

Report No. 852731

RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

☒ Developmental ☒ Design Acceptance ☐ Pre-Pilot ☐ Pilot ☐ Production Acceptance	AREA OF TESTING ☐ Safety Related ☐ Litigation ☐ Competitive Evaluation ☐ Warehouse Audit ☒ New Design ☐ Cost Reduction ☒ Design Change ☐ State _____ ☐ Plant Assistance ☒ Other <u>ADD NEW CALIBER</u>
FIREARM STAT'S MODEL: <u>XP-100</u> CAL or GAGE: <u>223 REM</u> BARREL TYPE: <u>EXP</u> PROOFED: YES ☒ NO ☐	REPORT REQ'D. FORMAL ☐ TEST RESULTS ONLY ☒ DATE REQUESTED: <u>SEPT 30, 85</u> DATE NEEDED BY: <u>OCT 10, 85</u> REQUESTED BY: <u>A.A. HUGIER</u> WORK ORDER NO: <u>E0237-314-Y</u>

TEST TYPE			
☐ Strength Test ☒ Function Test ☒ Accuracy Test	☐ Ammunition Test ☐ Environmental Test ☐ Customer Complaint	☐ Dry Cycle Test ☐ Measurements ☐ Endurance Test	☐ Photo/Video ☐ Other _____

EXPLAIN IN DETAIL THE REASON FOR THIS TEST:

TEN MODEL XP-100 223 REM PISTOL > FABRICATED IN CUSTOM SHOP FOR DESIGN TEST. FIVE HAVE 12 INCH TWIST AND FIVE HAVE 14 INCH TWIST, WITH TWIST MARKED ON BOLT HEAD. ACCURACY TEST FOR TWIST COMPARISON USING CURRENT 223 REM M700 AMMO. SPECIFICATION. ALSO INCLUDE LIGHTEST FACTORY AMMO BULLET WEIGHT (EXP 40 GRAM) AND HEAVIEST FACTORY AMMO BULLET WEIGHT (WIN. 65 GRAM). FRONTIER (HORNADY) AMMO LIST 55 GRAM BULLET WEIGHT AND PWC ? (OUBR) ON BACK.

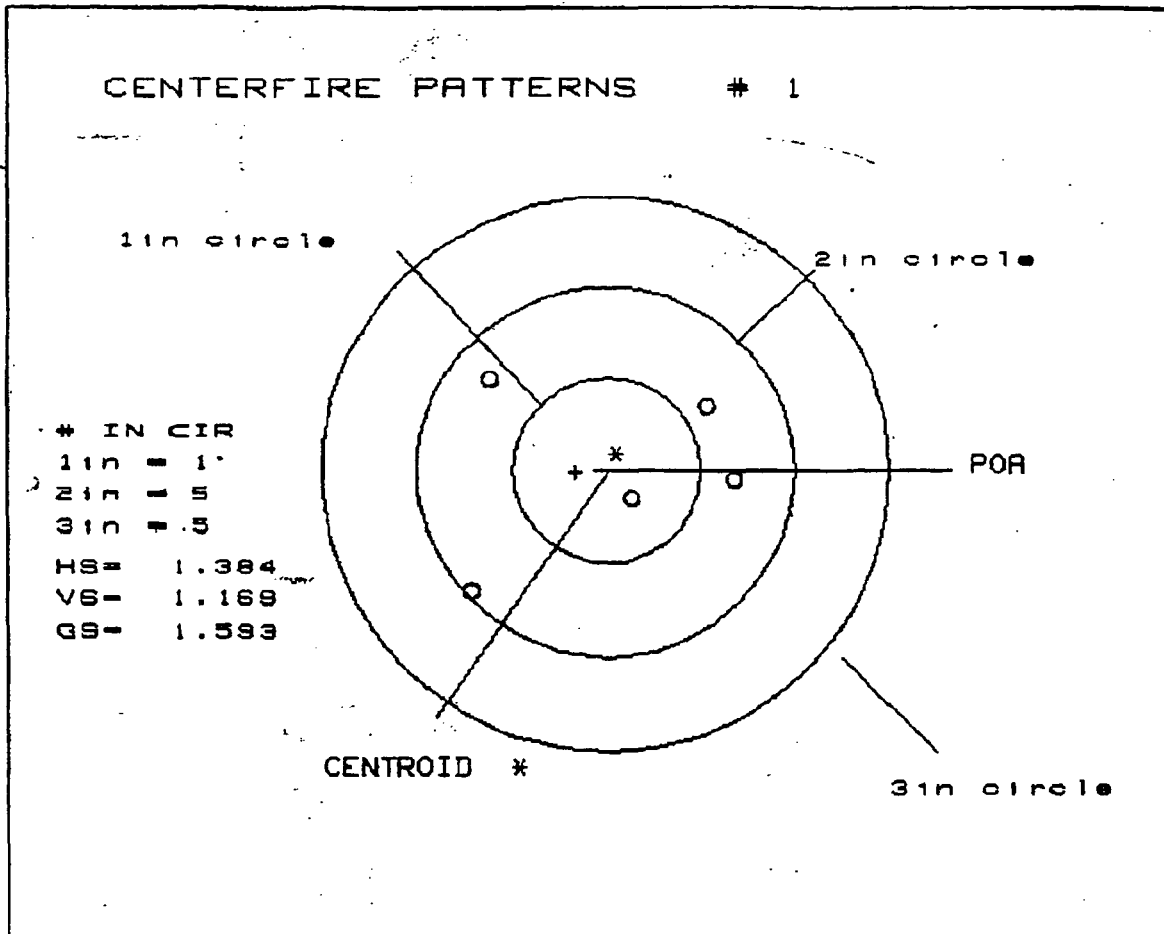
GUNS REQUIRED:

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: _____
 TEST COMPLETED BY: _____
 REPORT DATE: _____

R2" TWIST

#1.



PATTERN # 1

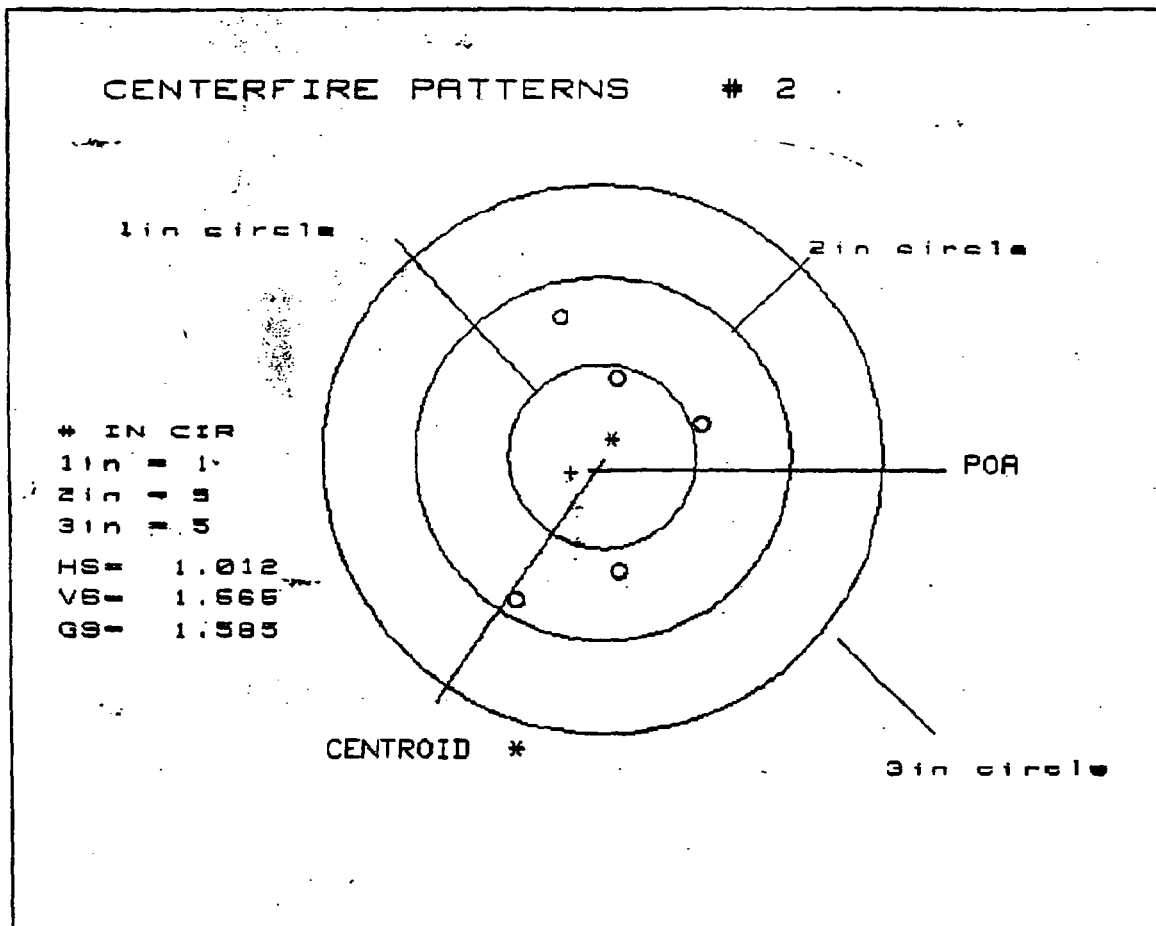
NUMBER OF SHOTS	5
MAXIMUM X & Y	.831
MINIMUM X & Y	.514
CENTROID X & Y	.169
POA TO CENTROID RAD	.1690
MIN RADIUS	.2252
MEAN RADIUS	.6565
MAX RADIUS	.9763
HORIZONTAL SPREAD	1.3840
VERTICAL SPREAD	1.1690
EXTREME SPREAD	1.5930

B-7511946 XP-100.223

FED. 40 GR. H.P.

LOT. 338-5649

NUMBER IN ONE	INCH CIRCLE	=	1
NUMBER IN TWO	INCH CIRCLE	=	5
NUMBER IN THREE	INCH CIRCLE	=	5



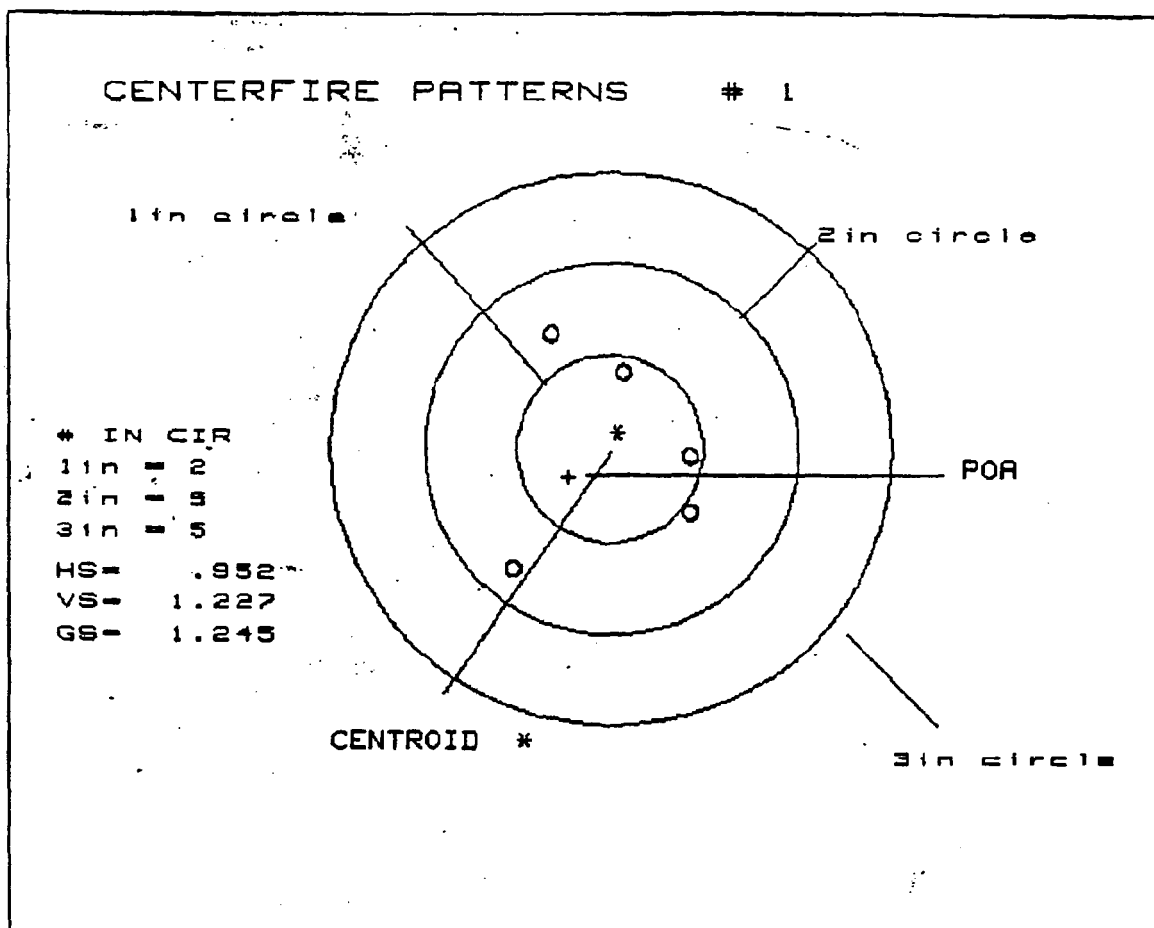
PATTERN # 2

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.690	-.322
MINIMUM X & Y	.850	-.715
CENTROID X & Y	.169	.075
POA TO CENTROID RAD	.1847	
MIN RADIUS	.4514	
MEAN RADIUS	.6731	
MAX RADIUS	.9300	
HORIZONTAL SPREAD	1.0120	
VERTICAL SPREAD	1.5650	
EXTREME SPREAD	1.5853	

NUMBER IN ONE INCH CIRCLE	=	1
NUMBER IN TWO INCH CIRCLE	=	5
NUMBER IN THREE INCH CIRCLE	=	5

#2

12" TWIST



PATTERN # 1

NUMBER OF SHOTS	:	5	
MAXIMUM X & Y	:	.631	-.321
MINIMUM X & Y	:	.744	-.489
CENTROID X & Y	:	.221	.139
POA TO CENTROID RAD:	:	.2616	
MIN RADIUS	:	.4139	
MEAN RADIUS	:	.5918	
MAX RADIUS	:	.8256	
HORIZONTAL SPREAD	:	.9520	
VERTICAL SPREAD	:	1.2270	
EXTREME SPREAD	:	1.2447	

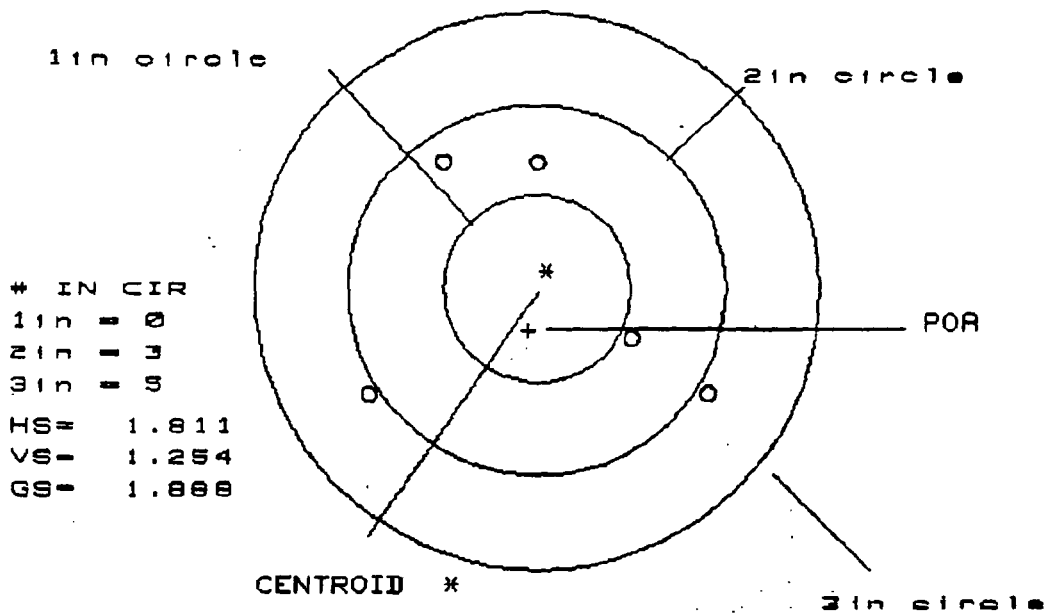
B 7511966-XP-100-.223

WIN. 55GR. F.M.C.

LOT- 38 SM 90

NUMBER IN ONE	INCH CIRCLE	=	2
NUMBER IN TWO	INCH CIRCLE	=	5
NUMBER IN THREE	INCH CIRCLE	=	5

CENTERFIRE PATTERNS # 2

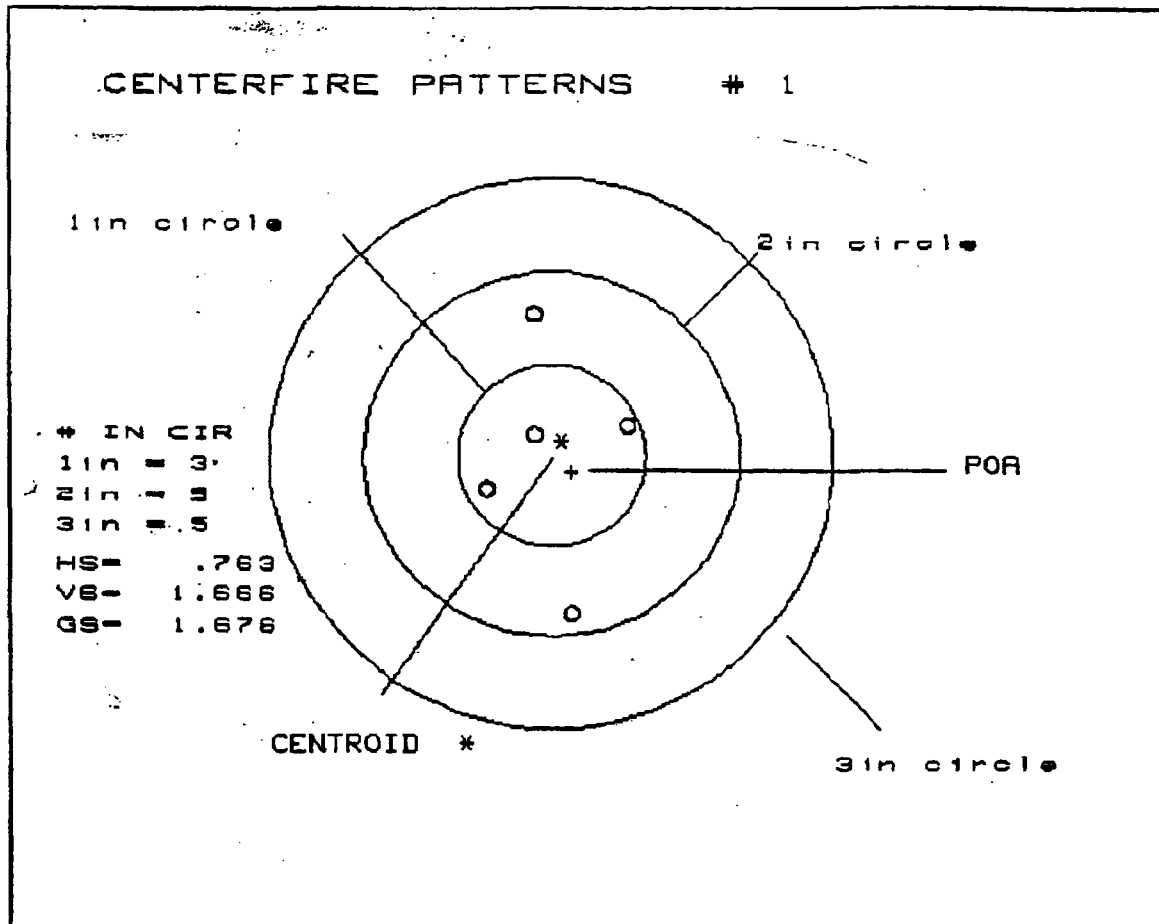


PATTERN # 1 2

NUMBER OF SHOTS	5
MAXIMUM X & Y	.972
MINIMUM X & Y	.920
CENTROID X & Y	.848
POA TO CENTROID RAD	.2203
MIN RADIUS	.5513
MEAN RADIUS	.8402
MAX RADIUS	1.0746
HORIZONTAL SPREAD	1.8110
VERTICAL SPREAD	1.2548
EXTREME SPREAD	1.8663
NUMBER IN ONE INCH CIRCLE	0
NUMBER IN TWO INCH CIRCLE	3
NUMBER IN THREE INCH CIRCLE	5

t3

12" TWIST



PATTERN # 1

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.311	-.452
MINIMUM X & Y	.856	-.810
CENTROID X & Y	-.102	.078
POA TO CENTROID RAD	.1281	
MIN RADIUS	.1473	
MEAN RADIUS	.5334	
MAX RADIUS	.8941	
HORIZONTAL SPREAD	.7630	
VERTICAL SPREAD	1.6660	
EXTREME SPREAD	1.6762	

NUMBER IN ONE INCH CIRCLE	=	3
NUMBER IN TWO INCH CIRCLE	=	5
NUMBER IN THREE INCH CIRCLE	=	5

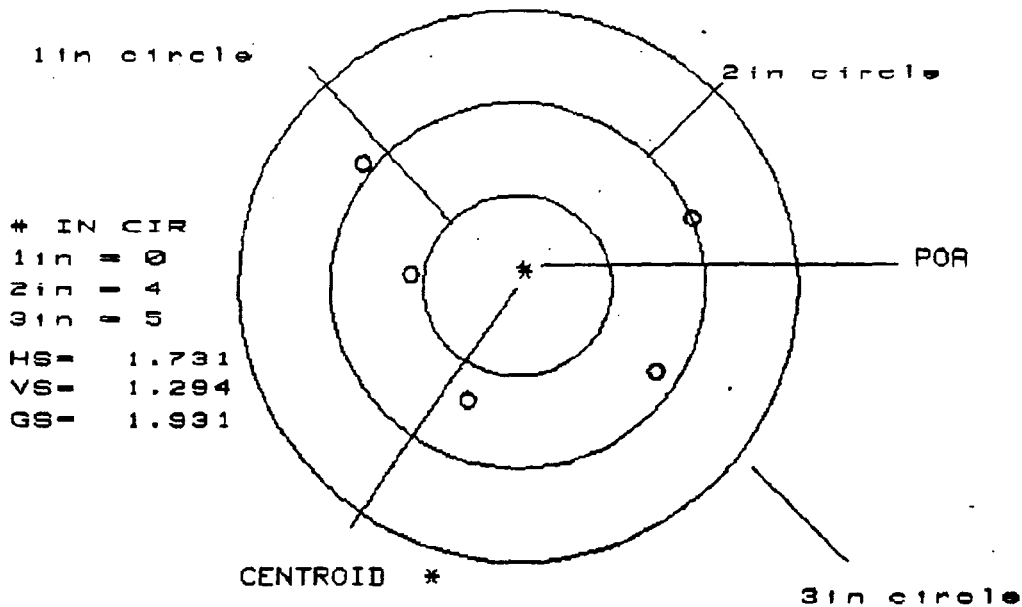
B-7511966-XP-100,223

REM. GALLERY Ammo.

55 GR. P.S.P.

LOT U2300 3640

CENTERFIRE PATTERNS # 2

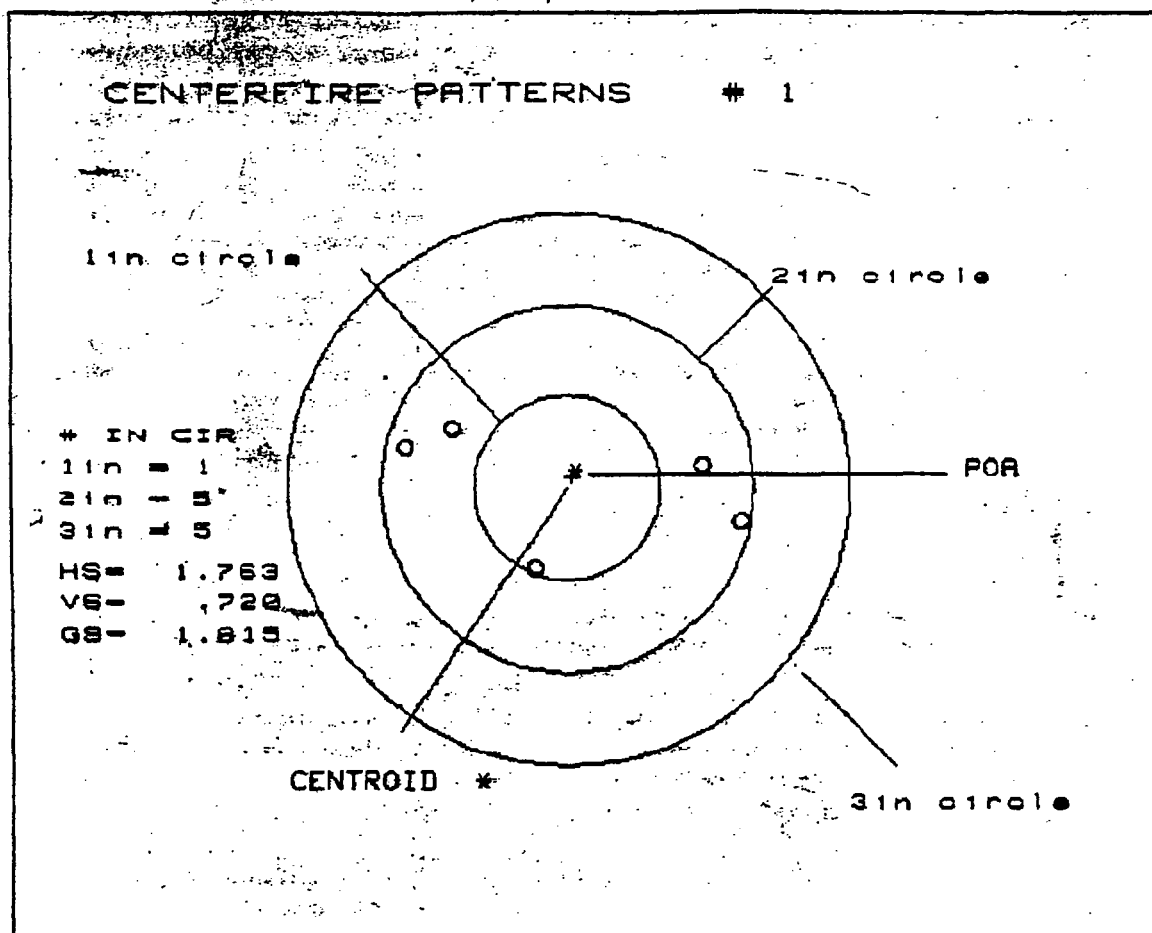


PATTERN # 2

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.885	-.846
MINIMUM X & Y	.564	-.730
CENTROID X & Y	-.034	-.120
POR TO CENTROID RAD:	.1249	
MIN RADIUS	.5908	
MEAN RADIUS	.8339	
MAX RADIUS	1.0618	
HORIZONTAL SPREAD	1.7310	
VERTICAL SPREAD	1.2940	
EXTREME SPREAD	1.9306	
NUMBER IN ONE INCH CIRCLE	=	0
NUMBER IN TWO INCH CIRCLE	=	4
NUMBER IN THREE INCH CIRCLE	=	5

1

14" Twist



PATTERN #

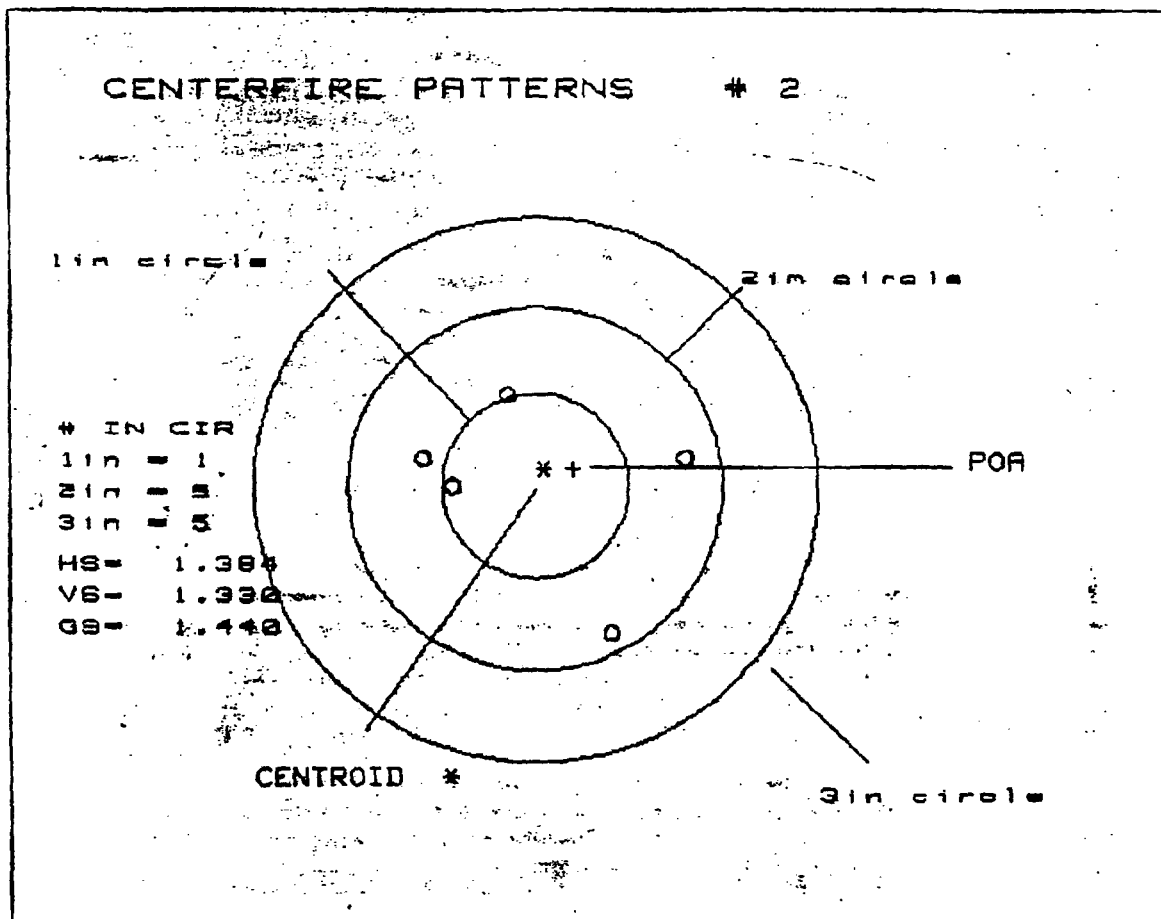
NUMBER OF SHOTS	5
MAXIMUM X & Y	.894
MINIMUM X & Y	.239
CENTROID X & Y	.026
POA TO CENTROID RAD	.0692
MIN RADIUS	.4484
MEAN RADIUS	.7319
MAX RADIUS	.9341
HORIZONTAL SPREAD	1.7630
VERTICAL SPREAD	.7200
EXTREME SPREAD	1.8152

* B 7511642 - XP-100 223

FED 40GR N.P.

LOT 33B-5649

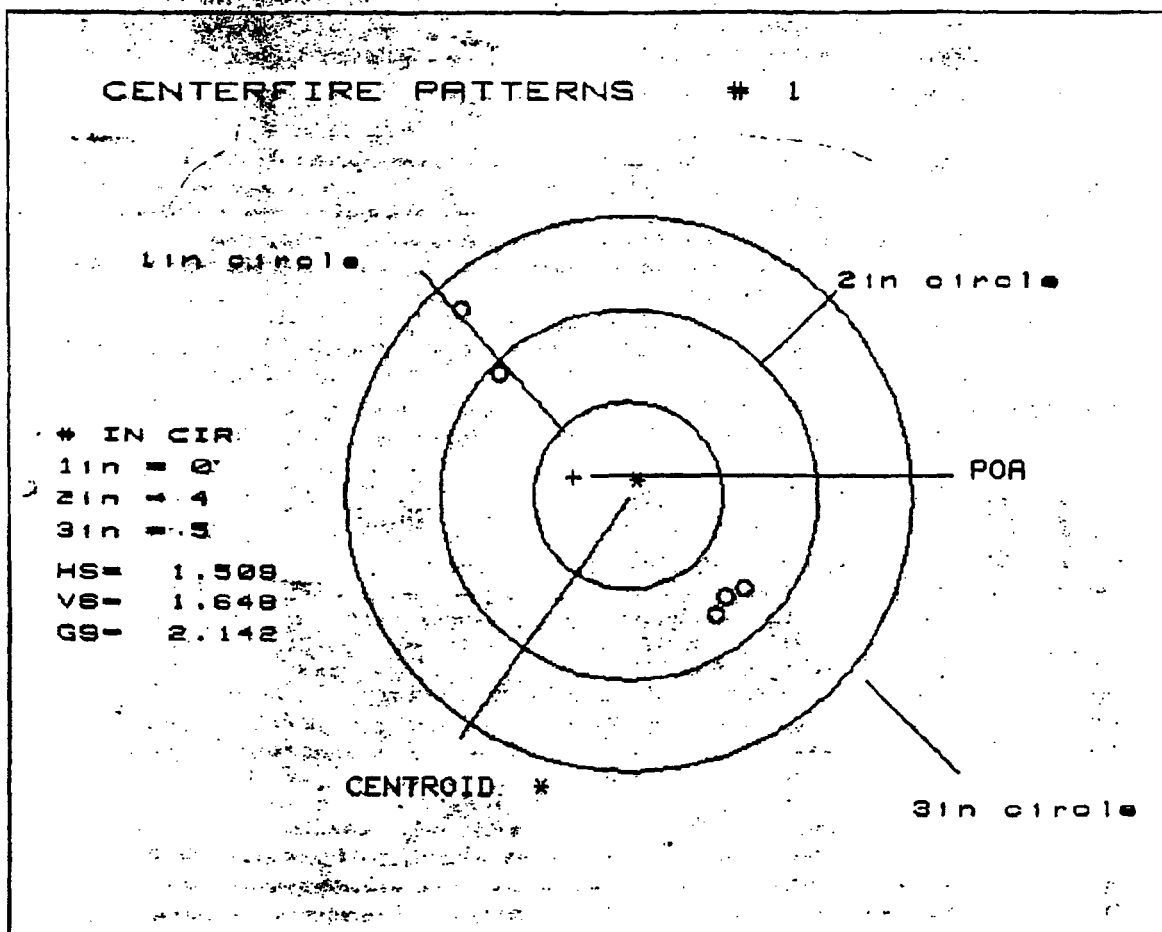
NUMBER IN ONE INCH CIRCLE	=	1
NUMBER IN TWO INCH CIRCLE	=	5
NUMBER IN THREE INCH CIRCLE	=	5



PATTERN #	1	3
NUMBER OF SHOTS	1	5
MAXIMUM X & Y	1	.576
MINIMUM X & Y	1	.416
CENTROID X & Y	1	-.202
POA TO CENTROID RAD	1	.2260
MIN RADIUS	1	.4290
MEAN RADIUS	1	.6582
MAX RADIUS	1	.9079
HORIZONTAL SPREAD	1	1.3840
VERTICAL SPREAD	1	1.3300
EXTREME SPREAD	1	1.4404
NUMBER IN ONE INCH CIRCLE	1	1
NUMBER IN TWO INCH CIRCLE	1	5
NUMBER IN THREE INCH CIRCLE	1	5

#2

14" TWIST



PATTERN #

NUMBER OF SHOTS	5
MAXIMUM X & Y	.886 - .623
MINIMUM X & Y	.901 - .747
CENTROID X & Y	.288 - .188
POA TO CENTROID RAD	.3074
MIN RADIUS	.7519
MEAN RADIUS	.9186
MAX RADIUS	1.3593
HORIZONTAL SPREAD	1.5098
VERTICAL SPREAD	1.6488
EXTREME SPREAD	2.1424

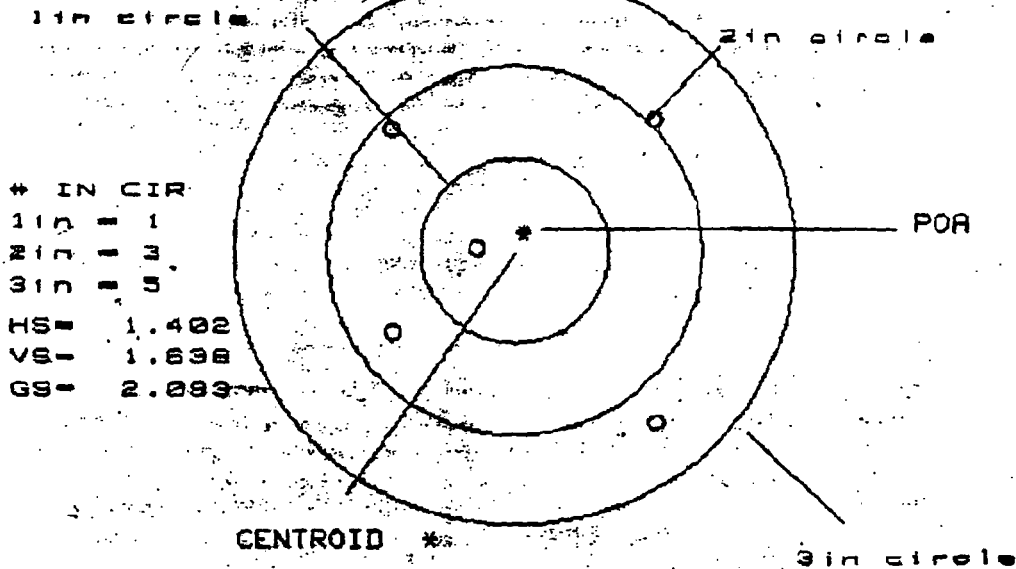
NUMBER IN ONE INCH CIRCLE	0
NUMBER IN TWO INCH CIRCLE	4
NUMBER IN THREE INCH CIRCLE	5

B-7511642 XP-100-223

WINCHESTER 536R. 804.

LOT- 38 SM 90

CENTERFIRE PATTERNS # 2



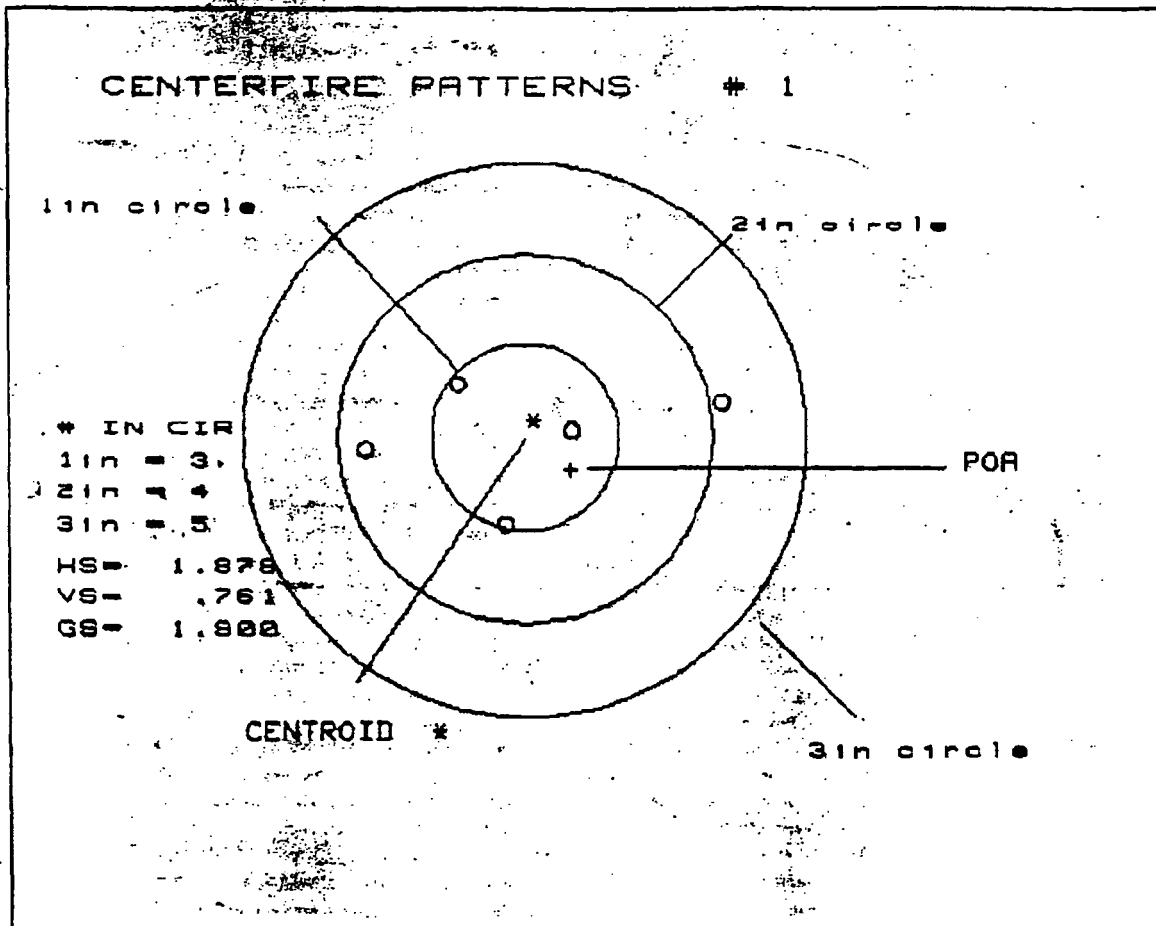
PATTERN

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.789	-.693
MINIMUM X & Y	.608	-1.028
CENTROID X & Y	-.049	-.112
POA TO CENTROID RAD	1.225	
MIN RADIUS	.2233	
MEAN RADIUS	.9250	
MAX RADIUS	1.1685	
HORIZONTAL SPREAD	1.4020	
VERTICAL SPREAD	1.6360	
EXTREME SPREAD	2.0930	

NUMBER IN ONE INCH CIRCLE	=	1
NUMBER IN TWO INCH CIRCLE	=	3
NUMBER IN THREE INCH CIRCLE	=	5

#3

14" twist



PATTERN # 1

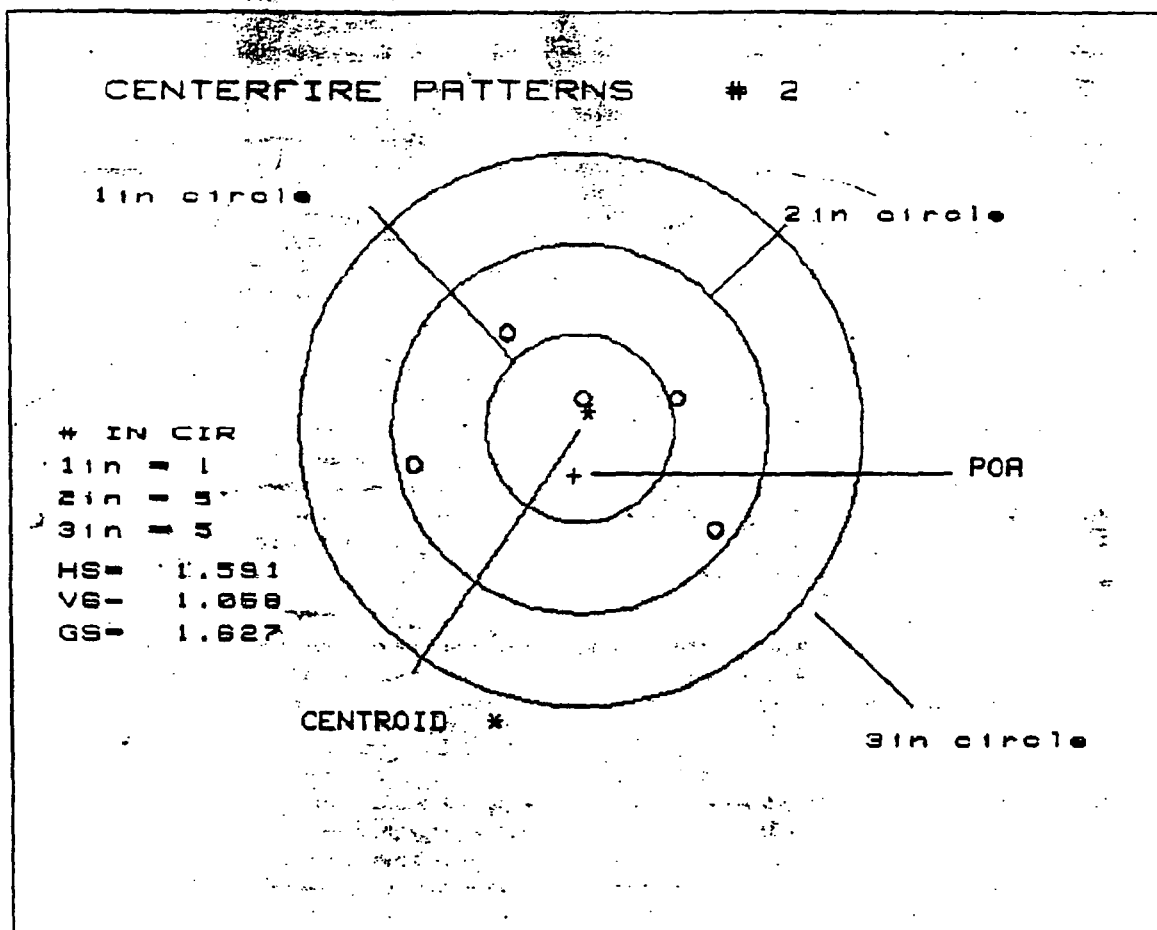
NUMBER OF SHOTS	5
MAXIMUM X & Y	.782 -1.096
MINIMUM X & Y	.461 -.300
CENTROID X & Y	-.246 .166
POA TO CENTROID RAD	.2969
MIN RADIUS	.2535
MEAN RADIUS	.6158
MAX RADIUS	1.0493
HORIZONTAL SPREAD	1.8780
VERTICAL SPREAD	.7610
EXTREME SPREAD	1.8997
NUMBER IN ONE INCH CIRCLE	3
NUMBER IN TWO INCH CIRCLE	4
NUMBER IN THREE INCH CIRCLE	5

B-7511642 XP-100-223

REM GALLERY Ammo

65 GR. R&P

LOT-423 00 3640



PATTERN #

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.756	-.835
MINIMUM X & Y	.746	-.312
CENTROID X & Y	.832	.243
POA TO CENTROID RAD	.2453	
MIN RADIUS	.1333	
MEAN RADIUS	.6211	
MAX RADIUS	.9125	
HORIZONTAL SPREAD	1.5910	
VERTICAL SPREAD	1.0580	
EXTREME SPREAD	1.6273	

NUMBER IN ONE INCH CIRCLE	=	1
NUMBER IN TWO INCH CIRCLE	=	5
NUMBER IN THREE INCH CIRCLE	=	5