |
| EXTREME SPREAD | .672 | .513 | .513 | |
| NUMBER IN ONE INCH CIRCLE | 5 | 5 | 5 | |
| NUMBER IN TWO INCH CIRCLE | 5 | 5 | 5 | |
| NUMBER IN THREE INCH CIRCLE | 5 | 5 | 5 | |

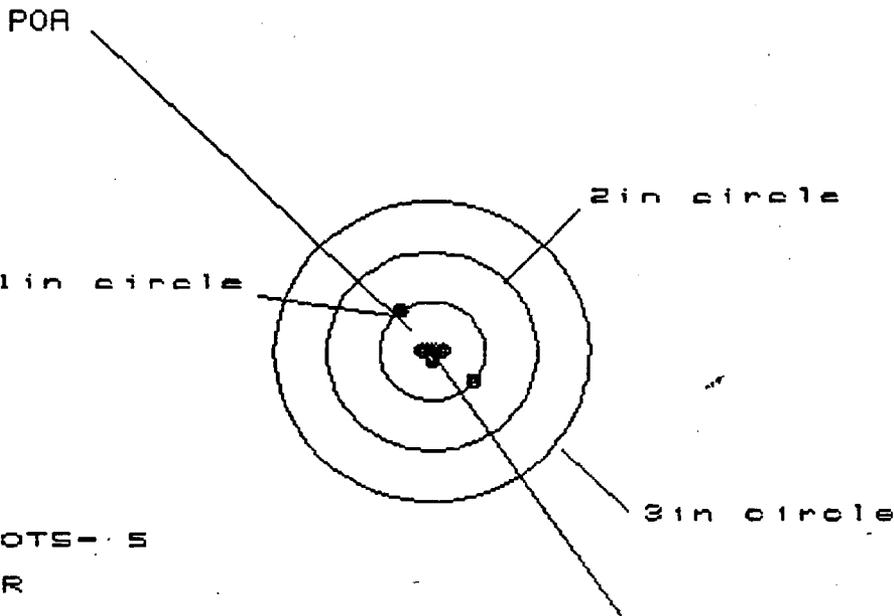
000100 D.

LYMAN 20X SUPER TGT. SPOT.

.223 REM.
55 GR. M.C. LOT # A061D
100 YDS.

15 Apr 1988

CENTERFIRE PATTERNS # 1



OF SHOTS - 5

IN CIR

1 in = 5

2 in = 5

3 in = 5

HS = .650

VS = .705

GS = .959

AUG: .772

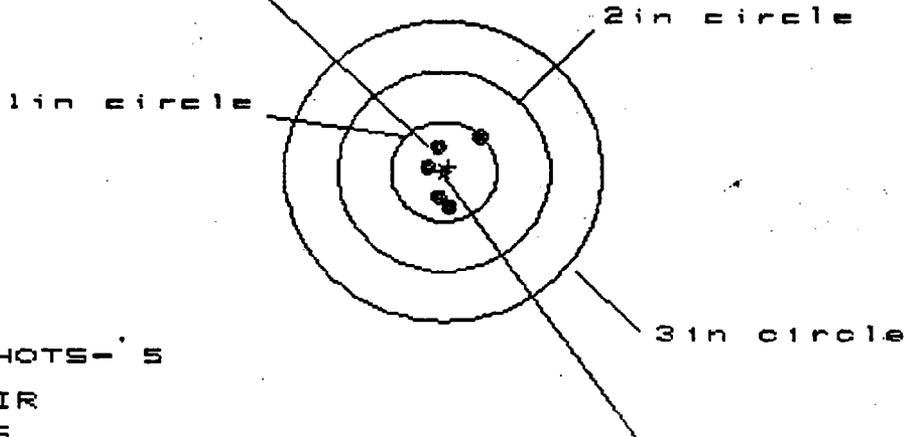
CENTROID *

| PATTERN # | 1 | 2 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .366 | .294 | .124 |
| MINIMUM X | -.284 | -.217 | -.119 |
| MAXIMUM Y | .481 | .116 | .049 |
| MINIMUM Y | -.304 | -.204 | -.067 |
| CENTROID X | .004 | .076 | -.023 |
| CENTROID Y | -.008 | -.108 | -.041 |
| POA TO CENTROID in. | .009 | .132 | .047 |
| MIN RADIUS | .098 | .090 | .067 |
| MEAN RADIUS | .263 | .199 | .107 |
| MAX RADIUS | .492 | .358 | .129 |
| HORIZONTAL SPREAD | .650 | .512 | .243 |
| VERTICAL SPREAD | .705 | .320 | .116 |
| EXTREME SPREAD | .959 | .604 | .245 |
| NUMBER IN ONE INCH CIRCLE | = 5 | | |
| NUMBER IN TWO INCH CIRCLE | = 5 | | |
| NUMBER IN THREE INCH CIRCLE | = 5 | | |

15 Apr 1986

CENTERFIRE PATTERNS # 2

POA



OF SHOTS - 5
IN CIR
1 in = 5
2 in = 5
3 in = 5
HS = .510
VS = .707
GS = .772

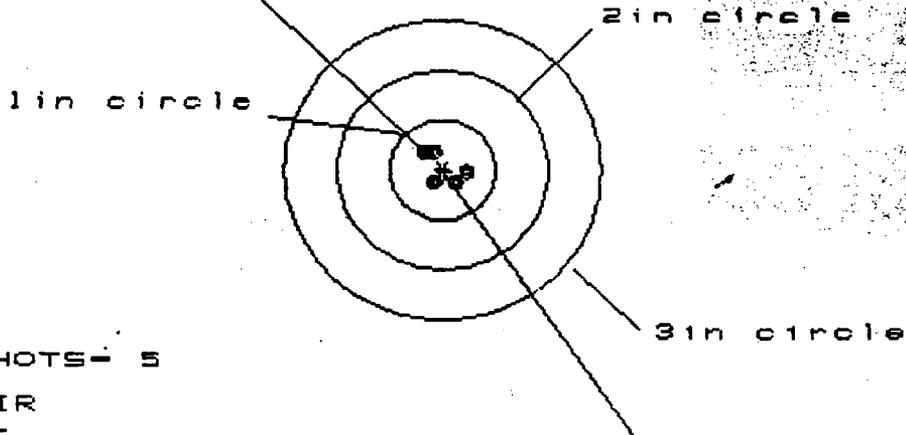
CENTROID *

| PATTERN # | : | 2 | | |
|-----------------------------|---|-------|-------|-------|
| SHOTS (BEST OF) | : | 5 | 4 | 3 |
| MAXIMUM X | : | .318 | .088 | .070 |
| MINIMUM X | : | -.192 | -.112 | -.083 |
| MAXIMUM Y | : | .339 | .310 | .216 |
| MINIMUM Y | : | -.368 | -.283 | -.273 |
| CENTROID X | : | -.046 | -.126 | -.155 |
| CENTROID Y | : | -.051 | -.136 | -.041 |
| POA TO CENTROID in. | : | .069 | .185 | .160 |
| MIN RADIUS | : | .203 | .179 | .101 |
| MEAN RADIUS | : | .309 | .244 | .200 |
| MAX RADIUS | : | .465 | .313 | .273 |
| HORIZONTAL SPREAD | : | .510 | .200 | .153 |
| VERTICAL SPREAD | : | .707 | .594 | .489 |
| EXTREME SPREAD | : | .772 | .596 | .492 |
| NUMBER IN ONE INCH CIRCLE | = | | 5 | |
| NUMBER IN TWO INCH CIRCLE | = | | 5 | |
| NUMBER IN THREE INCH CIRCLE | = | | 5 | |

15 Apr 1986

CENTERFIRE PATTERNS # 3

POA



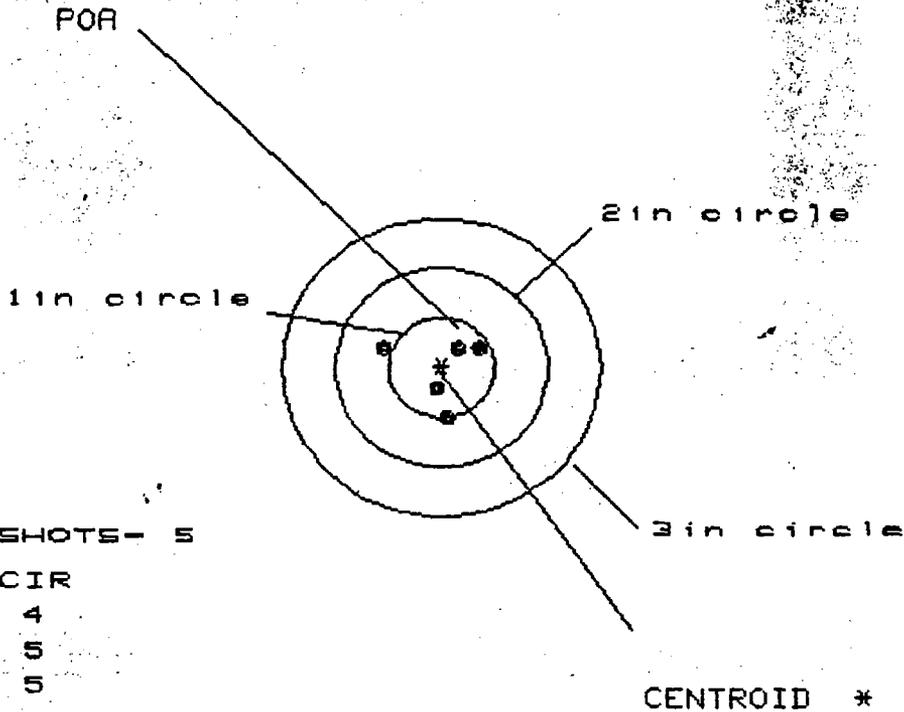
OF SHOTS = 5
 # IN CIR
 1 in = 5
 2 in = 5
 3 in = 5
 HS = .286
 VS = .305
 GS = .459

CENTROID *

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .201 | .155 | .193 |
| MINIMUM X | -.185 | -.147 | -.109 |
| MAXIMUM Y | .160 | .181 | .146 |
| MINIMUM Y | -.145 | -.105 | -.106 |
| CENTROID X | -.019 | .027 | -.011 |
| CENTROID Y | .014 | -.026 | .009 |
| POA TO CENTROID in. | .024 | .037 | .014 |
| MIN RADIUS | .134 | .140 | .135 |
| MEAN RADIUS | .195 | .171 | .171 |
| MAX RADIUS | .244 | .233 | .197 |
| HORIZONTAL SPREAD | .386 | .302 | .302 |
| VERTICAL SPREAD | .305 | .286 | .252 |
| EXTREME SPREAD | .459 | .386 | .355 |
| NUMBER IN ONE INCH CIRCLE = | 5 | 5 | 5 |
| NUMBER IN TWO INCH CIRCLE = | 5 | 5 | 5 |
| NUMBER IN THREE INCH CIRCLE = | 5 | 5 | 5 |

15 Apr 1986

CENTERFIRE PATTERNS # 4



OF SHOTS- 5

IN CIR

1 in = 4

2 in = 5

3 in = 5

HS= .881

VS= .697

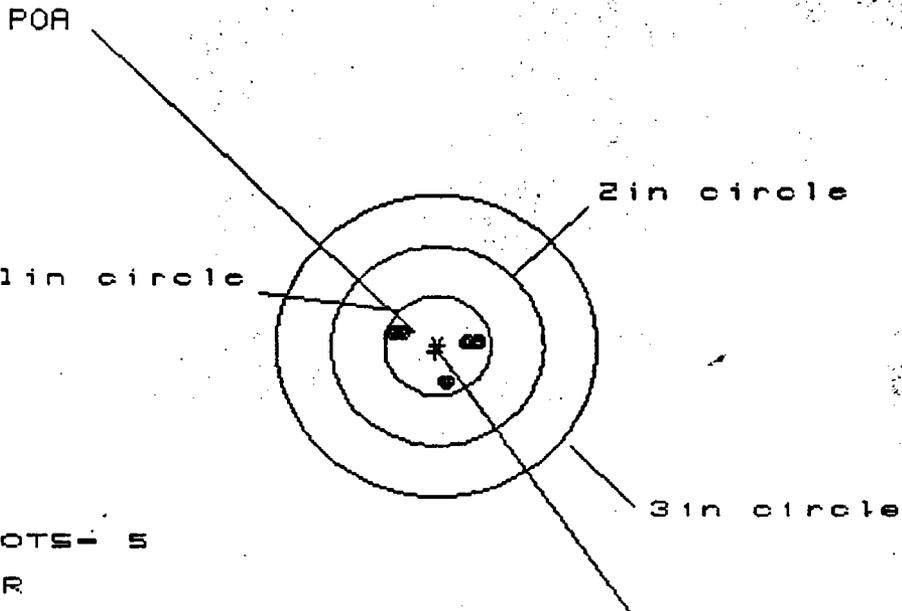
GS= .916

CENTROID *

| PATTERN # | 4 | 4 | 3 |
|-------------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .344 | .210 | .184 |
| MINIMUM X | -.537 | -.166 | -.192 |
| MAXIMUM Y | .240 | .296 | .164 |
| MINIMUM Y | -.457 | -.398 | -.290 |
| CENTROID X | -.352 | -.218 | -.192 |
| CENTROID Y | -.203 | -.263 | -.130 |
| POA TO CENTROID in. | .406 | .341 | .232 |
| MIN RADIUS | .220 | .229 | .126 |
| MEAN RADIUS | .389 | .314 | .240 |
| MAX RADIUS | .588 | .405 | .348 |
| HORIZONTAL SPREAD | .881 | .376 | .376 |
| VERTICAL SPREAD | .697 | .694 | .454 |
| EXTREME SPREAD | .916 | .751 | .589 |
| NUMBER IN ONE INCH CIRCLE = | | 4 | |
| NUMBER IN TWO INCH CIRCLE = | | 5 | |
| NUMBER IN THREE INCH CIRCLE = | | 5 | |

15 Apr 1986

CENTERFIRE PATTERNS # 5



OF SHOTS - 5
IN CIR
1 in = 5
2 in = 5
3 in = 5
HS = .746
VS = .510
GS = .754

| PATTERN # | 5 | 4 | 3 |
|-----------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .337 | .235 | .239 |
| MINIMUM X | -.409 | -.430 | -.426 |
| MAXIMUM Y | .149 | .177 | .066 |
| MINIMUM Y | -.361 | -.333 | -.075 |
| CENTROID X | .019 | .121 | .117 |
| CENTROID Y | .058 | .030 | .141 |
| POA TO CENTROID in. | .061 | .125 | .183 |
| MIN RADIUS | .300 | .219 | .188 |
| MEAN RADIUS | .360 | .314 | .290 |
| MAX RADIUS | .425 | .465 | .431 |
| HORIZONTAL SPREAD | .746 | .665 | .665 |
| VERTICAL SPREAD | .510 | .510 | .141 |
| EXTREME SPREAD | .754 | .680 | .680 |
| NUMBER IN ONE INCH CIRCLE | = 5 | 5 | |
| NUMBER IN TWO INCH CIRCLE | = 5 | 5 | |
| NUMBER IN THREE INCH CIRCLE | = 5 | 5 | |

Report No. 871383

RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

| AREA OF TESTING | |
|--|--|
| <input type="checkbox"/> Developmental | <input type="checkbox"/> Safety Related <input type="checkbox"/> Litigation |
| <input type="checkbox"/> Design Acceptance | <input type="checkbox"/> Competitive Evaluation <input type="checkbox"/> Warehouse Audit |
| <input type="checkbox"/> Pre-Pilot | <input type="checkbox"/> New Design <input type="checkbox"/> Cost Reduction |
| <input checked="" type="checkbox"/> Pilot | <input type="checkbox"/> Design Change Stake _____ |
| <input type="checkbox"/> Production Acceptance | <input type="checkbox"/> Plant Assistance <input type="checkbox"/> Other _____ |

| FIREARM STAT'S | REPORT REQ'D. | |
|---|--|---------------------------------|
| MODEL: <u>Police Sniper</u> | FORMAL <input checked="" type="checkbox"/> | DATE REQUESTED: <u>5/18/87</u> |
| CAL or GAGE: _____ | TEST RESULTS ONLY _____ | DATE NEEDED BY: _____ |
| BARREL TYPE: _____ | | REQUESTED BY: <u>GJ Hill</u> |
| PROOFED: YES <input checked="" type="checkbox"/> NO _____ | | WORK ORDER NO: <u>82034-905</u> |

| TEST TYPE | | | |
|---|---|---|--------------------------------------|
| <input type="checkbox"/> Strength Test | <input type="checkbox"/> Ammunition Test | <input type="checkbox"/> Dry Cycle Test | <input type="checkbox"/> Photo/Video |
| <input checked="" type="checkbox"/> Function Test | <input type="checkbox"/> Environmental Test | <input type="checkbox"/> Measurements | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Accuracy Test | <input type="checkbox"/> Customer Complaint | <input type="checkbox"/> Endurance Test | _____ |

EXPLAIN IN DETAIL THE REASON FOR THIS TEST:

Trial and Pilot - Accuracy & function

- Rem. Specs 1.5" center to center

M 700 "POLICE"

Bolt Action Rifle

223 REM

GUNS REQUIRED:

NOTE: NO firearms or parts will be tested in the Labs unless they are accompanied by a Work Request, and both are delivered to the Labs by the designer or engineer. All Work Requests are to be filled out in detail. No Exceptions.

DATE COMPLETED: 5/18/87
TEST COMPLETED BY: JES
REPORT DATE: 5/28/87

R 223R3 - 55yr. MC

R 223R1 - 55yr. PSP

2

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
 K.W. Soucy
 G.J. Hill
 T.C. Douglas
 J.R. Snedeker
 J.F. Matousek, Jr.
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 871531
 JUNE 10, 1987

MODEL 700 RS TRIAL AND PILOT EVALUATION

270 WIN CALIBER

MODEL 700 - 270 WIN CALIBER - TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model 700, 270 win caliber rifles to be acceptable. The Trial and Pilot Evaluation consisted of Visual Inspection, Accuracy, and Function. The eight rifle sample was found to be within Remington specifications for each phase of the Trial and Pilot Evaluation.

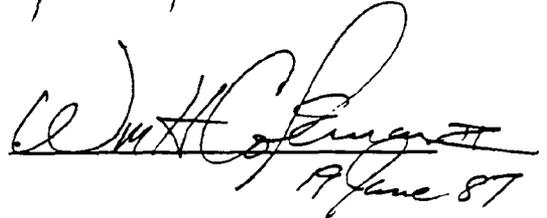
Prepared by: F.L. Supry
Date prepared: 10 June 1987

proofread and cleared by:

J.R. Snedeker, Research Supervisor
Test, Measurement & Mech. Analysis Lab


19 June 87

W.H. Coleman, II
New Products Research Lab Director


19 June 87

REPORT# 871531

WORK ORDER# 82034-905

To: J.R. Snedeker

From: F.L. Supry

MODEL 700 RS - 270 WIN CALIBER - TRIAL AND PILOT EVALUATION

INTRODUCTION:

On June 02, 1987 a request was received to conduct a Visual Inspection, Accuracy, and Function Evaluation of the Model 700 RS, 270 Win caliber, Trial and Pilot rifles. Eight rifles, four Camo and four Grey, were randomly selected from production.

SCOPE OF TEST:

To determine if the production run samples meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The eight rifle Trial and Pilot Evaluation was found to be acceptable. The following results were obtained:

A. VISUAL INSPECTION:

- a. The overall appearance of the rifles was acceptable.
- b. The pattern design of the Camo stocks was well liked.

B. ACCURACY: (Average group size)

- a. 270 Win = 1.91 inches.

C. FUNCTION:

- a. Three rifles fired 225 rounds each, with no malfunctions.
- b. One rifle had one stem high malfunction.
- c. The overall malfunction rate was 0.11%.

TEST REPORT

1. VISUAL INSPECTION:

- A. The visual inspection committee made the following general comments:
 - a. They liked the pattern in the Camo stocks.
 - b. Several of the stocks showed a rough area at the top of the grip. More care is needed in transit.
- B. Data sheets containing the comments on each rifle inspected is included in the appendix of this report.

2. ACCURACY:

- A. The Remington Specification for group size is as follows:
 - a. 270 Win caliber: 3.5 inches, center to center.
- B. Four rifles tested for 100 yard accuracy and the following results were obtained.

| | GROUP | | | AVG |
|-------------------|-------|-------|-------|-------|
| | 1 | 2 | 3 | |
| Rifle# B6865078 - | 1.435 | 1.648 | 2.199 | 1.761 |
| Rifle# B6864276 - | 1.668 | 2.420 | 1.584 | 1.891 |
| Rifle# B6862889 - | 1.951 | 1.838 | 2.422 | 2.070 |
| Rifle# B6865545 - | 2.169 | 1.856 | 1.750 | 1.925 |

OVERALL GROUP SIZE AVERAGE = 1.91 INCHES

3. FUNCTION:

- A. Four of the rifles were subjected to a 225 round per rifle, field function test and the following results were obtained:
 - a. One stem chamber malfunction occurred.

REPORT# 871382

WORK ORDER# 82034-905

TEST PROCEDURE:

1. VISUAL:

- A. The visual inspection committee consisted of J. Piseck, G. Barnes (P.E. & C.); C. Stephens, and F. Supry (R. & D.).
- B. Six rifles, three Camo and three Grey, were used in the visual inspection. The rifles were as follows:
 - a. Camo:
B6865679 B6864928 B6864900
 - b. Grey:
B6866020 B6865078 B6862889
- C. Each rifle was wiped down with a clean white Coyne towel, and examined by each member of the visual inspection committee. All comments were recorded, and are included in the appendix of this report.

2. ACCURACY:

- A. The following rifles were used in the 100 yard accuracy test:

 B6865078 B6864276 B6862889 B6865545
- B. The accuracy was shot by C.J. Stephens, at the R&D 100 yard range located in building 52-1.
- C. Leupold base and rings were used in conjunction with a Redfield 12X (4-plex) scope.
- D. Remington ammunition; index R270W4, 150 grain soft point, code E23F B6007 was used for the 100 yard accuracy test.
- E. Before shooting the accuracy test, the bores on each rifle were brushed with Hoppe's No. 9 solvent and patched dry.
- F. A total of three, five shot groups were shot with each rifle. The rifles were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- G. The targets were analyzed for group size and the averages calculated, using the HP 9000 computer and digitizing tablet.

REPORT# 871382

WORK ORDER# 82034-905

TEST PROCEDURE: (continued)

3. FIELD FUNCTION:

A. Four rifles were used in the function test. The rifles were as follows:

B6865078 B6864276 B6862889 B6865545

B. Each of the rifles was subjected to the loading and firing of 225 rounds of Remington and competitive ammunition, in a Field Function test conducted at the Ilion Fish and Game Club. Fifteen rounds were fired; 5 at a slow feeding cycle speed, 5 at a medium feeding cycle speed, and 5 at a fast feeding cycle speed. The rifles were allowed to cool, and then the procedure was repeated with each remaining ammunition type.

C. The following ammunition was used in the function test:

| | | | |
|--------|------|-------|---------|
| R270W1 | 270A | X2701 | 16902 |
| R270W2 | 270B | X2703 | 16903 |
| R270W3 | 270C | X2704 | IVI 270 |
| R270W4 | 270E | X2705 | |

APPENDIX

REPORT# 871382

WORK ORDER# 82034-905

VISUAL INSPECTION SUMMARY

CAMO STOCKS:

| SERIAL NUMBER - | COMMENTS |
|-----------------|---|
| B6865679 | SLIGHT OPENING BETWEEN FLOOR PLATE AND STOCK |
| B6864928 | SCUFF MARK AT BARREL BRACKET BULGE SCUFF MARK AT THE FORE-END TIP SCUFF MARK AT THE GRIP CAP MISMATCH AT THE TOE |
| B6864900 | SLIGHT DISCOLOR AT THE BUTT PAD MAR AT THE TOP OF THE RECEIVER (BEFORE BLASTING) |

GREY STOCKS:

| | |
|----------|---|
| B6866020 | SLIGHT OPENING BETWEEN FLOOR PLATE AND STOCK MAR ON THE TANG SCUFF MARK ON THE TOP OF THE GRIP AREA GAP AT THE TOE OF THE BUTT PLATE |
| B6865078 | OPENING AT THE REAR OF THE TRIGGER GUARD SCUFF MARK ON THE TOP OF THE GRIP AREA |
| B6862889 | ROUGH CHEEK PIECE MINIMUM OVER-TRAVEL ON THE SAFETY MAR BY THE GRIP CAP |

GENERAL COMMENTS"

THE COMMITTEE LIKED THE PATTERN DESIGN OF THE CAMO STOCKS.
MORE CARE NEEDS TO BE TAKEN, IN TRANSIT, TO KEEP FROM MARRING THE
TOP OF THE GRIP AREA.

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.



PETERS



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
K.W. Soucy
D.J. Anderson
G.J. Hill
T.C. Douglas
J.R. Snedeker
J.F. Matousek, Jr.
F.L. Supry
File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 872151
AUGUST 06, 1987

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model XP-100 35 REM caliber to be acceptable.

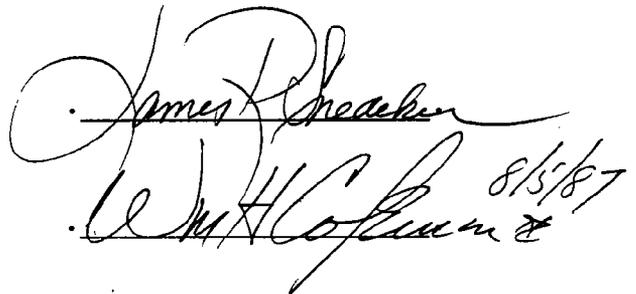
The pistols tested were randomly selected, after being put in the warehouse. The pistols were examined, as received, by Research Technicians, and then subjected to the 100 yard (off hand bench rest) accuracy test. The barrels with the maximum and minimum extreme spread were removed from the stocks and shot one five shot group each, using the Gallery accuracy device.

Prepared by: F.L. Supry
Date Prepared: 08/06/87

proofread and cleared by:

J.R. SNEDEKER, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. COLEMAN, II
New Products Research Lab Director


James R. Sneaker
W.H. Coleman, II 8/15/87

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TO: J.R. Snedeker
FROM: F.L. Supry

INTRODUCTION:

In July 1987, a request to conduct a Trial and Pilot Evaluation of the Model XP-100 35 REM caliber pistol was received by the Test Lab. The evaluation would use four pistols, withdrawn from the warehouse, and consist of Visual Inspection and 100 yard accuracy.

SCOPE OF THE TEST:

To determine if the production run sample would meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The Model XP-100, chambered in the 35 REM caliber, was found to be acceptable in all phases of the Trial and Pilot Evaluation.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

REPORT TEXT:

1. VISUAL INSPECTION:

A. There were no major items in the appearance of the pistols.

B. The pistols used in the Visual Inspection were:

B7520239 B7520092 B7520550 B7520284

C. Comments on each pistol are located in the appendix.

2. ACCURACY:

The Remington standard for the XP-100, chambered in the 35 REM caliber is an extreme group size of: 3.5 inches for a 5 shot group.

A. The pistols used in the accuracy test were:

B7520239 B7520092 B7520550 B7520284

B. The following averages were established:

| | <u>BENCH REST</u> | <u>ACCURACY DEVICE</u> |
|-----------------------|-------------------|------------------------|
| a. Group Size: | 2.82 inches | 2.49 inches |
| b. Horizontal Spread: | 2.24 inches | 2.16 inches |
| c. Vertical Spread: | 1.73 inches | 2.15 inches |

C. Accuracy results per individual pistol are located in the appendix of this report.

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TEST PROCEDURE:

1. VISUAL INSPECTION:

- A. The visual inspection was done by F.L. Supry and C.J. Stephens.
- B. All 4 of the pistols were examined.
- C. Each pistol was wiped down with a clean white Coyne towel, and examined. All comments were recorded.

2. ACCURACY:

- A. The off hand (bench rest) accuracy was shot by C.J. Stephens, at the R&D 100 yard range.
- B. Weaver bases and rings were used, in conjunction with a Redfield 12X scope.
- C. Remington ammunition, index R35R1, code E27 C6005L, 150 grain pointed soft point, was used for the 100 yard accuracy test.
- D. Before shooting the 100 yard accuracy test, the bores on each pistol were brushed with Hoppe's No. 9 solvent and patched dry.
- E. A total of three, five shot groups, were shot with each pistol. The pistols were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- F. The accuracy device accuracy was shot by R. Sterling, at the Gallery 100 yard range.
- G. The stocks were removed from two of the pistols, and one five shot group was shot with each pistol.
- H. The patterns were analyzed for group size, horizontal spread, and vertical spread, using the HP 9000 computer and digitizing tablet.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

APPENDIX

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ACCURACY RESULTS - EXTREME SPREAD

| <u>SERIAL NUMBER</u> | <u>GROUP#</u> | <u>BENCH REST</u> (inches) | <u>ACCURACY DEVICE</u> (inches) |
|----------------------|---------------|-------------------------------|------------------------------------|
| B7520092 | 1 | 3.07 | NA |
| | 2 | 2.70 | NA |
| | 3 | 2.81 | NA |
| B7520284 | 1 | 3.00 | 2.49 |
| | 2 | 2.98 | NA |
| | 3 | 2.74 | NA |
| B7520239 | 1 | 2.52 | NA |
| | 2 | 2.20 | NA |
| | 3 | 4.09 | NA |
| B7520550 | 1 | 2.27 | 2.37 |
| | 2 | 2.05 | NA |
| | 3 | 3.36 | NA |

NOTE:

THE ACCURACY DEVICE WAS USED TO VERIFY THE BARRELS WITH THE MINIMUM AND MAXIMUM EXTREME SPREAD, FROM THE OFF HAND BENCH REST SHOOTING.

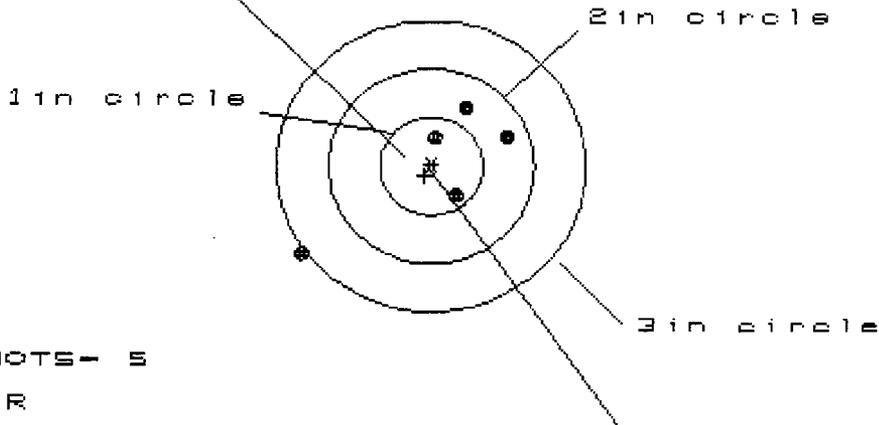
5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/DOOVER3

CENTERFIRE PATTERNS

3

POA



OF SHOTS = 5

IN CIR

1in = 2

2in = 4

3in = 4

HS = 1.984

VS = 1.451

GS = 2.288

CENTROID #

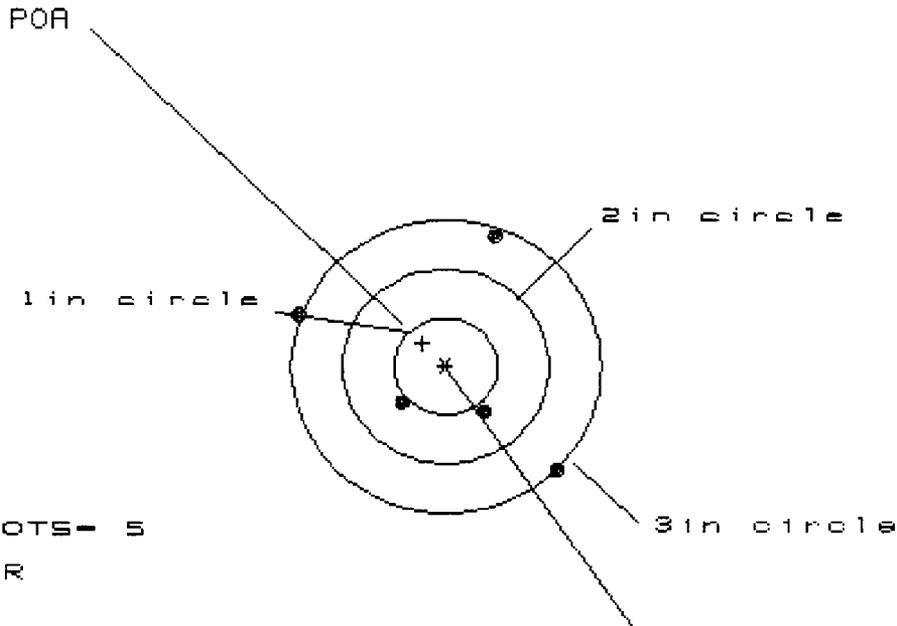
| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .706 | .386 | .099 |
| MINIMUM X | -1.278 | -.310 | -.181 |
| MAXIMUM Y | .592 | .377 | .398 |
| MINIMUM Y | -.859 | -.483 | -.462 |
| CENTROID X | .062 | .382 | .253 |
| CENTROID Y | .096 | .311 | .290 |
| POA TO CENTROID in. | .115 | .492 | .384 |
| MIN RADIUS | .257 | .312 | .191 |
| MEAN RADIUS | .719 | .392 | .357 |
| MAX RADIUS | 1.540 | .486 | .469 |
| HORIZONTAL SPREAD | 1.984 | .696 | .280 |
| VERTICAL SPREAD | 1.451 | .860 | .860 |
| EXTREME SPREAD | 2.288 | .860 | .860 |
| NUMBER IN ONE INCH CIRCLE = | | 2 | |
| NUMBER IN TWO INCH CIRCLE = | | 4 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

200 gr
0550

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1in = 0
 2in = 2
 3in = 4
 HS = 2.537
 VS = 2.362
 GS = 2.971

CENTROID *
 2.367
 2.621
 Avg = 2.494

| PATTERN # | 1 | 2 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.077 | .712 | .298 |
| MINIMUM X | -1.460 | -.821 | -.584 |
| MAXIMUM Y | 1.336 | 1.466 | 1.167 |
| MINIMUM Y | -1.026 | -.896 | -.600 |
| CENTROID X | .224 | .589 | .352 |
| CENTROID Y | -.238 | -.368 | -.069 |
| POA TO CENTROID in. | .327 | .694 | .358 |
| MIN RADIUS | .597 | .305 | .664 |
| MEAN RADIUS | 1.128 | .945 | .894 |
| MAX RADIUS | 1.550 | 1.467 | 1.205 |
| HORIZONTAL SPREAD | 2.537 | 1.533 | .882 |
| VERTICAL SPREAD | 2.362 | 2.362 | 1.767 |
| EXTREME SPREAD | 2.971 | 2.450 | 1.945 |
| NUMBER IN ONE INCH CIRCLE = | 0 | | |
| NUMBER IN TWO INCH CIRCLE = | | 2 | |
| NUMBER IN THREE INCH CIRCLE = | | | 4 |

1509r (0284)
~~0250~~ ~~0284~~

2,537
 - 350

 2,187

2,362
 - 350

 2,012

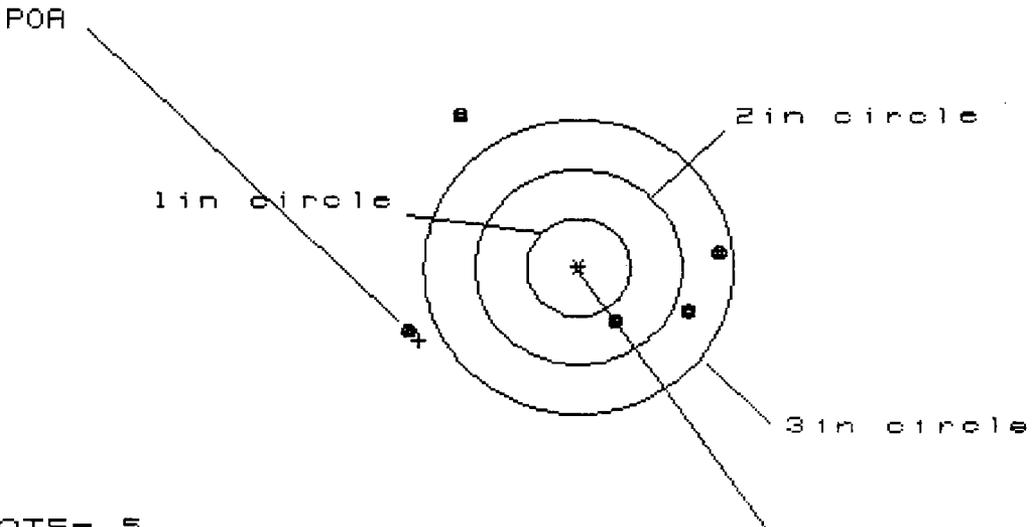
2,971
 - 350

 2,621

5 Aug 387

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 2



OF SHOTS - 5

IN CIR

1 in = 0

2 in = 1

3 in = 3

HQ = 2.853

VQ = 2.170

GQ = 3.073

| PATTERN # | 2 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.329 | 1.034 | .395 |
| MINIMUM X | -1.624 | -1.919 | -.558 |
| MAXIMUM Y | 1.508 | .565 | .470 |
| MINIMUM Y | -.662 | -.285 | -.278 |
| CENTROID X | 1.541 | 1.836 | 2.475 |
| CENTROID Y | .747 | .370 | .465 |
| POA TO CENTROID in. | 1.712 | 1.873 | 2.519 |
| MIN RADIUS | .674 | .200 | .253 |
| MEAN RADIUS | 1.376 | 1.032 | .497 |
| MAX RADIUS | 1.915 | 1.940 | .624 |
| HORIZONTAL SPREAD | 2.953 | 2.953 | .953 |
| VERTICAL SPREAD | 2.170 | .850 | .748 |
| EXTREME SPREAD | 3.073 | 3.073 | 1.211 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

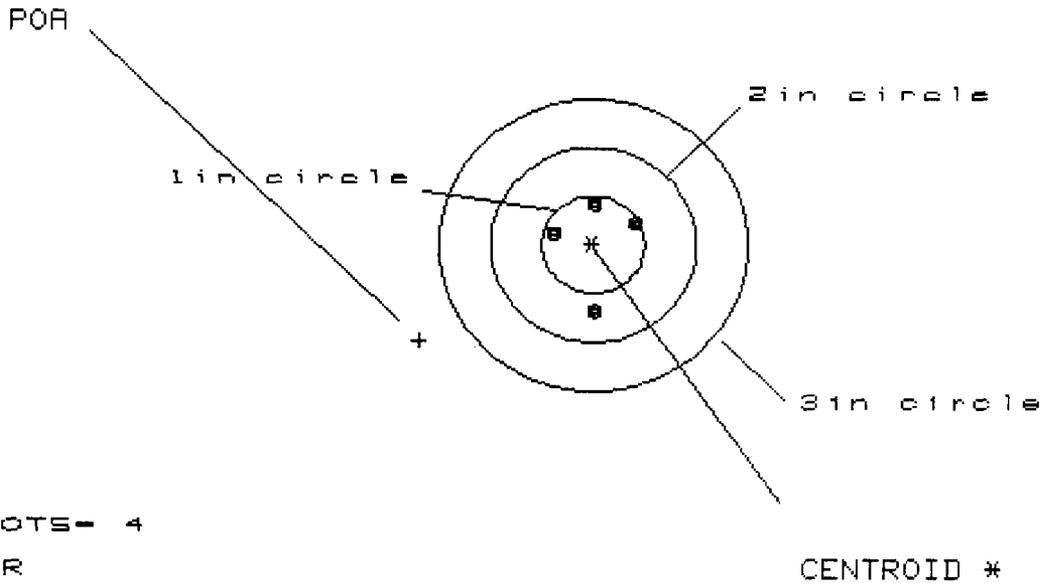
200gr
(0284)

2

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 3



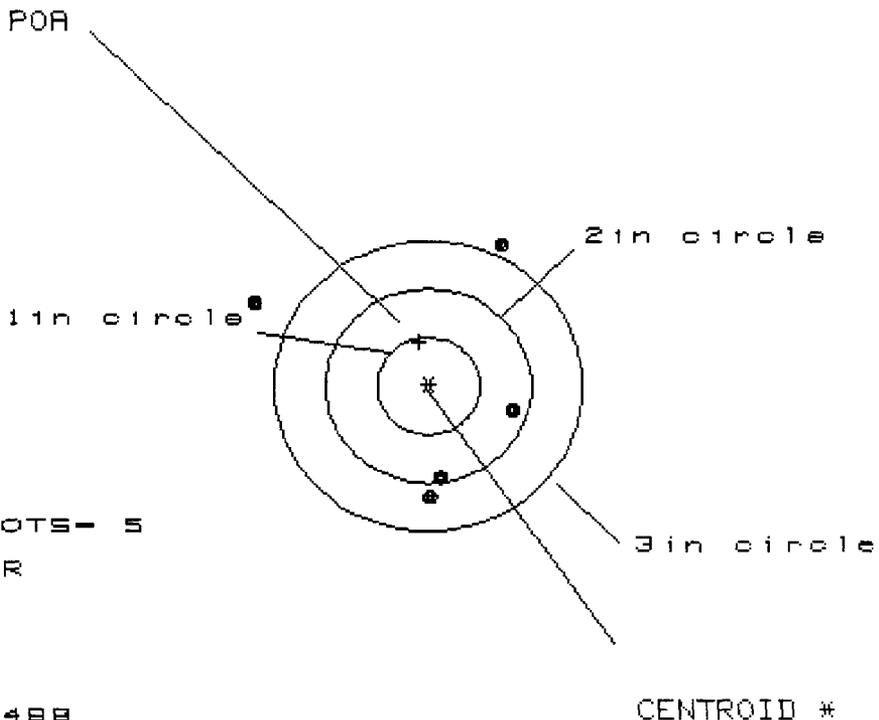
OF SHOTS = 4
 # IN CIR
 1 in = 0
 2 in = 4
 3 in = 4
 IS = .7000
 VS = 1.0000
 GS = 1.0000

| PATTERN # | 3 | 3 | 2 |
|-------------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 4 | 3 | 2 |
| MAXIMUM X | .373 | .385 | .183 |
| MINIMUM X | -.416 | -.404 | -.183 |
| MAXIMUM Y | .405 | .176 | .114 |
| MINIMUM Y | -.688 | -.124 | -.114 |
| CENTROID X | 1.687 | 1.675 | 1.877 |
| CENTROID Y | .979 | 1.208 | 1.270 |
| POA TO CENTROID in. | 1.950 | 2.065 | 2.266 |
| MIN RADIUS | .405 | .177 | .216 |
| MEAN RADIUS | .484 | .329 | .216 |
| MAX RADIUS | .689 | .423 | .216 |
| HORIZONTAL SPREAD | .789 | .789 | .366 |
| VERTICAL SPREAD | 1.093 | .300 | .228 |
| EXTREME SPREAD | 1.093 | .792 | .431 |
| NUMBER IN ONE INCH CIRCLE = | | 3 | |
| NUMBER IN TWO INCH CIRCLE = | | 4 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 4



OF SHOTS- 5
 # IN CIR
 1in = 0
 2in = 2
 3in = 3
 H0- 2.488
 V0- 2.639
 G0- 2.717

| PATTERN # | 5 | 4 | 3 |
|-------------------------------|--------|-------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .806 | .386 | .472 |
| MINIMUM X | -1.682 | -.387 | -.301 |
| MAXIMUM Y | 1.481 | 1.690 | .535 |
| MINIMUM Y | -1.158 | -.949 | -.385 |
| CENTROID X | .086 | .506 | .420 |
| CENTROID Y | -.456 | -.665 | -1.229 |
| POA TO CENTROID in. | .464 | .836 | 1.299 |
| MIN RADIUS | .841 | .387 | .227 |
| MEAN RADIUS | 1.289 | .970 | .477 |
| MAX RADIUS | 1.878 | 1.710 | .713 |
| HORIZONTAL SPREAD | 2.488 | .773 | .773 |
| VERTICAL SPREAD | 2.639 | 2.639 | .920 |
| EXTREME SPREAD | 2.717 | 2.717 | 1.202 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 2 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

150 gr
 0550

2.488
 - 350

 2,138

2639
 350

 2,289

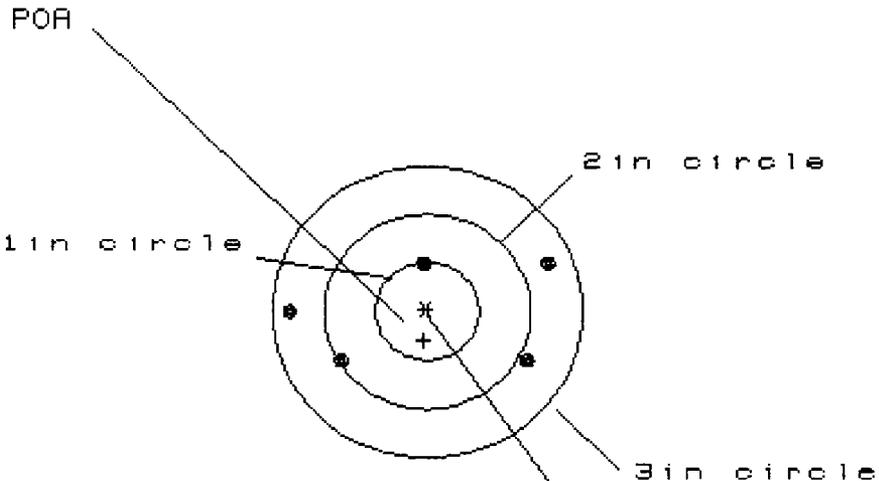
2717
 - 350

 2,367

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/07520550

CENTERFIRE PATTERNS # 1



OF SHOTS = 5
 # IN CIR
 1 in = 1
 2 in = 4
 3 in = 0
 HS = 2.565
 VS = 1.060
 GS = 2.620

2.559 = 2.56
 Aug. 2.86
 35 Rem.

| PATTERN # | 1 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.207 | .868 | .938 |
| MINIMUM X | -1.358 | -1.152 | -.863 |
| MAXIMUM Y | .530 | .529 | .673 |
| MINIMUM Y | -.530 | -.531 | -.355 |
| CENTROID X | .034 | .373 | .084 |
| CENTROID Y | .301 | .302 | .126 |
| POA TO CENTROID in. | .303 | .480 | .151 |
| MIN RADIUS | .498 | .617 | .678 |
| MEAN RADIUS | 1.049 | .931 | .867 |
| MAX RADIUS | 1.358 | 1.254 | 1.003 |
| HORIZONTAL SPREAD | 2.565 | 2.020 | 1.801 |
| VERTICAL SPREAD | 1.060 | 1.060 | 1.028 |
| EXTREME SPREAD | 2.620 | 2.265 | 1.801 |
| NUMBER IN ONE INCH CIRCLE = | 1 | | |
| NUMBER IN TWO INCH CIRCLE = | 2 | | |
| NUMBER IN THREE INCH CIRCLE = | 5 | | |

AUG
HS = 1.57
VS = 1.90

2.620
- 350

2.27

2.565
- 350

2.215

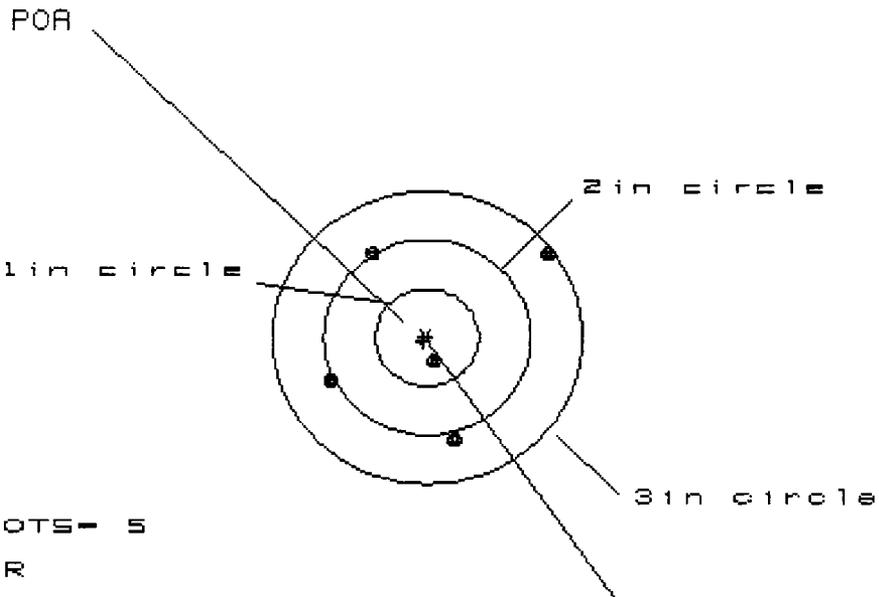
1.060
350

.710

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520550

CENTERFIRE PATTERNS # 2



OF SHOTS = 5
 # IN CIR
 1 in = 1
 2 in = 1
 3 in = 3
 HS = 2.026
 VS = 1.904
 GS = 2.399

| PATTERN # | 2 | 3 | 4 | 5 |
|-------------------------------|--------|-------|-------|---|
| SHOTS (BEST OF) | 5 | 4 | 3 | |
| MAXIMUM X | 1.125 | .565 | .529 | |
| MINIMUM X | -.901 | -.619 | -.431 | |
| MAXIMUM Y | .883 | 1.095 | .826 | |
| MINIMUM Y | -1.021 | -.809 | -.494 | |
| CENTROID X | .033 | -.249 | -.437 | |
| CENTROID Y | .040 | -.172 | .097 | |
| POA TO CENTROID in. | .052 | .302 | .447 | |
| MIN RADIUS | .280 | .346 | .624 | |
| MEAN RADIUS | .960 | .781 | .704 | |
| MAX RADIUS | 1.409 | 1.132 | .831 | |
| HORIZONTAL SPREAD | 2.026 | 1.184 | .960 | |
| VERTICAL SPREAD | 1.904 | 1.904 | 1.320 | |
| EXTREME SPREAD | 2.399 | 2.085 | 1.362 | |
| NUMBER IN ONE INCH CIRCLE = | | 1 | | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | | |
| NUMBER IN THREE INCH CIRCLE = | | 5 | | |

1.409
 3.50
 1.059

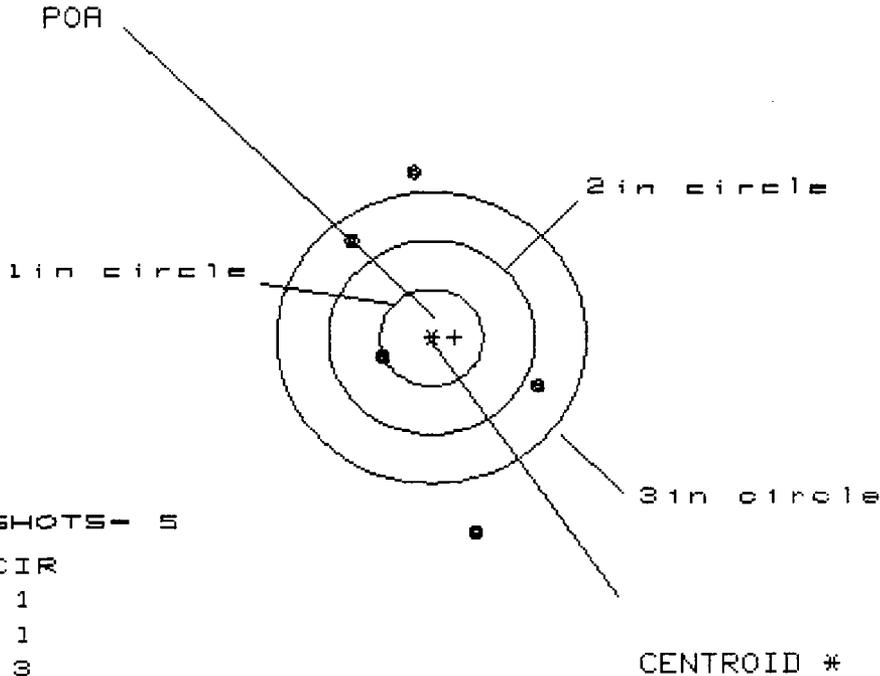
2.026
 1.350
 1.676

2.399
 .350
 2.049

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520550

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 1
 3 in = 0
 IS = 1.786
 VS = 3.674
 GS = 3.710

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .980 | 1.078 | 1.069 |
| MINIMUM X | -.806 | -.709 | -.717 |
| MAXIMUM Y | 1.676 | 1.177 | .884 |
| MINIMUM Y | -1.998 | -.945 | -.553 |
| CENTROID X | -.228 | -.326 | -.317 |
| CENTROID Y | -.005 | .494 | .102 |
| POA TO CENTROID in. | .228 | .592 | .333 |
| MIN RADIUS | .494 | .801 | .483 |
| MEAN RADIUS | 1.313 | 1.068 | .942 |
| MAX RADIUS | 2.035 | 1.433 | 1.203 |
| HORIZONTAL SPREAD | 1.786 | 1.786 | 1.786 |
| VERTICAL SPREAD | 3.674 | 2.122 | 1.437 |
| EXTREME SPREAD | 3.710 | 2.392 | 2.292 |
| NUMBER IN ONE INCH CIRCLE = | | 1 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

3.710
 .350

 3,360

1.786
 350

 1,436

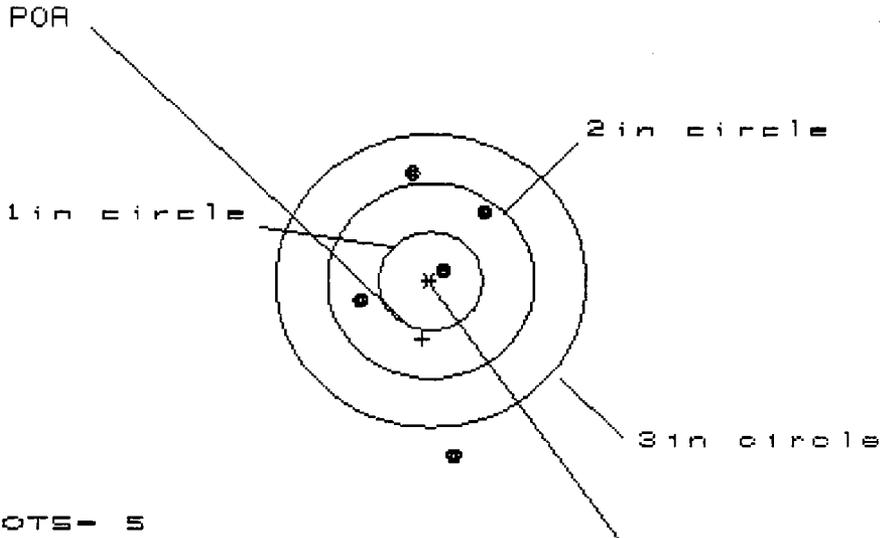
3.674
 350

 3,324

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520239

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 3
 3 in = 4
 HS = 1.175
 VS = 2.939
 GS = 2.972

CENTROID *

2.937 = 2.94

Aug. 3.26

35 Rem.

| PATTERN # | 1 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .525 | .587 | .542 |
| MINIMUM X | -.650 | -.588 | -.633 |
| MAXIMUM Y | 1.115 | .659 | .482 |
| MINIMUM Y | -1.824 | -.621 | -.482 |
| CENTROID X | .079 | .017 | .062 |
| CENTROID Y | .592 | 1.048 | .829 |
| POA TO CENTROID in. | .598 | 1.049 | .831 |
| MIN RADIUS | .173 | .329 | .121 |
| MEAN RADIUS | .941 | .625 | .532 |
| MAX RADIUS | 1.841 | .856 | .750 |
| HORIZONTAL SPREAD | 1.175 | 1.175 | 1.175 |
| VERTICAL SPREAD | 2.939 | 1.280 | .884 |
| EXTREME SPREAD | 2.972 | 1.470 | 1.470 |
| NUMBER IN ONE INCH CIRCLE = | 1 | | |
| NUMBER IN TWO INCH CIRCLE = | 3 | | |
| NUMBER IN THREE INCH CIRCLE = | 4 | | |

AVG = 2.25
 HS = 1.59
 VS = 1.59

2.972
 - .350

 2.522

1.175
 - .350

 0.825

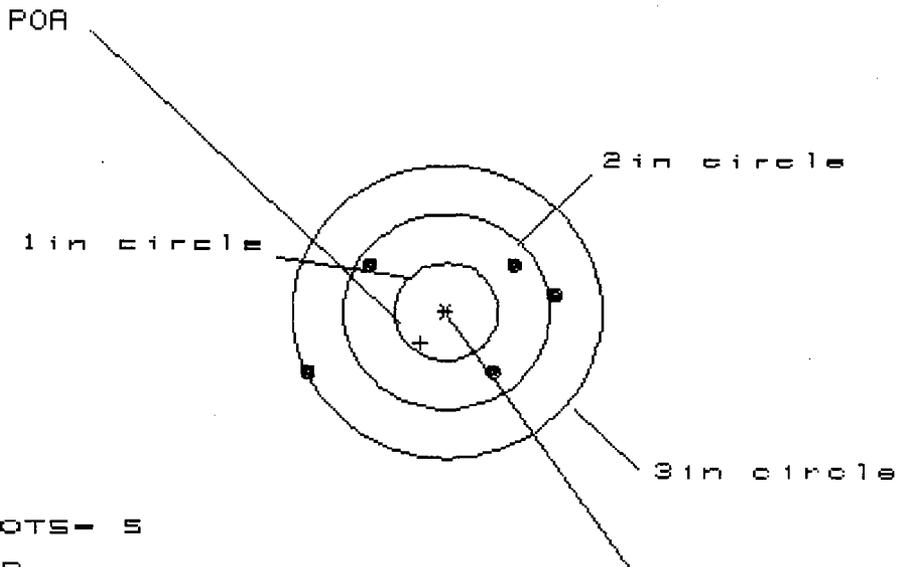
2.939
 - .350

 2.589

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520239

CENTERFIRE PATTERNS # 2



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 3
 3 in = 4
 HS = 2.400
 VS = 1.141
 GS = 2.553

| PATTERN # | 5 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.041 | .700 | .518 |
| MINIMUM X | -1.368 | -1.071 | -.838 |
| MAXIMUM Y | .515 | .359 | .379 |
| MINIMUM Y | -.626 | -.727 | -.707 |
| CENTROID X | .249 | .591 | .357 |
| CENTROID Y | .318 | .474 | .454 |
| POA TO CENTROID in. | .404 | .758 | .577 |
| MIN RADIUS | .714 | .458 | .642 |
| MEAN RADIUS | .992 | .752 | .773 |
| MAX RADIUS | 1.504 | 1.114 | .900 |
| HORIZONTAL SPREAD | 2.409 | 1.771 | 1.356 |
| VERTICAL SPREAD | 1.141 | 1.086 | 1.086 |
| EXTREME SPREAD | 2.553 | 1.788 | 1.553 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 3 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

2.409
 .350
 2.059

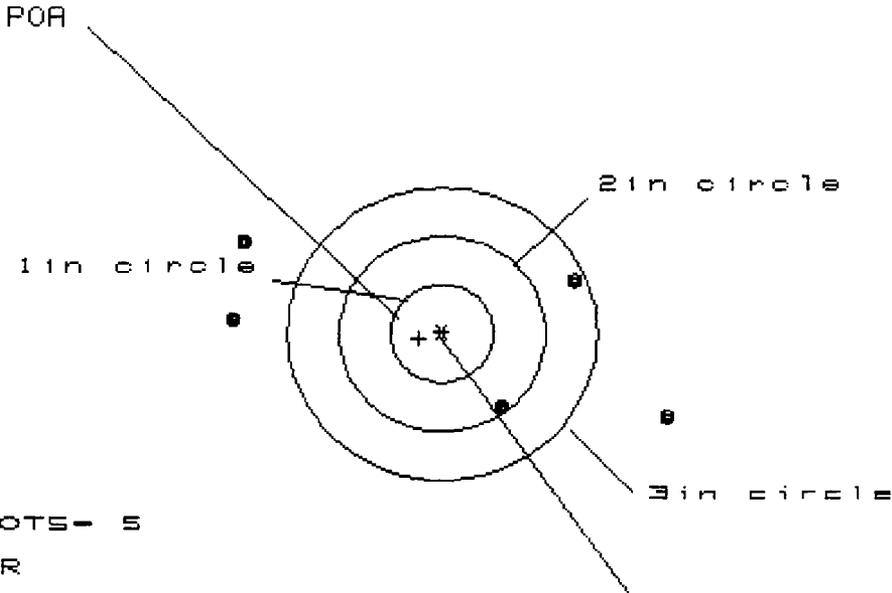
1.141
 .350
 .791

2.553
 .350
 2.203

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520239

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 1
 3 in = 2
 HS = 4.211
 VS = 1.734
 GS = 4.437

CENTROID *

Aug. 3-26

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 2.164 | 1.813 | 1.353 |
| MINIMUM X | -2.047 | -1.506 | -1.965 |
| MAXIMUM Y | .914 | .709 | .557 |
| MINIMUM Y | -.820 | -.938 | -.702 |
| CENTROID X | .222 | -.319 | .140 |
| CENTROID Y | .052 | .257 | .021 |
| POA TO CENTROID in. | .228 | .410 | .142 |
| MIN RADIUS | .905 | 1.424 | .931 |
| MEAN RADIUS | 1.754 | 1.581 | 1.455 |
| MAX RADIUS | 2.315 | 1.841 | 1.970 |
| HORIZONTAL SPREAD | 4.211 | 3.318 | 3.318 |
| VERTICAL SPREAD | 1.734 | 1.647 | 1.259 |
| EXTREME SPREAD | 4.437 | 3.343 | 3.343 |
| NUMBER IN ONE INCH CIRCLE = | 0 | | |
| NUMBER IN TWO INCH CIRCLE = | 1 | | |
| NUMBER IN THREE INCH CIRCLE = | 2 | | |

4.437
 .350

 4.087

4.211
 - 350

 3.861

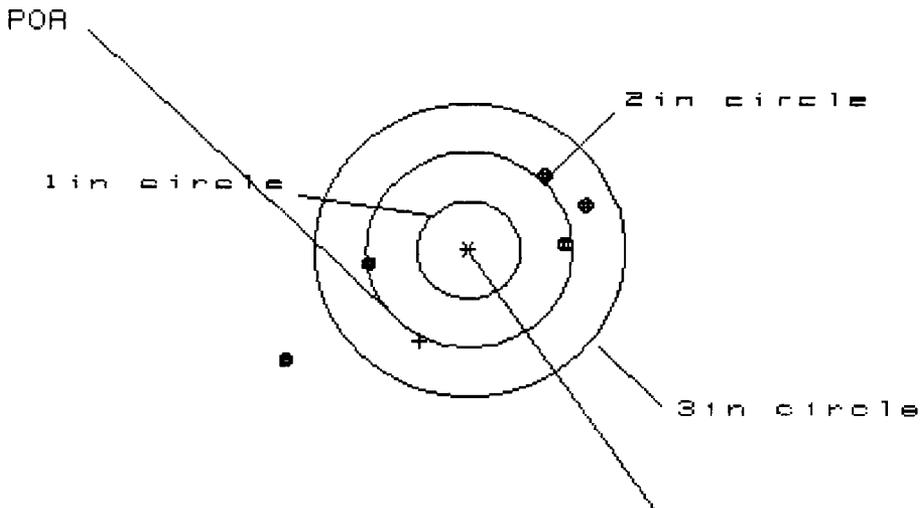
1.734
 350

 1.384

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520284

CENTERFIRE PATTERNS # 1



OF SHOTS - 5

IN CIR

1 in = 0

2 in = 1

3 in = 4

MO = 2.838

VO = 1.976

GO = 3.345

CENTROID *

2.904 = 2.90

Aug 3-2
35 Rem.

| PATTERN # | 1 | 4 | 3 |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.146 | .698 | .701 |
| MINIMUM X | -1.793 | -1.444 | -1.211 |
| MAXIMUM Y | .804 | .511 | .555 |
| MINIMUM Y | -1.172 | -.459 | -.415 |
| CENTROID X | .471 | .919 | .686 |
| CENTROID Y | .933 | 1.226 | 1.182 |
| POA TO CENTROID in. | 1.045 | 1.532 | 1.367 |
| MIN RADIUS | .923 | .503 | .715 |
| MEAN RADIUS | 1.276 | .828 | .916 |
| MAX RADIUS | 2.142 | 1.515 | 1.280 |
| HORIZONTAL SPREAD | 2.939 | 2.142 | 1.912 |
| VERTICAL SPREAD | 1.976 | .970 | .970 |
| EXTREME SPREAD | 3.345 | 2.222 | 1.976 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

AUG
MS = 2.76
VS = 1.33

3.345
- 350
2.995

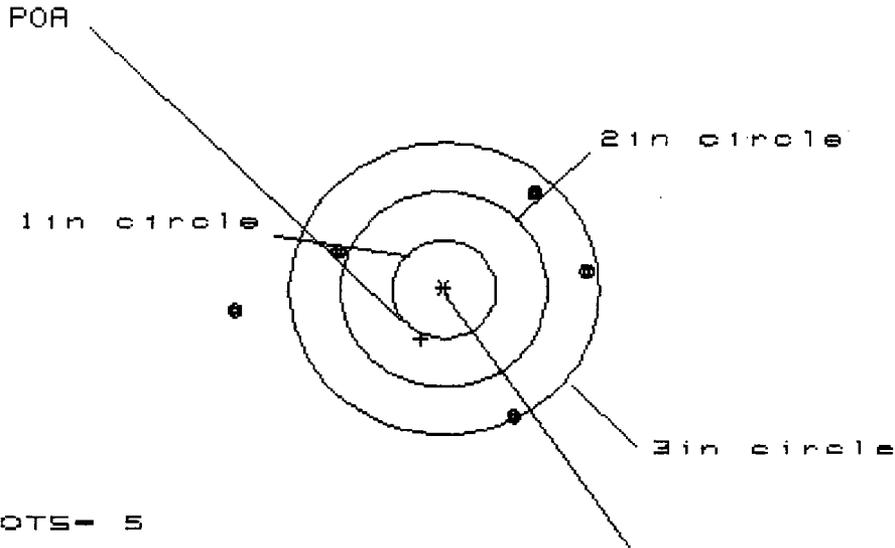
2.739
- 350
2.589

1.976
- 350
1.626

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520284

CENTERFIRE PATTERNS # 2



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 0
 3 in = 4
 HS = 3.312
 VS = 2.240
 GS = 3.328

| PATTERN # | 2 | 3 | 4 | 5 |
|-----------------------------|--------|--------|--------|--------|
| SHOTS (BEST OF) | 3 | 4 | 5 | 5 |
| MAXIMUM X | .915 | .841 | 1.335 | 1.335 |
| MINIMUM X | -1.408 | -1.482 | -1.977 | -1.977 |
| MAXIMUM Y | .470 | .913 | .958 | .958 |
| MINIMUM Y | -.341 | -1.327 | -1.282 | -1.282 |
| CENTROID X | .645 | .719 | .225 | .225 |
| CENTROID Y | .998 | .555 | .510 | .510 |
| POA TO CENTROID in. | 1.188 | .908 | .557 | .557 |
| MIN RADIUS | .682 | .847 | 1.051 | 1.051 |
| MEAN RADIUS | 1.024 | 1.178 | 1.434 | 1.434 |
| MAX RADIUS | 1.414 | 1.514 | 1.985 | 1.985 |
| HORIZONTAL SPREAD | 2.323 | 2.323 | 3.312 | 3.312 |
| VERTICAL SPREAD | .811 | 2.240 | 2.240 | 2.240 |
| EXTREME SPREAD | 2.333 | 2.364 | 3.328 | 3.328 |
| NUMBER IN ONE INCH CIRCLE | 0 | 0 | 0 | 0 |
| NUMBER IN TWO INCH CIRCLE | 0 | 0 | 0 | 0 |
| NUMBER IN THREE INCH CIRCLE | 0 | 4 | 4 | 4 |

$$\begin{array}{r} 3.312 \\ - .360 \\ \hline 2.962 \end{array}$$

$$\begin{array}{r} 2.240 \\ - .350 \\ \hline 1.89 \end{array}$$

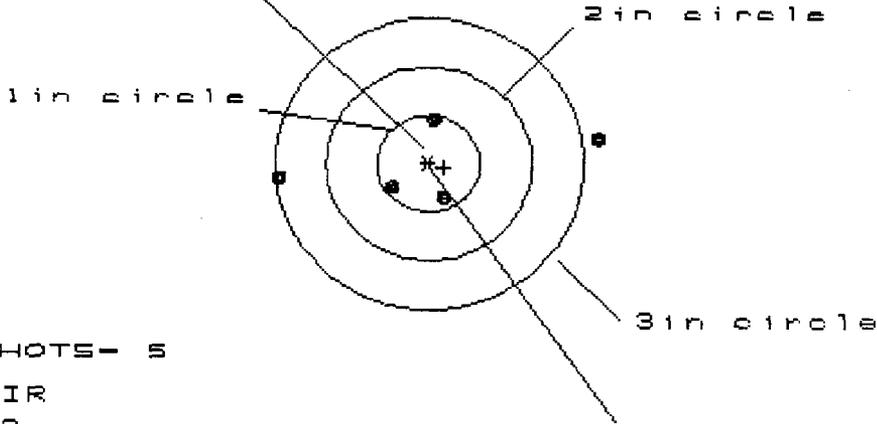
$$\begin{array}{r} 3.328 \\ - .350 \\ \hline 2.978 \end{array}$$

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520284

CENTERFIRE PATTERNS # 3

POA



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 3
 3 in = 4
 IN = 0.065
 V = .812
 G = 0.0000

CENTROID *

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.599 | .586 | .231 |
| MINIMUM X | -1.466 | -1.066 | -.354 |
| MAXIMUM Y | .432 | .501 | .485 |
| MINIMUM Y | -.380 | -.311 | -.327 |
| CENTROID X | -.145 | -.545 | -.190 |
| CENTROID Y | .038 | -.031 | -.015 |
| POA TO CENTROID in. | .150 | .546 | .191 |
| MIN RADIUS | .423 | .141 | .387 |
| MEAN RADIUS | .881 | .641 | .429 |
| MAX RADIUS | 1.623 | 1.067 | .500 |
| HORIZONTAL SPREAD | 3.065 | 1.652 | .585 |
| VERTICAL SPREAD | .812 | .812 | .812 |
| EXTREME SPREAD | 3.090 | 1.673 | .819 |
| NUMBER IN ONE INCH CIRCLE = | | 3 | |
| NUMBER IN TWO INCH CIRCLE = | | 3 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

3.090
 .350

 2.740

3.065
 .350

 2.715

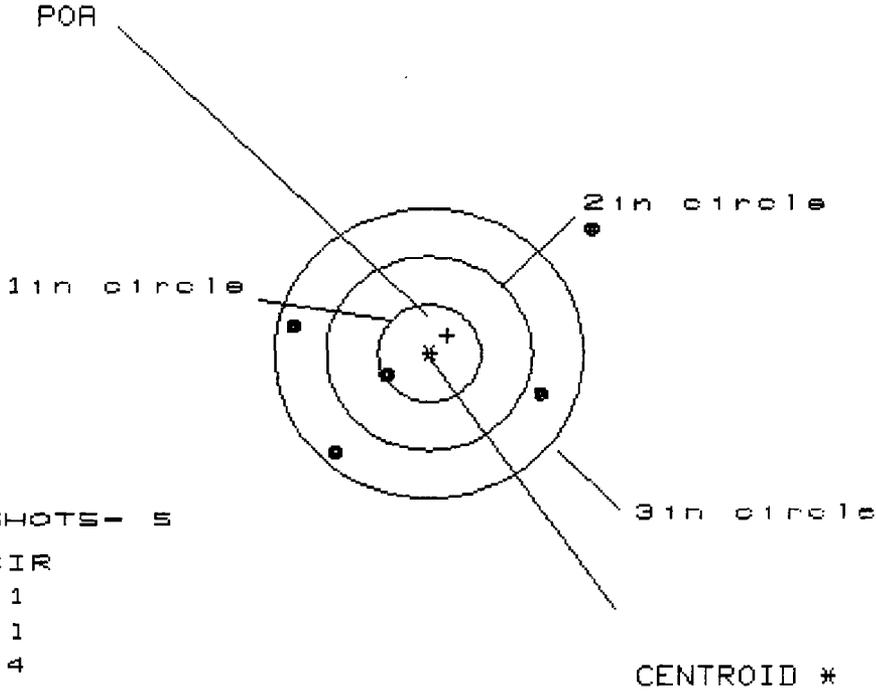
.812
 -.350

 .462

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520092

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 1
 3 in = 4
 HS = 2.943
 VS = 2.349
 GS = 3.417

CENTROID *

2.858 = 2.86

Aug. 8/86
35 Rem.

| PATTERN # | 1 | 4 | 3 |
|--------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.593 | 1.504 | 1.187 |
| MINIMUM X | -1.350 | -.952 | -.807 |
| MAXIMUM Y | 1.332 | .664 | .368 |
| MINIMUM Y | -1.017 | -.684 | -.462 |
| CENTROID X | -.182 | -.580 | -.263 |
| CENTROID Y | -.183 | -.516 | -.738 |
| POA TO CENTROID n. | .258 | .776 | .783 |
| MIN RADIUS | .497 | .159 | .528 |
| MEAN RADIUS | 1.302 | .918 | .883 |
| MAX RADIUS | 2.076 | 1.509 | 1.190 |
| HORIZONTAL SPREAD | 2.943 | 2.456 | 1.994 |
| VERTICAL SPREAD | 2.349 | 1.348 | .830 |
| EXTREME SPREAD | 3.417 | 2.580 | 2.070 |
| NUMBER IN ONE INCH CIR | = | 1 | |
| NUMBER IN TWO INCH CIR | = | 1 | |
| NUMBER IN THREE INCH CIR | = | 4 | |

Avg
 HS = 2.36
 VS = 2.17

3.417
 - .350

 3.067

2.943
 - .350

 2.593

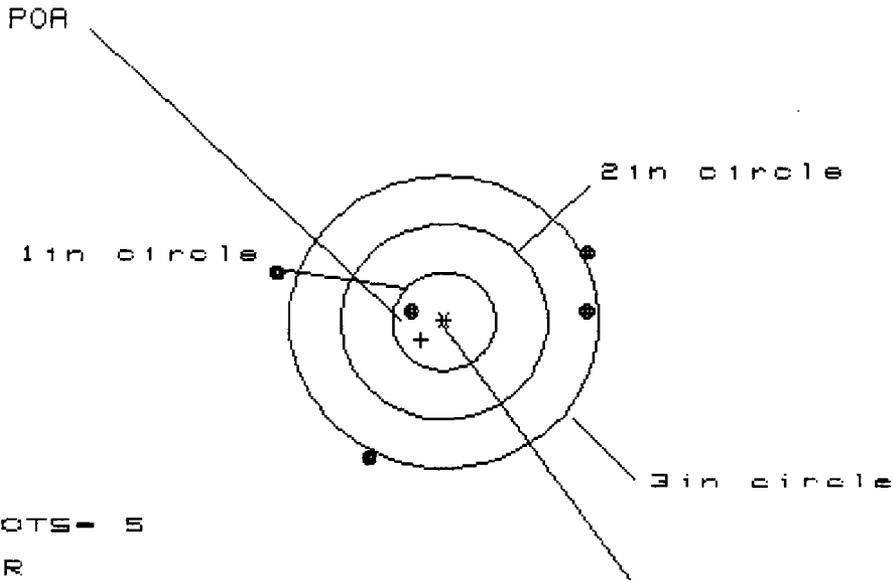
2.349
 - .350

 1.999

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520092

CENTERFIRE PATTERNS # 2



OF SHOTS- 5
 # IN CIR
 1in - 1
 2in - 1
 3in - 2
 HS- 3.044
 VS- 2.098
 GS- 3.051

| PATTERN # | 2 | 4 | 3 |
|-----------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.377 | .961 | .588 |
| MINIMUM X | -1.667 | -1.118 | -1.156 |
| MAXIMUM Y | .688 | .814 | .386 |
| MINIMUM Y | -1.410 | -1.284 | -.204 |
| CENTROID X | .219 | .636 | 1.008 |
| CENTROID Y | .189 | .063 | .491 |
| POA TO CENTROID in. | .289 | .639 | 1.121 |
| MIN RADIUS | .386 | .821 | .604 |
| MEAN RADIUS | 1.321 | 1.187 | .826 |
| MAX RADIUS | 1.742 | 1.702 | 1.170 |
| HORIZONTAL SPREAD | 3.044 | 2.078 | 1.744 |
| VERTICAL SPREAD | 2.098 | 2.098 | .590 |
| EXTREME SPREAD | 3.051 | 2.953 | 1.834 |
| NUMBER IN ONE INCH CIRCLE | = 1 | | |
| NUMBER IN TWO INCH CIRCLE | = 1 | | |
| NUMBER IN THREE INCH CIRCLE | = 2 | | |

3.044
 - .350
 2.694

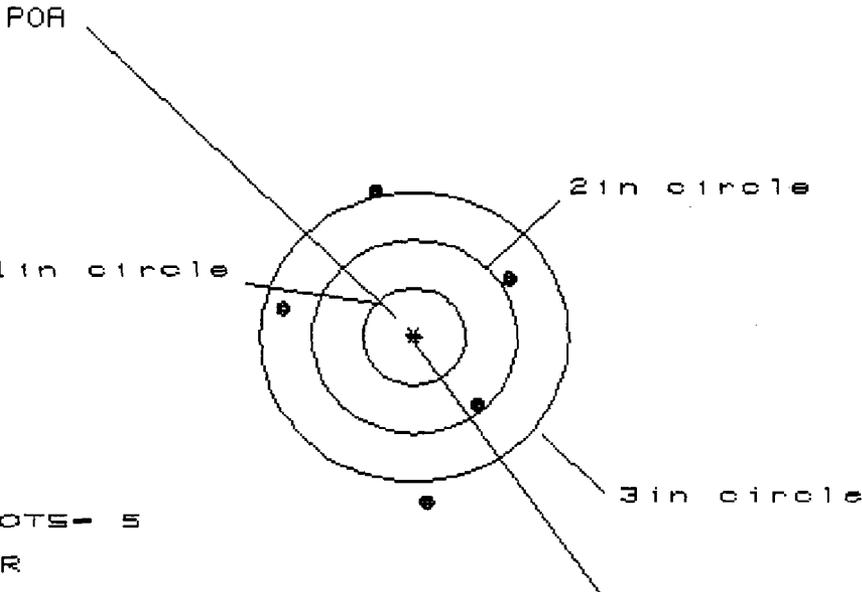
2.098
 - .350
 1.748

3.051
 - .350
 2.701

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520092

CENTERFIRE PATTERNS # 3



OF SHOTS- 5
 # IN CIR
 1in = 0
 2in = 1
 3in = 3
 HG = 2.148
 VG = 3.121
 GS = 3.156

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .884 | .911 | .797 |
| MINIMUM X | -1.264 | -1.237 | -1.351 |
| MAXIMUM Y | 1.461 | 1.046 | .530 |
| MINIMUM Y | -1.660 | -1.145 | -.797 |
| CENTROID X | -.021 | -.048 | .066 |
| CENTROID Y | .002 | .418 | .069 |
| POA TO CENTROID in. | .022 | .420 | .095 |
| MIN RADIUS | .971 | .929 | .957 |
| MEAN RADIUS | 1.303 | 1.148 | 1.101 |
| MAX RADIUS | 1.664 | 1.325 | 1.377 |
| HORIZONTAL SPREAD | 2.148 | 2.148 | 2.148 |
| VERTICAL SPREAD | 3.121 | 2.191 | 1.327 |
| EXTREME SPREAD | 3.156 | 2.411 | 2.181 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

3.156
 .350

 2.806

2.148
 .350

 1.798

3.121
 .350

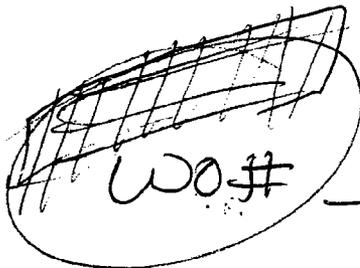
 2.771

7 guns 87451 WO#
Serial # B7520239
B7520092
" 0550
" 0284

50yr P. Soft Point Cartridge R3521
code # E27 C6005L

12 x redfield
weaver base & ~~mount~~ (rings)

100 yards - C. Stephens


WO#

81411

111411 - 001800

DJ Anderson

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
K.W. Soucy
D.J. Anderson
G.J. Hill
T.C. Douglas
J.R. Snedeker
J.F. Matousek, Jr.
F.L. Supry
File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 872151
AUGUST 06, 1987

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model XP-100 35 REM caliber to be acceptable.

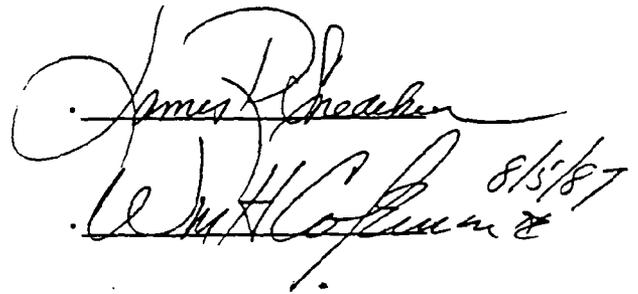
The pistols tested were randomly selected, after being put in the warehouse. The pistols were examined, as received, by Research Technicians, and then subjected to the 100 yard (off hand bench rest) accuracy test. The barrels with the maximum and minimum extreme spread were removed from the stocks and shot one five shot group each, using the Gallery accuracy device.

Prepared by: F.L. Supry
Date Prepared: 08/06/87

proofread and cleared by:

J.R. SNEDEKER, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. COLEMAN, II
New Products Research Lab Director


James R. Snedeker
W.H. Coleman, II 8/5/87

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TO: J.R. Snedeker
FROM: F.L. Supry

INTRODUCTION:

In July 1987, a request to conduct a Trial and Pilot Evaluation of the Model XP-100 35 REM caliber pistol was received by the Test Lab. The evaluation would use four pistols, withdrawn from the warehouse, and consist of Visual Inspection and 100 yard accuracy.

SCOPE OF THE TEST:

To determine if the production run sample would meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The Model XP-100, chambered in the 35 REM caliber, was found to be acceptable in all phases of the Trial and Pilot Evaluation.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

REPORT TEXT:

1. VISUAL INSPECTION:

- A. There were no major items in the appearance of the pistols.
- B. The pistols used in the Visual Inspection were:
B7520239 B7520092 B7520550 B7520284
- C. Comments on each pistol are located in the appendix.

2. ACCURACY:

The Remington standard for the XP-100, chambered in the 35 REM caliber is an extreme group size of: 3.5 inches for a 5 shot group.

- A. The pistols used in the accuracy test were:
B7520239 B7520092 B7520550 B7520284

- B. The following averages were established:

| | <u>BENCH REST</u> | <u>ACCURACY DEVICE</u> |
|-----------------------|-------------------|------------------------|
| a. Group Size: | 2.82 inches | 2.49 inches |
| b. Horizontal Spread: | 2.24 inches | 2.16 inches |
| c. Vertical Spread: | 1.73 inches | 2.15 inches |

- C. Accuracy results per individual pistol are located in the appendix of this report.

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TEST PROCEDURE:

1. VISUAL INSPECTION:

- A. The visual inspection was done by F.L. Supry and C.J. Stephens.
- B. All 4 of the pistols were examined.
- C. Each pistol was wiped down with a clean white Coyne towel, and examined. All comments were recorded.

2. ACCURACY:

- A. The off hand (bench rest) accuracy was shot by C.J. Stephens, at the R&D 100 yard range.
- B. Weaver bases and rings were used, in conjunction with a Redfield 12X scope.
- C. Remington ammunition, index R35R1, code E27 C6005L, 150 grain pointed soft point, was used for the 100 yard accuracy test.
- D. Before shooting the 100 yard accuracy test, the bores on each pistol were brushed with Hoppe's No. 9 solvent and patched dry.
- E. A total of three, five shot groups, were shot with each pistol. The pistols were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- F. The accuracy device accuracy was shot by R. Sterling, at the Gallery 100 yard range.
- G. The stocks were removed from two of the pistols, and one five shot group was shot with each pistol.
- H. The patterns were analyzed for group size, horizontal spread, and vertical spread, using the HP 9000 computer and digitizing tablet.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

APPENDIX

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ACCURACY RESULTS - EXTREME SPREAD

| <u>SERIAL NUMBER</u> | <u>GROUP#</u> | <u>BENCH REST</u> (inches) | <u>ACCURACY DEVICE</u> (inches) |
|----------------------|---------------|-------------------------------|------------------------------------|
| B7520092 | 1 | 3.07 | NA |
| | 2 | 2.70 | NA |
| | 3 | 2.81 | NA |
| B7520284 | 1 | 3.00 | 2.49 |
| | 2 | 2.98 | NA |
| | 3 | 2.74 | NA |
| B7520239 | 1 | 2.52 | NA |
| | 2 | 2.20 | NA |
| | 3 | 4.09 | NA |
| B7520550 | 1 | 2.27 | 2.37 |
| | 2 | 2.05 | NA |
| | 3 | 3.36 | NA |

NOTE:

THE ACCURACY DEVICE WAS USED TO VERIFY THE BARRELS WITH THE MINIMUM AND MAXIMUM EXTREME SPREAD, FROM THE OFF HAND BENCH REST SHOOTING.

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.



PETERS



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
 K.W. Soucy
 D.J. Anderson
 G.J. Hill
 T.C. Douglas
 J.R. Snedeker
 J.F. Matousek, Jr.
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 872151
AUGUST 06, 1987

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model XP-100 35 REM caliber to be acceptable.

The pistols tested were randomly selected, after being put in the warehouse. The pistols were examined, as received, by Research Technicians, and then subjected to the 100 yard (off hand bench rest) accuracy test. The barrels with the maximum and minimum extreme spread were removed from the stocks and shot one five shot group each, using the Gallery accuracy device.

Prepared by: F.L. Supry
Date Prepared: 08/06/87

proofread and cleared by:

J.R. SNEDEKER, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. COLEMAN, II
New Products Research Lab Director

James Sneaker
W.H. Coleman II 8/5/87

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TO: J.R. Snedeker
FROM: F.L. Supry

INTRODUCTION:

In July 1987, a request to conduct a Trial and Pilot Evaluation of the Model XP-100 35 REM caliber pistol was received by the Test Lab. The evaluation would use four pistols, withdrawn from the warehouse, and consist of Visual Inspection and 100 yard accuracy.

SCOPE OF THE TEST:

To determine if the production run sample would meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The Model XP-100, chambered in the 35 REM caliber, was found to be acceptable in all phases of the Trial and Pilot Evaluation.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

REPORT TEXT:

1. VISUAL INSPECTION:

- A. There were no major items in the appearance of the pistols.
- B. The pistols used in the Visual Inspection were:
B7520239 B7520092 B7520550 B7520284
- C. Comments on each pistol are located in the appendix.

2. ACCURACY:

The Remington standard for the XP-100, chambered in the 35 REM caliber is an extreme group size of: 3.5 inches for a 5 shot group.

- A. The pistols used in the accuracy test were:

B7520239 B7520092 B7520550 B7520284

- B. The following averages were established:

| | <u>BENCH REST</u> | <u>ACCURACY DEVICE</u> |
|-----------------------|-------------------|------------------------|
| a. Group Size: | 2.82 inches | 2.49 inches |
| b. Horizontal Spread: | 2.24 inches | 2.16 inches |
| c. Vertical Spread: | 1.73 inches | 2.15 inches |

- C. Accuracy results per individual pistol are located in the appendix of this report.

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TEST PROCEDURE:

1. VISUAL INSPECTION:

- A. The visual inspection was done by F.L. Supry and C.J. Stephens.
- B. All 4 of the pistols were examined.
- C. Each pistol was wiped down with a clean white Coyne towel, and examined. All comments were recorded.

2. ACCURACY:

- A. The off hand (bench rest) accuracy was shot by C.J. Stephens, at the R&D 100 yard range.
- B. Weaver bases and rings were used, in conjunction with a Redfield 12X scope.
- C. Remington ammunition, index R35R1, code E27 C6005L, 150 grain pointed soft point, was used for the 100 yard accuracy test.
- D. Before shooting the 100 yard accuracy test, the bores on each pistol were brushed with Hoppe's No. 9 solvent and patched dry.
- E. A total of three, five shot groups, were shot with each pistol. The pistols were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- F. The accuracy device accuracy was shot by R. Sterling, at the Gallery 100 yard range.
- G. The stocks were removed from two of the pistols, and one five shot group was shot with each pistol.
- H. The patterns were analyzed for group size, horizontal spread, and vertical spread, using the HP 9000 computer and digitizing tablet.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

APPENDIX

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ACCURACY RESULTS - EXTREME SPREAD

| <u>SERIAL NUMBER</u> | <u>GROUP#</u> | <u>BENCH REST</u> (inches) | <u>ACCURACY DEVICE</u> (inches) |
|----------------------|---------------|-------------------------------|------------------------------------|
| B7520092 | 1 | 3.07 | NA |
| | 2 | 2.70 | NA |
| | 3 | 2.81 | NA |
| B7520284 | 1 | 3.00 | 2.49 |
| | 2 | 2.98 | NA |
| | 3 | 2.74 | NA |
| B7520239 | 1 | 2.52 | NA |
| | 2 | 2.20 | NA |
| | 3 | 4.09 | NA |
| B7520550 | 1 | 2.27 | 2.37 |
| | 2 | 2.05 | NA |
| | 3 | 3.36 | NA |

NOTE:

THE ACCURACY DEVICE WAS USED TO VERIFY THE BARRELS WITH THE MINIMUM AND MAXIMUM EXTREME SPREAD, FROM THE OFF HAND BENCH REST SHOOTING.

RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

| | | |
|---|---|--|
| <input checked="" type="checkbox"/> Developmental <input type="checkbox"/> Design Acceptance <input type="checkbox"/> Pre-Pilot <input type="checkbox"/> Pilot <input type="checkbox"/> Production Acceptance | <u>AREA OF TESTING</u> | |
| | <input type="checkbox"/> Safety Related | <input type="checkbox"/> Litigation |
| | <input type="checkbox"/> Competitive Evaluation | <input type="checkbox"/> Warehouse Audit |
| | <input type="checkbox"/> New Design | <input checked="" type="checkbox"/> Cost Reduction |
| | <input type="checkbox"/> Design Change | Stake _____ |
| | <input type="checkbox"/> Plant Assistance | <input type="checkbox"/> Other _____ |

| | | |
|--|---|--|
| <u>FIREARM STAT'S.</u> MODEL: <u>XP-100</u> CAL. or GAGE: <u>35 REM</u> BARREL TYPE: _____ PROOFED: YES <input checked="" type="checkbox"/> NO _____ | <u>REPORT REQ'D.</u> FORMAL _____ TEST RESULTS ONLY <input checked="" type="checkbox"/> | DATE REQUESTED: <u>12-5-88</u> DATE NEEDED BY: <u>1-16-89</u> REQUESTED BY: <u>RS MURPHY</u> WORK ORDER NO: <u>481152</u> |
|--|---|--|

| | | | |
|---|---|---|--------------------------------------|
| <u>TEST TYPE</u> | | | |
| <input type="checkbox"/> Strength Test | <input type="checkbox"/> Ammunition Test | <input type="checkbox"/> Dry Cycle Test | <input type="checkbox"/> Photo/Video |
| <input checked="" type="checkbox"/> Function Test | <input type="checkbox"/> Environmental Test | <input type="checkbox"/> Measurements | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Accuracy Test | <input type="checkbox"/> Customer Complaint | <input type="checkbox"/> Endurance Test | _____ |

EXPLAIN IN DETAIL THE REASON FOR THIS TEST:

These XP's were assembled in Production. Please function these three guns to 500 rds in a jack. Shoot the 200 gr. bullet weight. Every 100 rounds please return the guns to production and comparabr check (and record) the sear engagement. The test is to verify that the lock washers installed to prevent movement of the engagement screw will work. NOTE: If the lock washers

GUNS REQUIRED: do not work, sear engagement may change and the gun may f3R or fire on Closing!
 # B7525755 # B7525802 # B7525875

NOTE: NO firearms or parts will be tested in the Labs unless they are accompanied by a Work Request, and both are delivered to the Labs by the designer or engineer. All Work Requests are to be filled out in detail. No Exceptions.

DATE COMPLETED: 12/8/88
 TEST COMPLETED BY: CS
 REPORT DATE: 12/19/88

TEST AND MEASUREMENT LAB

- TEST REPORT

REQUESTER:R. MURPHY
REPORT NO.:883401
WRITTEN BY:C.STEPHENS

TESTER:C. STEPHENS

DATE:9 DEC 88
WORK ORDER:481152

TEST TYPE:TEST RESULTS

FIREARM STAT'S:

MODEL:XP100
BARREL TYPE:

CAL OR GAGE:35 REM
PROOFED:YES

REASON FOR TEST:

TO VERIFY THAT INSTALLING LOCKWASHERS ON THE ENGAGEMENT SCREW WILL PREVENT MOVEMENT OF THE SCREW.

EQUIPMENT REQUIRED:

3 XP100 IN 35 REM, SHOOTING ROOM, COMPARATOR, PERSONAL

TEST PROCEDURE:

EACH GUN WAS SHOT 500 RDS. AT 100 RD. INTERVALS EACH GUN WAS TAKEN TO PRODUCTION AND THE SEAR ENGAGEMENT AND OVER TRAVEL CHECKED.

TEST RESULTS:

THE RESULTS SHOW THAT TWO GUNS SHOWED MOVEMENT WITHIN TWO HUNDRED ROUNDS ON SEAR ENGAGEMENT. BOTH GUNS REMAINED WITHIN SPECS. ALL THREE GUNS SHOT THE LAST THREE HUNDRED ROUNDS WITH NO MOVEMENT

Trigger Adjustment Locknut

| | Serial No. | 100 rds. | | 200 rds. | | 300 rds. | | 400 rds. | | 500 rds. | |
|----|------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
| | | Sear | Over Travel |
| 1 | B7525802 | Mean | Max | Mean | Max | Min | Max | Min | Max | Min | Max |
| 2 | | | | | | | | | | | |
| 3 | B7525755 | Max | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean |
| 4 | | | | | | | | | | | |
| 5 | B7525875 | Mean | Mean |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 21 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 25 | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 27 | | | | | | | | | | | |
| 28 | | | | | | | | | | | |
| 29 | | | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 31 | | | | | | | | | | | |
| 32 | | | | | | | | | | | |
| 33 | | | | | | | | | | | |
| 34 | | | | | | | | | | | |
| 35 | | | | | | | | | | | |
| 36 | | | | | | | | | | | |
| 37 | | | | | | | | | | | |
| 38 | | | | | | | | | | | |
| 39 | | | | | | | | | | | |
| 40 | | | | | | | | | | | |

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

xc: W.H. Coleman, II/File
 K.W. Soucy
 D.J. Anderson
 G.J. Hill
 T.C. Douglas
 J.R. Snedeker
 J.F. Matousek, Jr.
 F.L. Supry
 File

RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 872151
AUGUST 06, 1987

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ABSTRACT:

Research and Development finds the Trial and Pilot Evaluation of the Model XP-100 35 REM caliber to be acceptable.

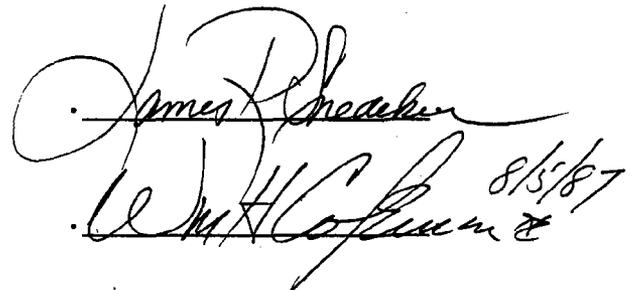
The pistols tested were randomly selected, after being put in the warehouse. The pistols were examined, as received, by Research Technicians, and then subjected to the 100 yard (off hand bench rest) accuracy test. The barrels with the maximum and minimum extreme spread were removed from the stocks and shot one five shot group each, using the Gallery accuracy device.

Prepared by: F.L. Supry
Date Prepared: 08/06/87

proofread and cleared by:

J.R. SNEDEKER, Research Supervisor
Test, Measurement & Mech. Analysis Lab

W.H. COLEMAN, II
New Products Research Lab Director


James R. Snedeker
W.H. Coleman, II 8/5/87

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TO: J.R. Snedeker
FROM: F.L. Supry

INTRODUCTION:

In July 1987, a request to conduct a Trial and Pilot Evaluation of the Model XP-100 35 REM caliber pistol was received by the Test Lab. The evaluation would use four pistols, withdrawn from the warehouse, and consist of Visual Inspection and 100 yard accuracy.

SCOPE OF THE TEST:

To determine if the production run sample would meet the Remington Specifications set by the Research Design Section.

TEST RESULTS:

The Model XP-100, chambered in the 35 REM caliber, was found to be acceptable in all phases of the Trial and Pilot Evaluation.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

REPORT TEXT:

1. VISUAL INSPECTION:

A. There were no major items in the appearance of the pistols.

B. The pistols used in the Visual Inspection were:

B7520239 B7520092 B7520550 B7520284

C. Comments on each pistol are located in the appendix.

2. ACCURACY:

The Remington standard for the XP-100, chambered in the 35 REM caliber is an extreme group size of: 3.5 inches for a 5 shot group.

A. The pistols used in the accuracy test were:

B7520239 B7520092 B7520550 B7520284

B. The following averages were established:

| | <u>BENCH REST</u> | <u>ACCURACY DEVICE</u> |
|-----------------------|-------------------|------------------------|
| a. Group Size: | 2.82 inches | 2.49 inches |
| b. Horizontal Spread: | 2.24 inches | 2.16 inches |
| c. Vertical Spread: | 1.73 inches | 2.15 inches |

C. Accuracy results per individual pistol are located in the appendix of this report.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

TEST PROCEDURE:

1. VISUAL INSPECTION:

- A. The visual inspection was done by F.L. Supry and C.J. Stephens.
- B. All 4 of the pistols were examined.
- C. Each pistol was wiped down with a clean white Coyne towel, and examined. All comments were recorded.

2. ACCURACY:

- A. The off hand (bench rest) accuracy was shot by C.J. Stephens, at the R&D 100 yard range.
- B. Weaver bases and rings were used, in conjunction with a Redfield 12X scope.
- C. Remington ammunition, index R35R1, code E27 C6005L, 150 grain pointed soft point, was used for the 100 yard accuracy test.
- D. Before shooting the 100 yard accuracy test, the bores on each pistol were brushed with Hoppe's No. 9 solvent and patched dry.
- E. A total of three, five shot groups, were shot with each pistol. The pistols were cooled between each group, and one "warmer" shot was fired before the next group was shot.
- F. The accuracy device accuracy was shot by R. Sterling, at the Gallery 100 yard range.
- G. The stocks were removed from two of the pistols, and one five shot group was shot with each pistol.
- H. The patterns were analyzed for group size, horizontal spread, and vertical spread, using the HP 9000 computer and digitizing tablet.

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

APPENDIX

Report# 872151

Work Order# 111411-001800

MODEL XP-100 35 REM CALIBER TRIAL AND PILOT EVALUATION

ACCURACY RESULTS - EXTREME SPREAD

| <u>SERIAL NUMBER</u> | <u>GROUP#</u> | <u>BENCH REST</u> (inches) | <u>ACCURACY DEVICE</u> (inches) |
|----------------------|---------------|-------------------------------|------------------------------------|
| B7520092 | 1 | 3.07 | NA |
| | 2 | 2.70 | NA |
| | 3 | 2.81 | NA |
| B7520284 | 1 | 3.00 | 2.49 |
| | 2 | 2.98 | NA |
| | 3 | 2.74 | NA |
| B7520239 | 1 | 2.52 | NA |
| | 2 | 2.20 | NA |
| | 3 | 4.09 | NA |
| B7520550 | 1 | 2.27 | 2.37 |
| | 2 | 2.05 | NA |
| | 3 | 3.36 | NA |

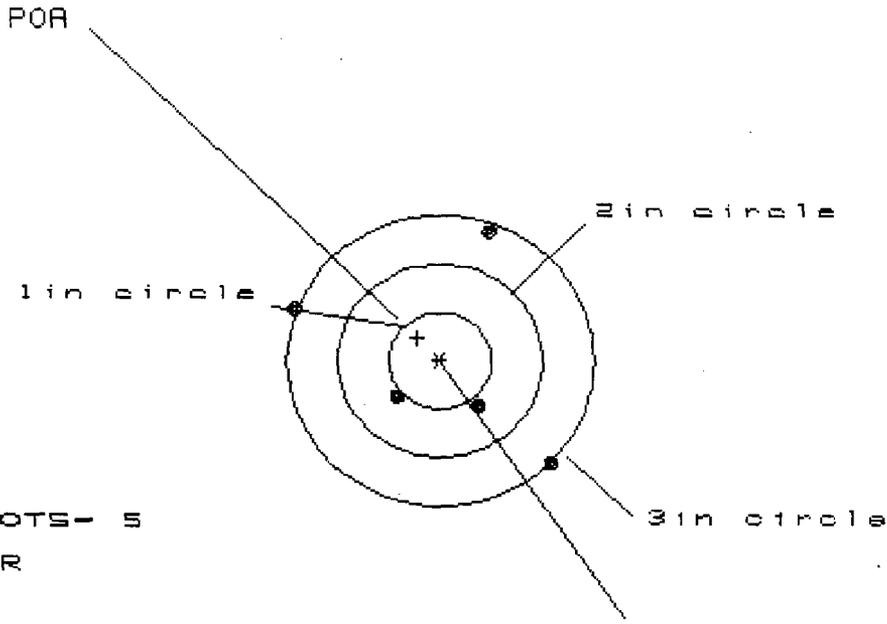
NOTE:

THE ACCURACY DEVICE WAS USED TO VERIFY THE BARRELS WITH THE MINIMUM AND MAXIMUM EXTREME SPREAD, FROM THE OFF HAND BENCH REST SHOOTING.

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1in = 0
 2in = 2
 3in = 4
 HS = 2.537
 VS = 2.362
 GS = 2.971

CENTROID *
 2.367
 2.621
 Avg = 2.494

| PATTERN # | 1 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.077 | .712 | .298 |
| MINIMUM X | -1.460 | -.821 | -.584 |
| MAXIMUM Y | 1.336 | 1.466 | 1.167 |
| MINIMUM Y | -1.026 | -.896 | -.600 |
| CENTROID X | .224 | .589 | .352 |
| CENTROID Y | -.238 | -.368 | -.069 |
| POA TO CENTROID in. | .327 | .694 | .358 |
| MIN RADIUS | .597 | .305 | .664 |
| MEAN RADIUS | 1.128 | .945 | .894 |
| MAX RADIUS | 1.550 | 1.467 | 1.205 |
| HORIZONTAL SPREAD | 2.537 | 1.533 | .882 |
| VERTICAL SPREAD | 2.362 | 2.362 | 1.767 |
| EXTREME SPREAD | 2.971 | 2.450 | 1.945 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 2 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

1509r (0284)
~~0550~~ ~~0584~~

2.537
 - 350

 2.187

2.362
 - 350

 2.012

2.971
 - 350

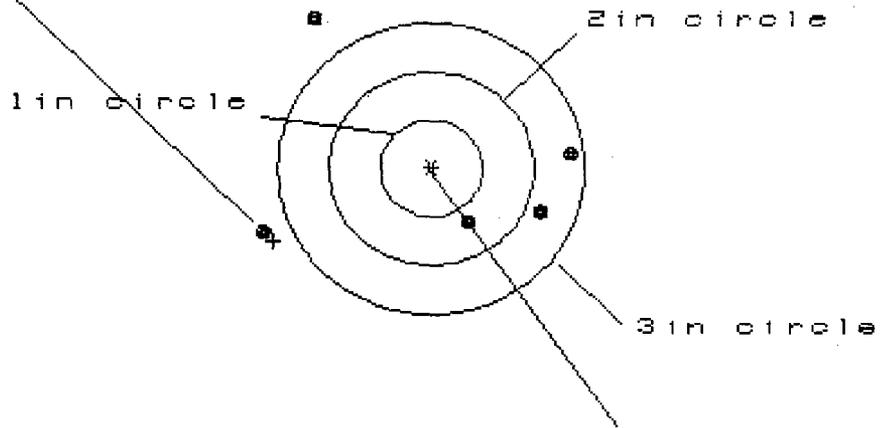
 2.621

5 Aug 387

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 2

POA



OF SHOTS - 5

IN CIR

1 in = 0

2 in = 1

3 in = 0

HS = 2.953

VS = 2.170

GS = 3.073

CENTROID *

| PATTERN # | 2 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.329 | 1.034 | .395 |
| MINIMUM X | -1.624 | -1.919 | -.558 |
| MAXIMUM Y | 1.508 | .565 | .470 |
| MINIMUM Y | -.662 | -.285 | -.278 |
| CENTROID X | 1.541 | 1.836 | 2.475 |
| CENTROID Y | .747 | .370 | .465 |
| POA TO CENTROID in. | 1.712 | 1.873 | 2.519 |
| MIN RADIUS | .674 | .200 | .253 |
| MEAN RADIUS | 1.376 | 1.032 | .497 |
| MAX RADIUS | 1.915 | 1.940 | .624 |
| HORIZONTAL SPREAD | 2.953 | 2.953 | .953 |
| VERTICAL SPREAD | 2.170 | .850 | .748 |
| EXTREME SPREAD | 3.073 | 3.073 | 1.211 |
| NUMBER IN ONE INCH CIRCLE = | 0 | | |
| NUMBER IN TWO INCH CIRCLE = | 1 | | |
| NUMBER IN THREE INCH CIRCLE = | 0 | 3 | |

2009r
(0284)

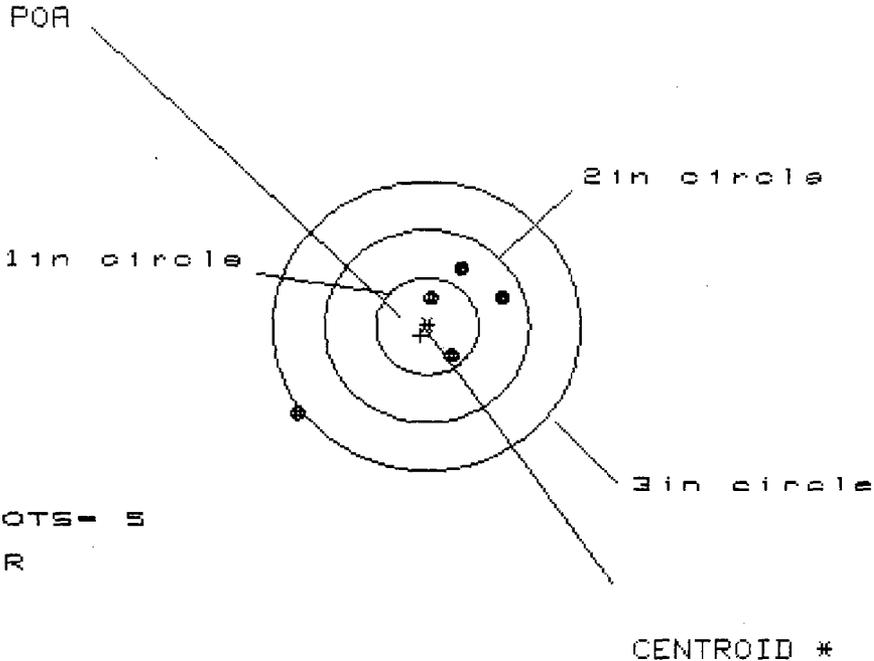
2.

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/000VER3

CENTERFIRE PATTERNS

3



OF SHOTS = 5
 # IN CIR
 1 in = 2
 2 in = 4
 3 in = 4
 HS = 1.984
 VS = 1.451
 GS = 2.288

CENTROID *

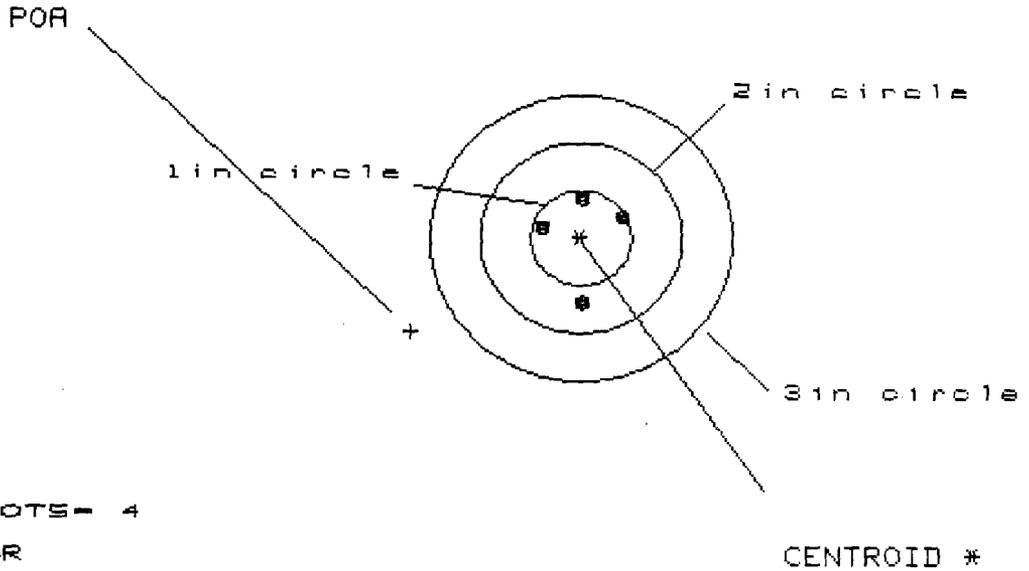
| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .706 | .386 | .099 |
| MINIMUM X | -1.278 | -.310 | -.181 |
| MAXIMUM Y | .592 | .377 | .398 |
| MINIMUM Y | -.859 | -.483 | -.462 |
| CENTROID X | .062 | .382 | .253 |
| CENTROID Y | .096 | .311 | .290 |
| POA TO CENTROID in. | .115 | .492 | .384 |
| MIN RADIUS | .257 | .312 | .191 |
| MEAN RADIUS | .719 | .392 | .357 |
| MAX RADIUS | 1.540 | .486 | .469 |
| HORIZONTAL SPREAD | 1.984 | .696 | .280 |
| VERTICAL SPREAD | 1.451 | .860 | .860 |
| EXTREME SPREAD | 2.288 | .860 | .860 |
| NUMBER IN ONE INCH CIRCLE = | | 2 | |
| NUMBER IN TWO INCH CIRCLE = | | 4 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

200 gr
0550

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 3



OF SHOTS - 4

IN CIR

1 in = 3

2 in = 4

3 in = 4

HS = .7000

VS = 1.0000

GS = 1.0000

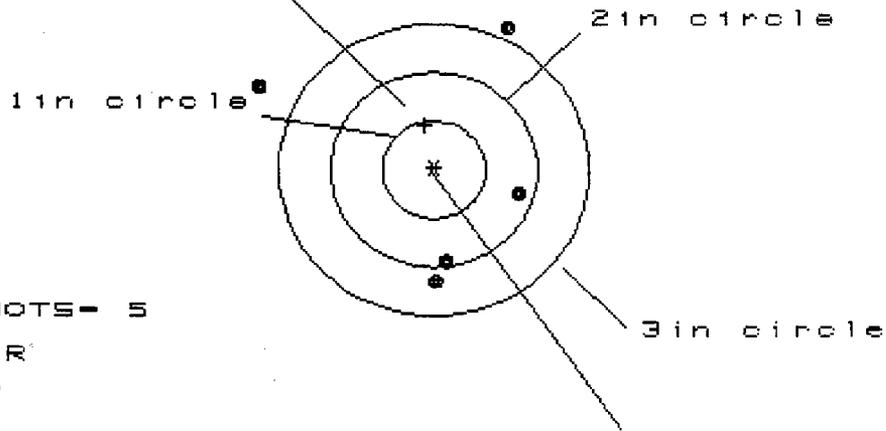
| PATTERN # | 3 | 3 | 2 |
|-------------------------------|-------|-------|-------|
| SHOTS (BEST OF) | 4 | 3 | 2 |
| MAXIMUM X | .373 | .385 | .183 |
| MINIMUM X | -.416 | -.404 | -.183 |
| MAXIMUM Y | .405 | .176 | .114 |
| MINIMUM Y | -.688 | -.124 | -.114 |
| CENTROID X | 1.687 | 1.675 | 1.877 |
| CENTROID Y | .979 | 1.208 | 1.270 |
| POA TO CENTROID in. | 1.950 | 2.065 | 2.266 |
| MIN RADIUS | .405 | .177 | .216 |
| MEAN RADIUS | .484 | .329 | .216 |
| MAX RADIUS | .689 | .423 | .216 |
| HORIZONTAL SPREAD | .789 | .789 | .366 |
| VERTICAL SPREAD | 1.093 | .300 | .228 |
| EXTREME SPREAD | 1.093 | .792 | .431 |
| NUMBER IN ONE INCH CIRCLE = | | 3 | |
| NUMBER IN TWO INCH CIRCLE = | | 4 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

5 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/XP10035

CENTERFIRE PATTERNS # 4

POA



OF SHOTS - 5

IN CIR

1 in = 1

2 in = 2

3 in = 0

HS = 2.488

VS = 2.639

GS = 2.717

CENTROID *

| PATTERN # | 4 | 3 | 2 |
|-------------------------------|--------|-------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .806 | .386 | .472 |
| MINIMUM X | -1.682 | -.387 | -.301 |
| MAXIMUM Y | 1.481 | 1.690 | .535 |
| MINIMUM Y | -1.158 | -.949 | -.385 |
| CENTROID X | .086 | .506 | .420 |
| CENTROID Y | -.456 | -.665 | -1.229 |
| POA TO CENTROID in. | .464 | .836 | 1.299 |
| MIN RADIUS | .841 | .387 | .227 |
| MEAN RADIUS | 1.289 | .970 | .477 |
| MAX RADIUS | 1.878 | 1.710 | .713 |
| HORIZONTAL SPREAD | 2.488 | .773 | .773 |
| VERTICAL SPREAD | 2.639 | 2.639 | .920 |
| EXTREME SPREAD | 2.717 | 2.717 | 1.202 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 2 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

150 gr

0550

$$\begin{array}{r} 2.488 \\ - 350 \\ \hline 2,138 \end{array}$$

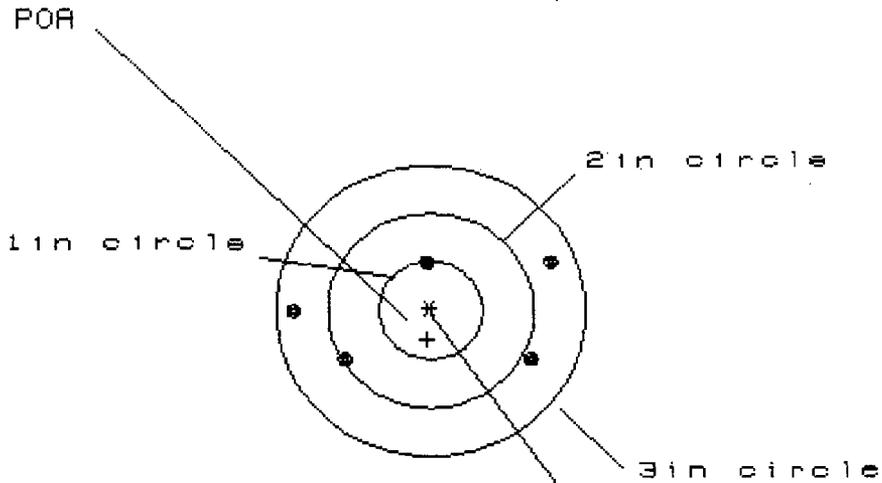
$$\begin{array}{r} 2639 \\ 350 \\ \hline 2,289 \end{array}$$

$$\begin{array}{r} 2717 \\ - 750 \\ \hline 2,367 \end{array}$$

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520550

CENTERFIRE PATTERNS # 1



OF SHOTS = 5
 # IN CIR
 1 in = 1
 2 in = 2
 3 in = 5
 HS = 2.555
 VS = 1.060
 GS = 2.620

2.559 = 2.56
 Aug. 2 86
 35 Rem.

| PATTERN # | 1 | 2 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.207 | .868 | .938 |
| MINIMUM X | -1.358 | -1.152 | -.863 |
| MAXIMUM Y | .530 | .529 | .673 |
| MINIMUM Y | -.530 | -.531 | -.355 |
| CENTROID X | .034 | .373 | .084 |
| CENTROID Y | .301 | .302 | .126 |
| POA TO CENTROID in. | .303 | .480 | .151 |
| MIN RADIUS | .498 | .617 | .678 |
| MEAN RADIUS | 1.049 | .931 | .867 |
| MAX RADIUS | 1.358 | 1.254 | 1.003 |
| HORIZONTAL SPREAD | 2.565 | 2.020 | 1.801 |
| VERTICAL SPREAD | 1.060 | 1.060 | 1.028 |
| EXTREME SPREAD | 2.620 | 2.265 | 1.801 |
| NUMBER IN ONE INCH CIRCLE = | | 1 | |
| NUMBER IN TWO INCH CIRCLE = | | 2 | |
| NUMBER IN THREE INCH CIRCLE = | | 5 | |

AUG
 HS = 1.57
 VS = 1.90

2.620
 - 350

 2.27

2.565
 - 350

 2.215

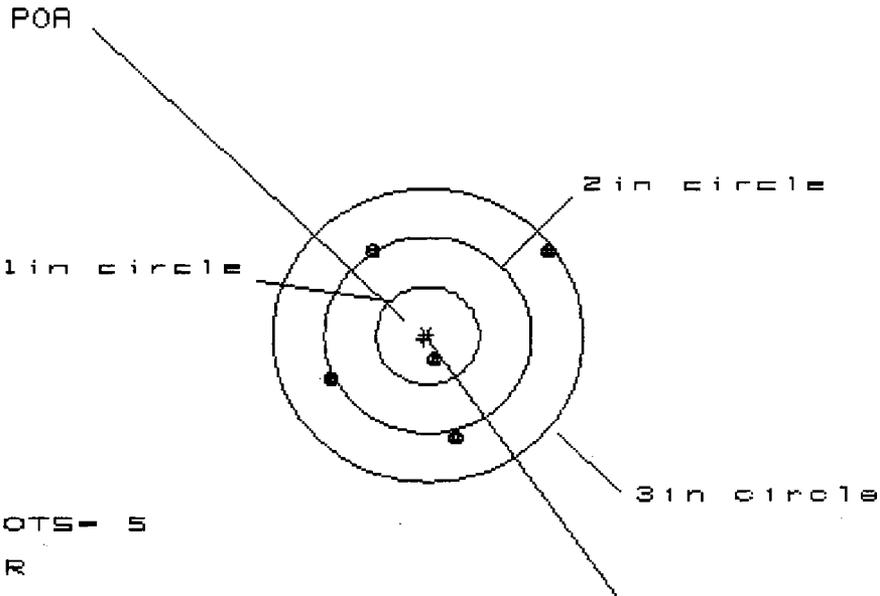
1.066
 350

 .710

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520550

CENTERFIRE PATTERNS # 2



OF SHOTS - 5

IN CIR

1 in = 1

2 in = 1

3 in = 5

HS = 2.026

VS = 1.904

GS = 2.399

| PATTERN # | 2 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.125 | .565 | .529 |
| MINIMUM X | -.901 | -.619 | -.431 |
| MAXIMUM Y | .883 | 1.095 | .826 |
| MINIMUM Y | -1.021 | -.809 | -.494 |
| CENTROID X | .033 | -.249 | -.437 |
| CENTROID Y | .040 | -.172 | .097 |
| POA TO CENTROID in. | .052 | .302 | .447 |
| MIN RADIUS | .280 | .346 | .624 |
| MEAN RADIUS | .960 | .781 | .704 |
| MAX RADIUS | 1.409 | 1.132 | .831 |
| HORIZONTAL SPREAD | 2.026 | 1.184 | .960 |
| VERTICAL SPREAD | 1.904 | 1.904 | 1.320 |
| EXTREME SPREAD | 2.399 | 2.085 | 1.362 |
| NUMBER IN ONE INCH CIRCLE = | | 1 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 5 | |

$$\begin{array}{r} 1.409 \\ 3.50 \\ \hline 1.059 \end{array}$$

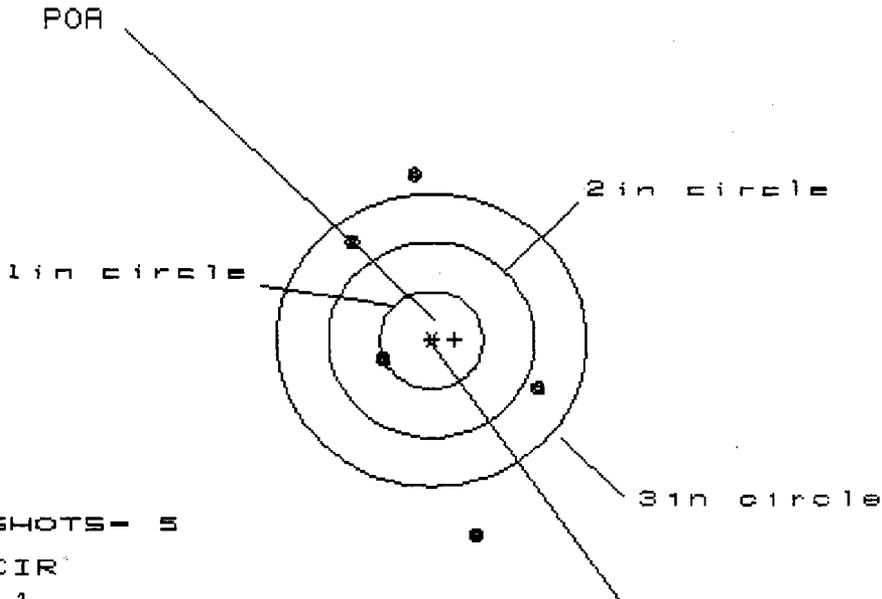
$$\begin{array}{r} 2.026 \\ 1.350 \\ \hline 1.676 \end{array}$$

$$\begin{array}{r} 2.399 \\ .250 \\ \hline 2.049 \end{array}$$

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520550

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 1
 3 in = 0
 HS = 1.786
 VS = 3.674
 GS = 3.710

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .980 | 1.078 | 1.069 |
| MINIMUM X | -.806 | -.709 | -.717 |
| MAXIMUM Y | 1.676 | 1.177 | .884 |
| MINIMUM Y | -1.998 | -.945 | -.553 |
| CENTROID X | -.228 | -.326 | -.317 |
| CENTROID Y | -.005 | .494 | .102 |
| POA TO CENTROID in. | .228 | .592 | .333 |
| MIN RADIUS | .494 | .801 | .483 |
| MEAN RADIUS | 1.313 | 1.068 | .942 |
| MAX RADIUS | 2.035 | 1.433 | 1.203 |
| HORIZONTAL SPREAD | 1.786 | 1.786 | 1.786 |
| VERTICAL SPREAD | 3.674 | 2.122 | 1.437 |
| EXTREME SPREAD | 3.710 | 2.392 | 2.292 |
| NUMBER IN ONE INCH CIRCLE = | | 1 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 3 | |

3.710
 .350

 3,360

1.786
 350

 1,436

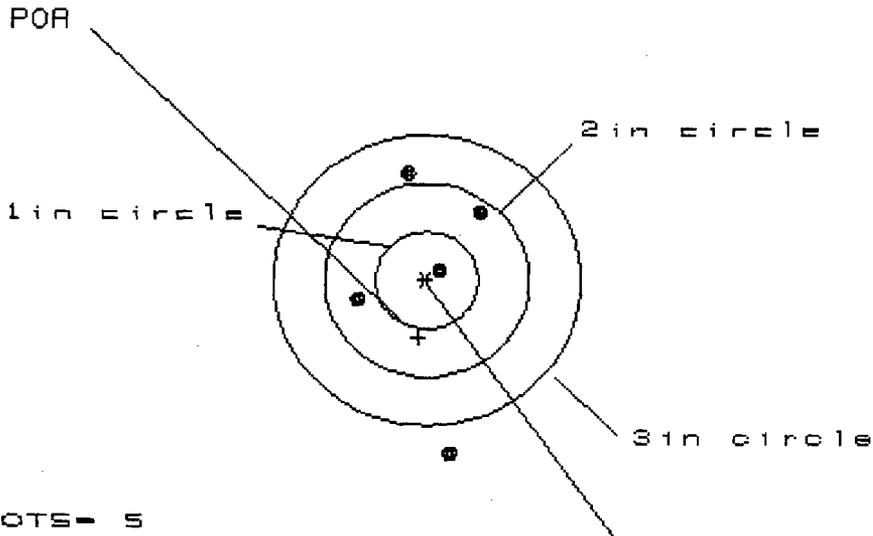
3.674
 350

 3,324

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520239

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 3
 3 in = 4
 HS = 1.175
 VS = 2.939
 GS = 2.972

CENTROID *

2.937 = 2.94

Aug. 3.26
35 Rem.

| PATTERN # | 1 | 2 | 3 |
|-------------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .525 | .587 | .542 |
| MINIMUM X | -.650 | -.588 | -.633 |
| MAXIMUM Y | 1.115 | .659 | .482 |
| MINIMUM Y | -1.824 | -.621 | -.402 |
| CENTROID X | .079 | .017 | .062 |
| CENTROID Y | .592 | 1.048 | .829 |
| POA TO CENTROID in. | .598 | 1.049 | .831 |
| MIN RADIUS | .173 | .329 | .121 |
| MEAN RADIUS | .941 | .625 | .532 |
| MAX RADIUS | 1.841 | .856 | .750 |
| HORIZONTAL SPREAD | 1.175 | 1.175 | 1.175 |
| VERTICAL SPREAD | 2.939 | 1.280 | .884 |
| EXTREME SPREAD | 2.972 | 1.470 | 1.470 |
| NUMBER IN ONE INCH CIRCLE = | | 1 | |
| NUMBER IN TWO INCH CIRCLE = | | 3 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

AUG
HS = 2.25
VS = 1.59

2.972
- .350

2.522

1.175
- .350

0.825

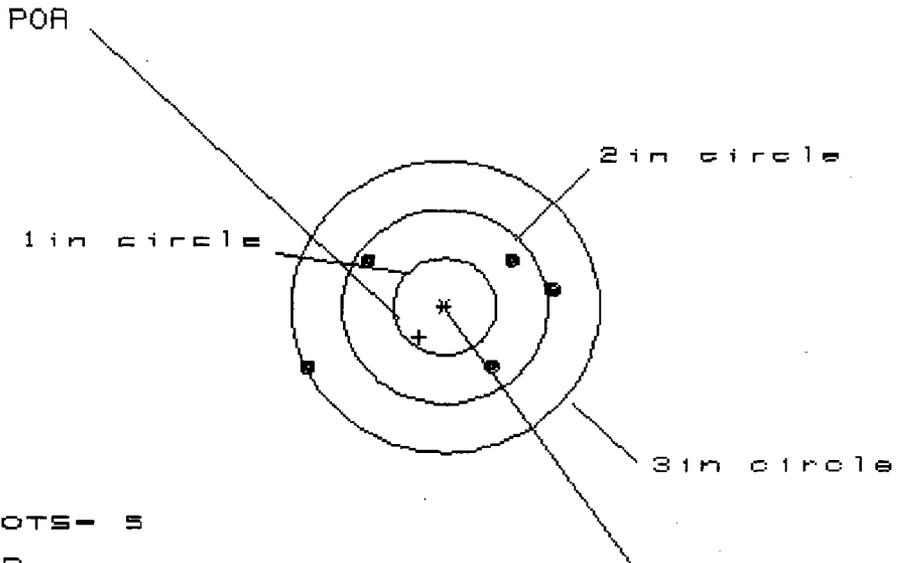
2.939
- .350

2.589

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520239

CENTERFIRE PATTERNS # 2



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 3
 3 in = 4
 HS = 2.409
 VS = 1.141
 GS = 2.553

| PATTERN # | 2 | 3 | 4 | 5 |
|-----------------------------|-------|--------|--------|--------|
| SHOTS (BEST OF) | 3 | 4 | 5 | 5 |
| MAXIMUM X | .518 | .700 | 1.041 | 1.041 |
| MINIMUM X | -.838 | -1.071 | -1.368 | -1.368 |
| MAXIMUM Y | .379 | .359 | .515 | .515 |
| MINIMUM Y | -.707 | -.727 | -.626 | -.626 |
| CENTROID X | .357 | .591 | .249 | .249 |
| CENTROID Y | .454 | .474 | .318 | .318 |
| POA TO CENTROID in. | .577 | .758 | .404 | .404 |
| MIN RADIUS | .642 | .458 | .714 | .714 |
| MEAN RADIUS | .773 | .752 | .992 | .992 |
| MAX RADIUS | .900 | 1.114 | 1.504 | 1.504 |
| HORIZONTAL SPREAD | 1.356 | 1.771 | 2.409 | 2.409 |
| VERTICAL SPREAD | 1.086 | 1.086 | 1.141 | 1.141 |
| EXTREME SPREAD | 1.553 | 1.788 | 2.553 | 2.553 |
| NUMBER IN ONE INCH CIRCLE | = 0 | = 0 | = 0 | = 0 |
| NUMBER IN TWO INCH CIRCLE | = 3 | = 3 | = 3 | = 3 |
| NUMBER IN THREE INCH CIRCLE | = 4 | = 4 | = 4 | = 4 |

2.553
 - .350

 2,203

2.409
 - .350

 2,059

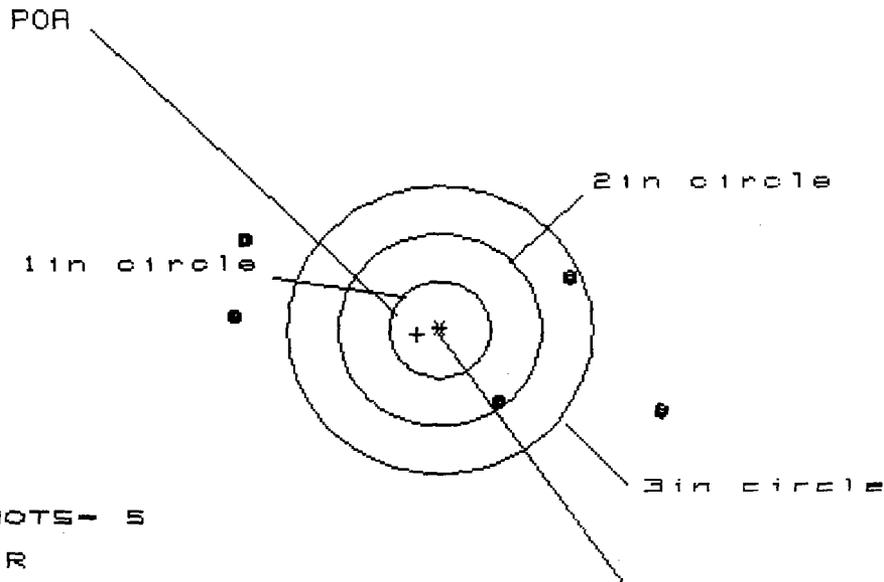
1.141
 - .350

 .791

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520239

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 1
 3 in = 2
 IS = 4.211
 VS = 1.734
 GS = 4.437

CENTROID *

Aug. 3-26

| PATTERN # | 3 | 4 | 3 |
|-----------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 2.164 | 1.813 | 1.353 |
| MINIMUM X | -2.047 | -1.506 | -1.965 |
| MAXIMUM Y | .914 | .709 | .557 |
| MINIMUM Y | -.820 | -.938 | -.702 |
| CENTROID X | .222 | -.319 | .140 |
| CENTROID Y | .052 | .257 | .021 |
| POA TO CENTROID in. | .228 | .410 | .142 |
| MIN RADIUS | .905 | 1.424 | .931 |
| MEAN RADIUS | 1.754 | 1.581 | 1.455 |
| MAX RADIUS | 2.315 | 1.841 | 1.970 |
| HORIZONTAL SPREAD | 4.211 | 3.318 | 3.318 |
| VERTICAL SPREAD | 1.734 | 1.647 | 1.259 |
| EXTREME SPREAD | 4.437 | 3.343 | 3.343 |
| NUMBER IN ONE INCH CIRCLE | = | 0 | |
| NUMBER IN TWO INCH CIRCLE | = | 1 | |
| NUMBER IN THREE INCH CIRCLE | = | 2 | |

4.437
 .350

 4.087

4.211
 - .350

 3.861

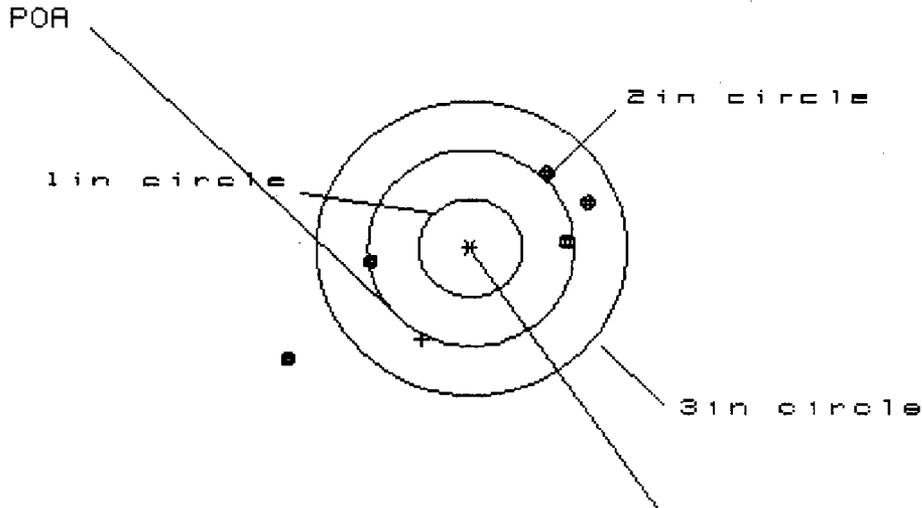
1.734
 .350

 1.384

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B75202B4

CENTERFIRE PATTERNS # 1



OF SHOTS - 5

IN CIR

1 in = 0

2 in = 1

3 in = 4

HS = 2.839

VS = 1.976

GS = 3.345

CENTROID *

2.904 = 2.90

Aug 3-2
35 Rem.

| PATTERN # | 1 | 4 | 3 |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.146 | .698 | .701 |
| MINIMUM X | -1.793 | -1.444 | -1.211 |
| MAXIMUM Y | .804 | .511 | .555 |
| MINIMUM Y | -1.172 | -.459 | -.415 |
| CENTROID X | .471 | .919 | .686 |
| CENTROID Y | .933 | 1.226 | 1.182 |
| POA TO CENTROID in. | 1.045 | 1.532 | 1.367 |
| MIN RADIUS | .923 | .503 | .715 |
| MEAN RADIUS | 1.276 | .828 | .916 |
| MAX RADIUS | 2.142 | 1.515 | 1.280 |
| HORIZONTAL SPREAD | 2.939 | 2.142 | 1.912 |
| VERTICAL SPREAD | 1.976 | .970 | .970 |
| EXTREME SPREAD | 3.345 | 2.222 | 1.976 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 1 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

AUG
HS = 2.76
VS = 1.33

3.345
- 350
2.995

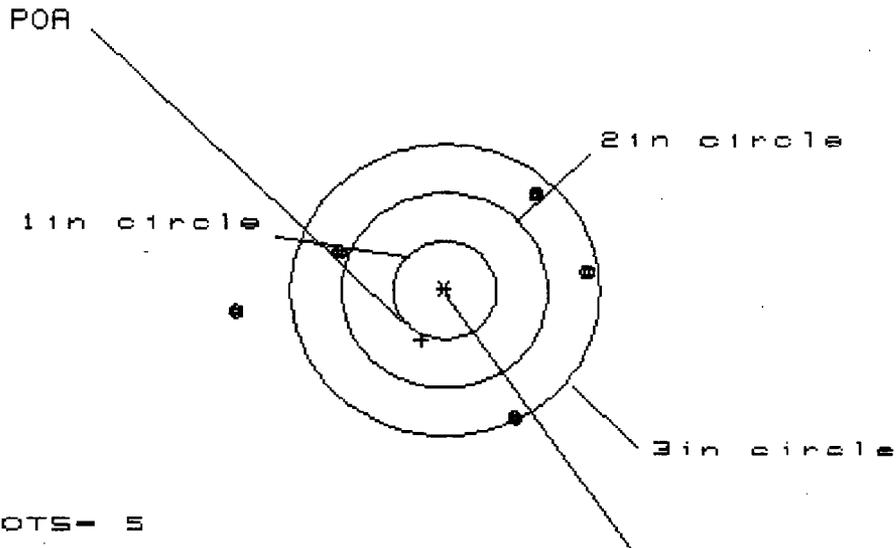
2.739
- 350
2.589

1.976
- 350
1.626

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B75202B4

CENTERFIRE PATTERNS # 2



OF SHOTS- 5
 # IN CIR
 1in = 0
 2in = 0
 3in = 4
 HS= 3.312
 VS= 2.240
 GS= 3.328

| PATTERN # | 2 | 4 | 3 |
|-------------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.335 | .841 | .915 |
| MINIMUM X | -1.977 | -1.482 | -1.408 |
| MAXIMUM Y | .958 | .913 | .470 |
| MINIMUM Y | -1.282 | -1.327 | -.341 |
| CENTROID X | .225 | .719 | .645 |
| CENTROID Y | .510 | .555 | .998 |
| POA TO CENTROID in. | .557 | .908 | 1.188 |
| MIN RADIUS | 1.051 | .847 | .682 |
| MEAN RADIUS | 1.434 | 1.178 | 1.024 |
| MAX RADIUS | 1.985 | 1.514 | 1.414 |
| HORIZONTAL SPREAD | 3.312 | 2.323 | 2.323 |
| VERTICAL SPREAD | 2.240 | 2.240 | .811 |
| EXTREME SPREAD | 3.328 | 2.364 | 2.333 |
| NUMBER IN ONE INCH CIRCLE = | | 0 | |
| NUMBER IN TWO INCH CIRCLE = | | 0 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

3.312
- .380
2.962

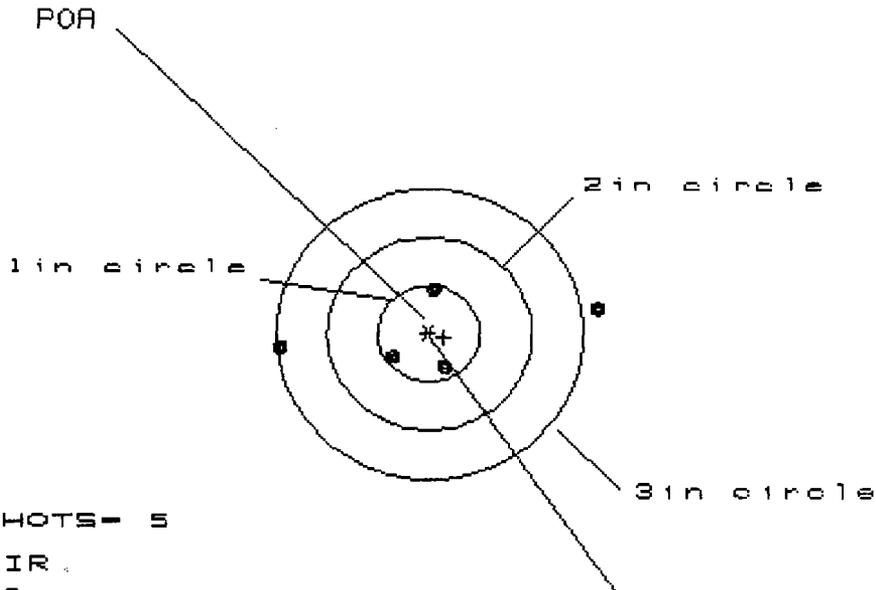
2.240
- .350
1.89

3.328
- .350
2.978

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B75202B4

CENTERFIRE PATTERNS # 3



OF SHOTS- 5
 # IN CIR.
 1 in = 3
 2 in = 3
 3 in = 4
 HS = 3.065
 VS = .812
 GS = 3.090

CENTROID *

| PATTERN # | 3 | 4 | 3 |
|-------------------------------|--------|--------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.599 | .586 | .231 |
| MINIMUM X | -1.466 | -1.066 | -.354 |
| MAXIMUM Y | .432 | .501 | .485 |
| MINIMUM Y | -.380 | -.311 | -.327 |
| CENTROID X | -.145 | -.545 | -.190 |
| CENTROID Y | .038 | -.031 | -.015 |
| POA TO CENTROID in. | .150 | .546 | .191 |
| MIN RADIUS | .423 | .141 | .387 |
| MEAN RADIUS | .881 | .641 | .429 |
| MAX RADIUS | 1.623 | 1.067 | .500 |
| HORIZONTAL SPREAD | 3.065 | 1.652 | .585 |
| VERTICAL SPREAD | .812 | .812 | .812 |
| EXTREME SPREAD | 3.090 | 1.673 | .819 |
| NUMBER IN ONE INCH CIRCLE = | | 3 | |
| NUMBER IN TWO INCH CIRCLE = | | 3 | |
| NUMBER IN THREE INCH CIRCLE = | | 4 | |

3.090
 .350

 2.740

3.065
 .350

 2.715

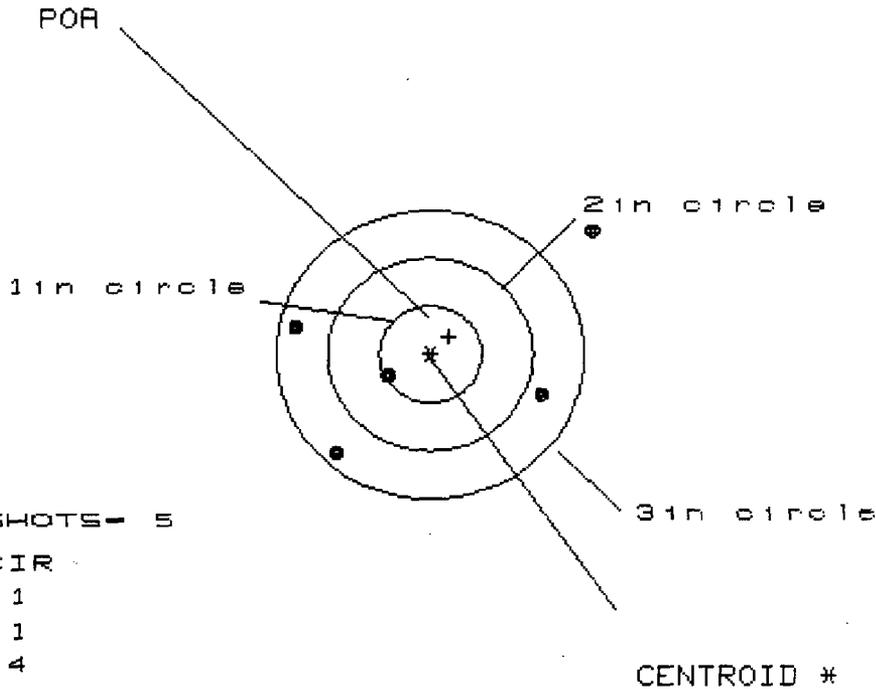
.812
 .350

 .462

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520092

CENTERFIRE PATTERNS # 1



OF SHOTS - 5
 # IN CIRCLES
 1 in = 1
 2 in = 1
 3 in = 4
 HS = 2.043
 VS = 2.349
 GS = 3.417

CENTROID *

2.858 = 2.86

Aug. #6
35 Rem.

| PATTERN # | 1 | 2 | 3 |
|---------------------------|--------|-------|-------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.593 | 1.504 | 1.187 |
| MINIMUM X | -1.350 | -.952 | -.807 |
| MAXIMUM Y | 1.332 | .664 | .368 |
| MINIMUM Y | -1.017 | -.684 | -.462 |
| CENTROID X | -.182 | -.580 | -.263 |
| CENTROID Y | -.183 | -.516 | -.738 |
| POA TO CENTROID n. | .258 | .776 | .783 |
| MIN RADIUS | .497 | .159 | .528 |
| MEAN RADIUS | 1.302 | .918 | .883 |
| MAX RADIUS | 2.076 | 1.509 | 1.190 |
| HORIZONTAL SPREAD | 2.943 | 2.456 | 1.994 |
| VERTICAL SPREAD | 2.349 | 1.348 | .830 |
| EXTREME SPREAD | 3.417 | 2.580 | 2.070 |
| NUMBER IN ONE INCH CIRC | = | 1 | |
| NUMBER IN TWO INCH CIRC | = | 1 | |
| NUMBER IN THREE INCH CIRC | = | 4 | |

Aug
HS = 2.36
VS = 2.17

3.417
- 350
3.067

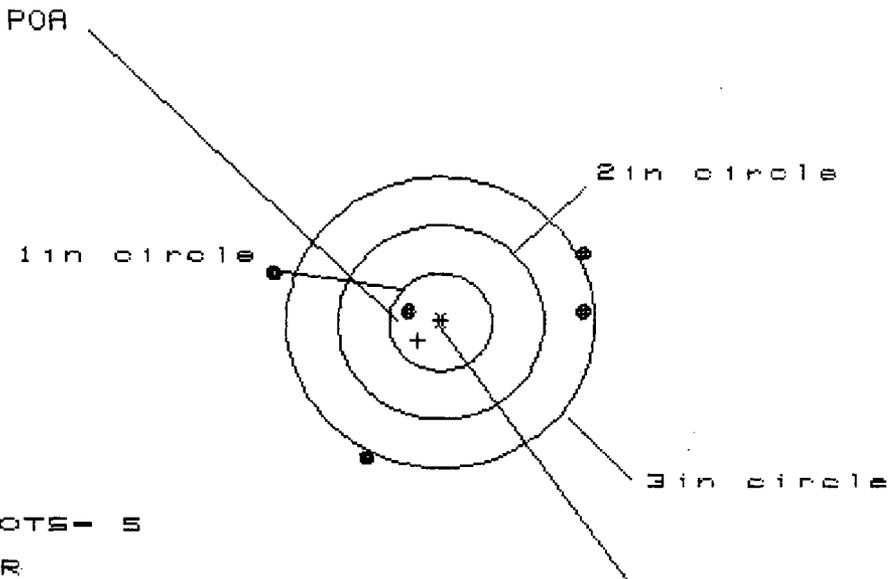
2.943
- 350
2.593

2.349
- 350
1.999

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/B7520092

CENTERFIRE PATTERNS # 2



OF SHOTS - 5
 # IN CIR
 1 in = 1
 2 in = 1
 3 in = 2
 HM = 3.044
 VS = 2.098
 GS = 3.051

CENTROID *

| PATTERN # | 2 | 4 | 3 |
|-----------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | 1.377 | .961 | .588 |
| MINIMUM X | -1.667 | -1.118 | -1.156 |
| MAXIMUM Y | .688 | .814 | .386 |
| MINIMUM Y | -1.410 | -1.284 | -.204 |
| CENTROID X | .219 | .636 | 1.008 |
| CENTROID Y | .189 | .063 | .491 |
| POA TO CENTROID in. | .289 | .639 | 1.121 |
| MIN RADIUS | .386 | .821 | .604 |
| MEAN RADIUS | 1.321 | 1.187 | .826 |
| MAX RADIUS | 1.742 | 1.702 | 1.170 |
| HORIZONTAL SPREAD | 3.044 | 2.078 | 1.744 |
| VERTICAL SPREAD | 2.098 | 2.098 | .590 |
| EXTREME SPREAD | 3.051 | 2.953 | 1.834 |
| NUMBER IN ONE INCH CIRCLE | = | 1 | |
| NUMBER IN TWO INCH CIRCLE | = | 1 | |
| NUMBER IN THREE INCH CIRCLE | = | 2 | |

$$\begin{array}{r} 3.044 \\ - .350 \\ \hline 2.694 \end{array}$$

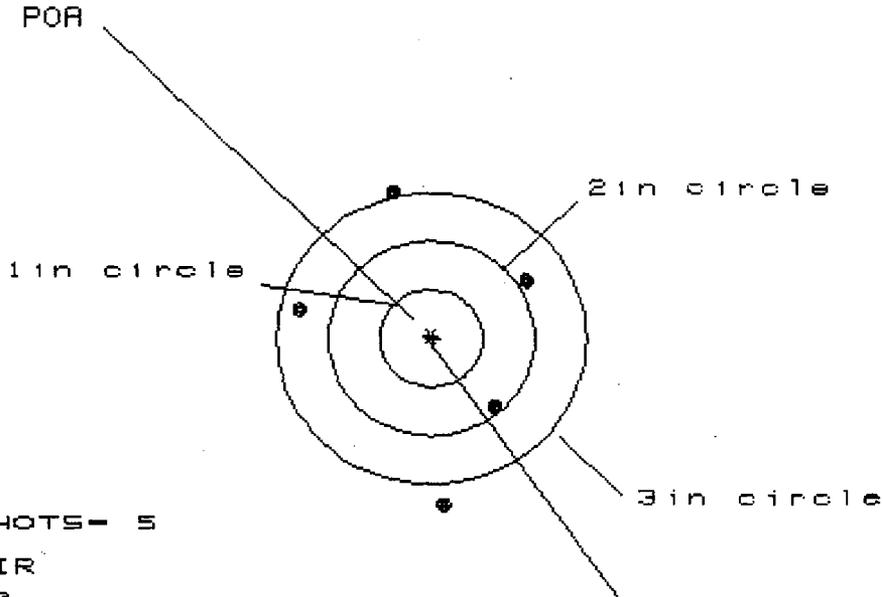
$$\begin{array}{r} 2.098 \\ - .350 \\ \hline 1.748 \end{array}$$

$$\begin{array}{r} 3.051 \\ - .350 \\ \hline 2.701 \end{array}$$

4 Aug 1987

FILE:/PATTERNING/CENTERFIRE_PATT/87520092

CENTERFIRE PATTERNS # 3



OF SHOTS - 5
 # IN CIR
 1 in = 0
 2 in = 1
 3 in = 3
 HS = 2.148
 VS = 3.121
 GS = 3.156

CENTROID *

| PATTERN # | 3 | 4 | 3 |
|-----------------------------|--------|--------|--------|
| SHOTS (BEST OF) | 5 | 4 | 3 |
| MAXIMUM X | .884 | .911 | .797 |
| MINIMUM X | -1.264 | -1.237 | -1.351 |
| MAXIMUM Y | 1.461 | 1.046 | .530 |
| MINIMUM Y | -1.660 | -1.145 | -.797 |
| CENTROID X | -.021 | -.048 | .066 |
| CENTROID Y | .002 | .418 | .069 |
| POA TO CENTROID in. | .022 | .420 | .095 |
| MIN RADIUS | .971 | .929 | .957 |
| MEAN RADIUS | 1.303 | 1.148 | 1.101 |
| MAX RADIUS | 1.664 | 1.325 | 1.377 |
| HORIZONTAL SPREAD | 2.148 | 2.148 | 2.148 |
| VERTICAL SPREAD | 3.121 | 2.191 | 1.327 |
| EXTREME SPREAD | 3.156 | 2.411 | 2.181 |
| NUMBER IN ONE INCH CIRCLE | = 0 | | |
| NUMBER IN TWO INCH CIRCLE | = 1 | | |
| NUMBER IN THREE INCH CIRCLE | = 3 | | |

3.156
 .350

 2.806

2.148
 .350

 1.798

3.121
 .350

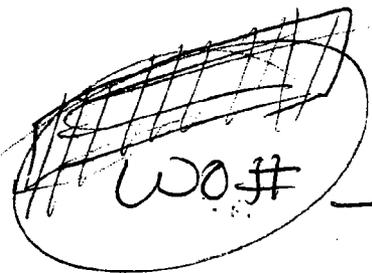
 2.771

7 guns 87251 WO#
Serial # B7520239
B7520092
" 0550
" 0284

150gr P. Soft Point Core Loke R35R1
code # E27 C6005L

12 x redfield
weaver base & mount (rings)

100 yards - C. Stephens


WO#

81411

111411-001800

DS Anderson

XP 100

6 files to Stan.

Jo XP 100

788