

Report No. 852731

RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

☒ Developmental ☒ Design Acceptance ☐ Pre-Pilot ☐ Pilot ☐ Production Assistance	<u>AREA OF TESTING</u> <table border="0"> <tr> <td>☐ Safety Related</td> <td>☐ Litigation</td> </tr> <tr> <td>☐ Competitive Evaluation</td> <td>☐ Warehouse Audit</td> </tr> <tr> <td>☒ New Design</td> <td>☐ Cost Reduction</td> </tr> <tr> <td>☒ Design Change</td> <td>State <u> </u></td> </tr> <tr> <td>☐ Plant Assistance</td> <td>☒ Other <u>ADD NEW CALIBER</u></td> </tr> </table>	☐ Safety Related	☐ Litigation	☐ Competitive Evaluation	☐ Warehouse Audit	☒ New Design	☐ Cost Reduction	☒ Design Change	State <u> </u>	☐ Plant Assistance	☒ Other <u>ADD NEW CALIBER</u>
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☐ Competitive Evaluation	☐ Warehouse Audit										
☒ New Design	☐ Cost Reduction										
☒ Design Change	State <u> </u>										
☐ Plant Assistance	☒ Other <u>ADD NEW CALIBER</u>										
<u>FIREARM STAT'S</u> MODEL: <u>XP-100</u> CAL or GAGE: <u>223 REM</u> BARREL TYPE: <u>EXP</u> PROOFED: YES ☒ NO ☐	<u>REPORT REQ'D.</u> <table border="0"> <tr> <td>FORMAL ☐</td> <td>DATE REQUESTED: <u>SEPT 30, 85</u></td> </tr> <tr> <td>TEST RESULTS ONLY ☒</td> <td>DATE NEEDED BY: <u>OCT 10, 85</u></td> </tr> <tr> <td></td> <td>REQUESTED BY: <u>A.A. HUGIER</u></td> </tr> <tr> <td></td> <td>WORK ORDER NO: <u>E0237-314-Y</u></td> </tr> </table>	FORMAL ☐	DATE REQUESTED: <u>SEPT 30, 85</u>	TEST RESULTS ONLY ☒	DATE NEEDED BY: <u>OCT 10, 85</u>		REQUESTED BY: <u>A.A. HUGIER</u>		WORK ORDER NO: <u>E0237-314-Y</u>		
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<u>TEST TYPE</u>			
☐ Strength Test	☐ Ammunition Test	☐ Dry Cycle Test	☐ Photo/Video
☒ Function Test	☐ Environmental Test	☐ Measurements	☐ Other <u> </u>
☒ Accuracy Test	☐ Customer Complaint	☐ Endurance Test	☐ <u> </u>

EXPLAIN IN DETAIL THE REASON FOR THIS TEST:

TEN MODEL XP-100 223 REM PISTOLS 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.

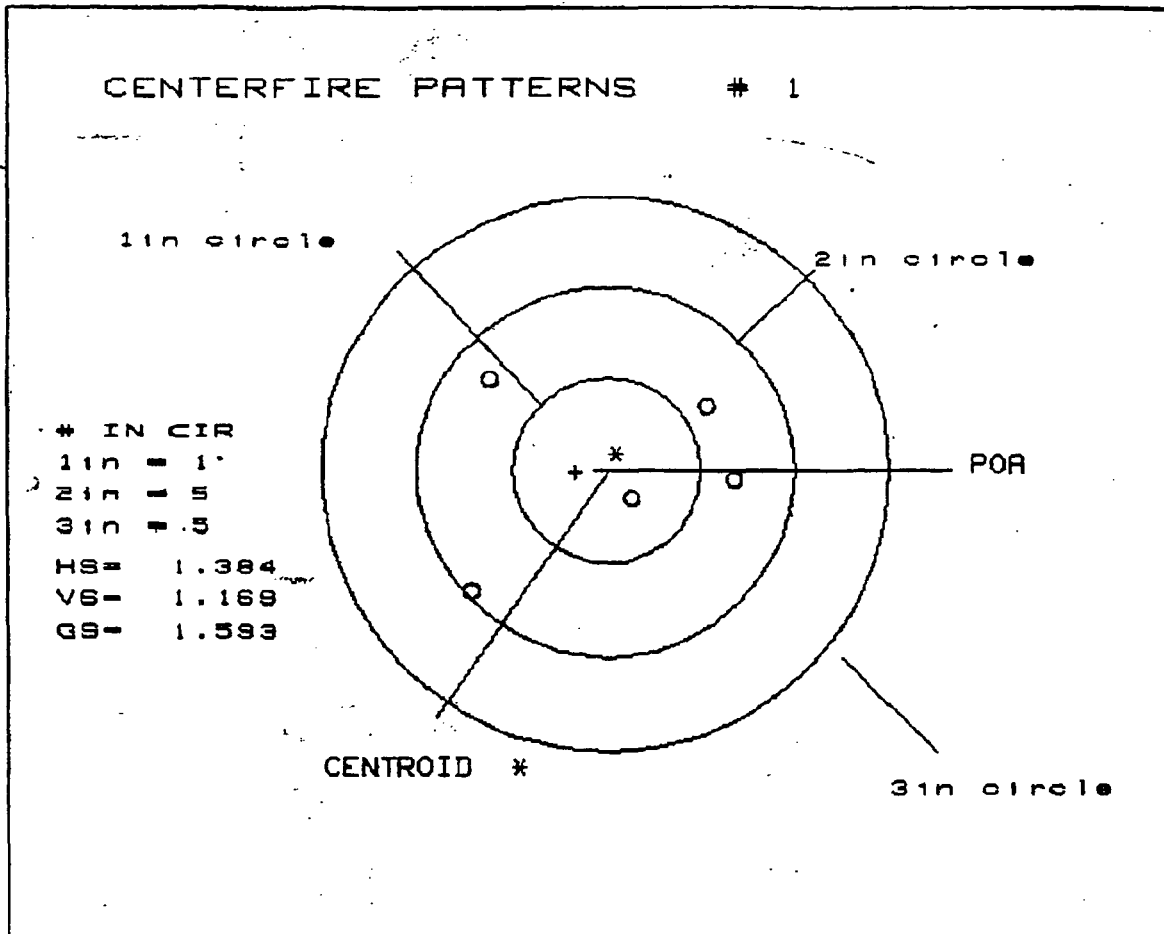
GUNS REQUIRED:

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	-.553
MINIMUM X & Y	.514	-.655
CENTROID X & Y	.169	.002
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	

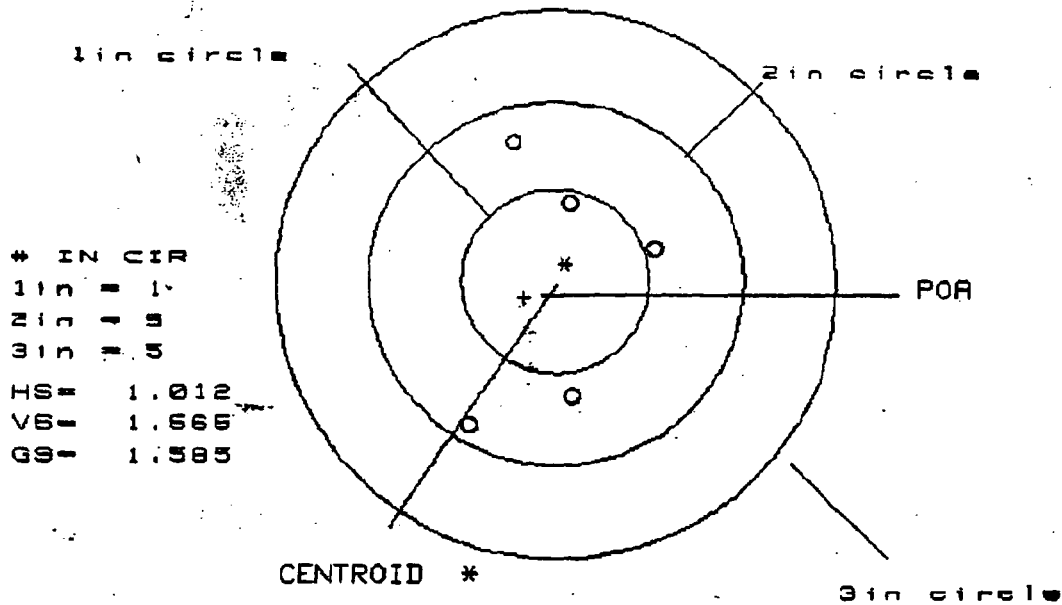
B-7511946 XP-100.223

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

CENTERFIRE PATTERNS # 2



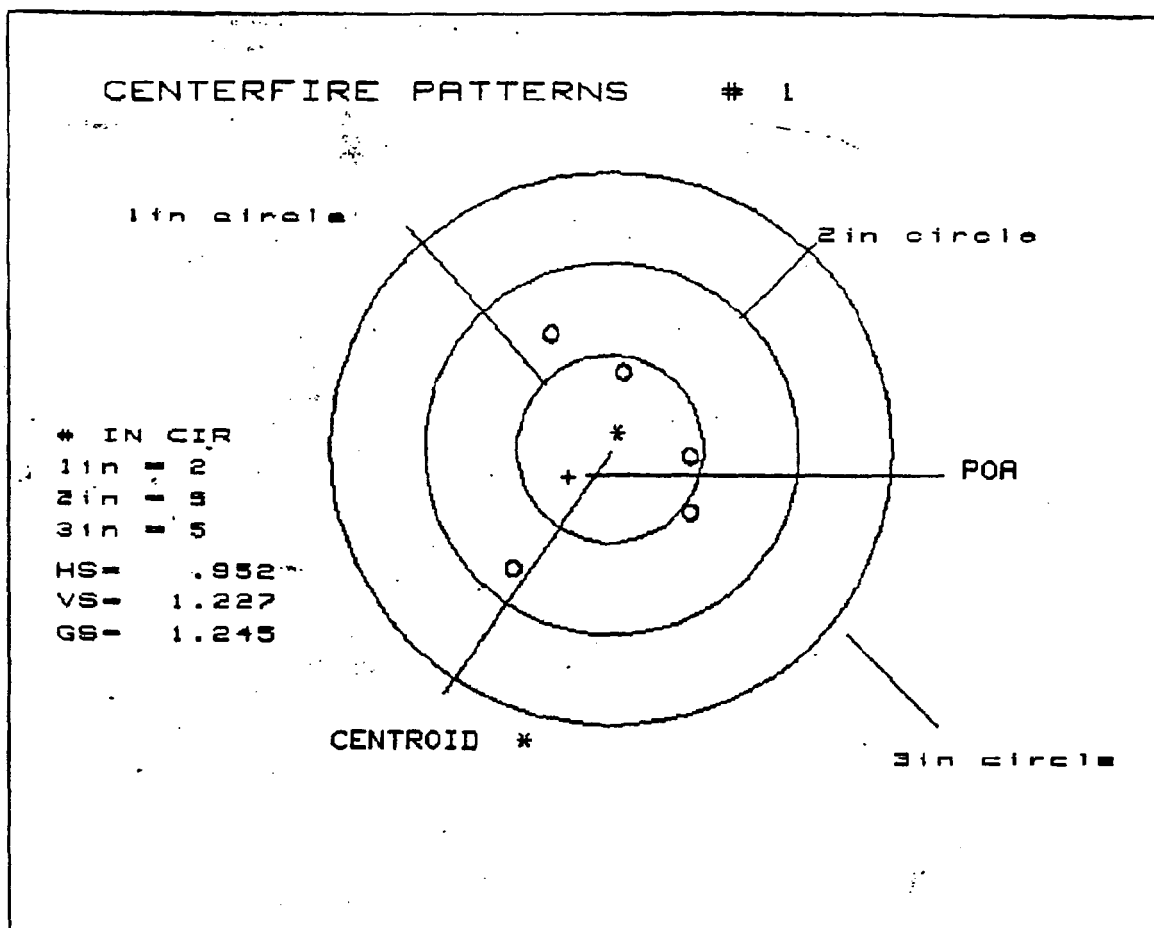
PATTERN # 2

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
MINIMUM X & Y	.744
CENTROID X & Y	.221
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

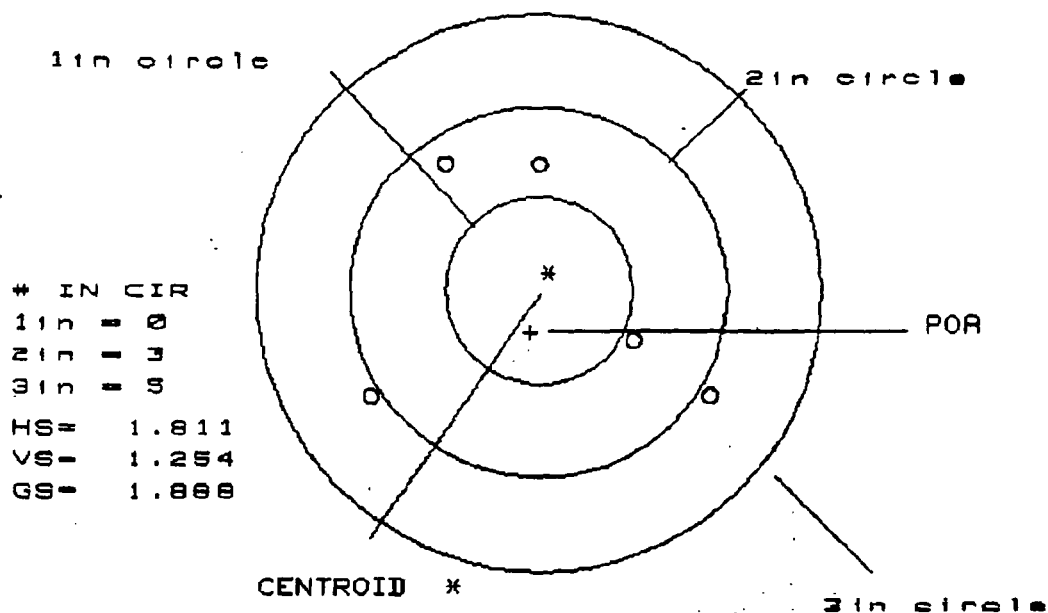
B 7511966-XP-100-.223

WIN. 55GR. F.M.C.

LOT- 38 SM 90

NUMBER IN ONE INCH CIRCLE	=	2
NUMBER IN TWO INCH CIRCLE	=	3
NUMBER IN THREE INCH CIRCLE	=	5

CENTERFIRE PATTERNS # 2



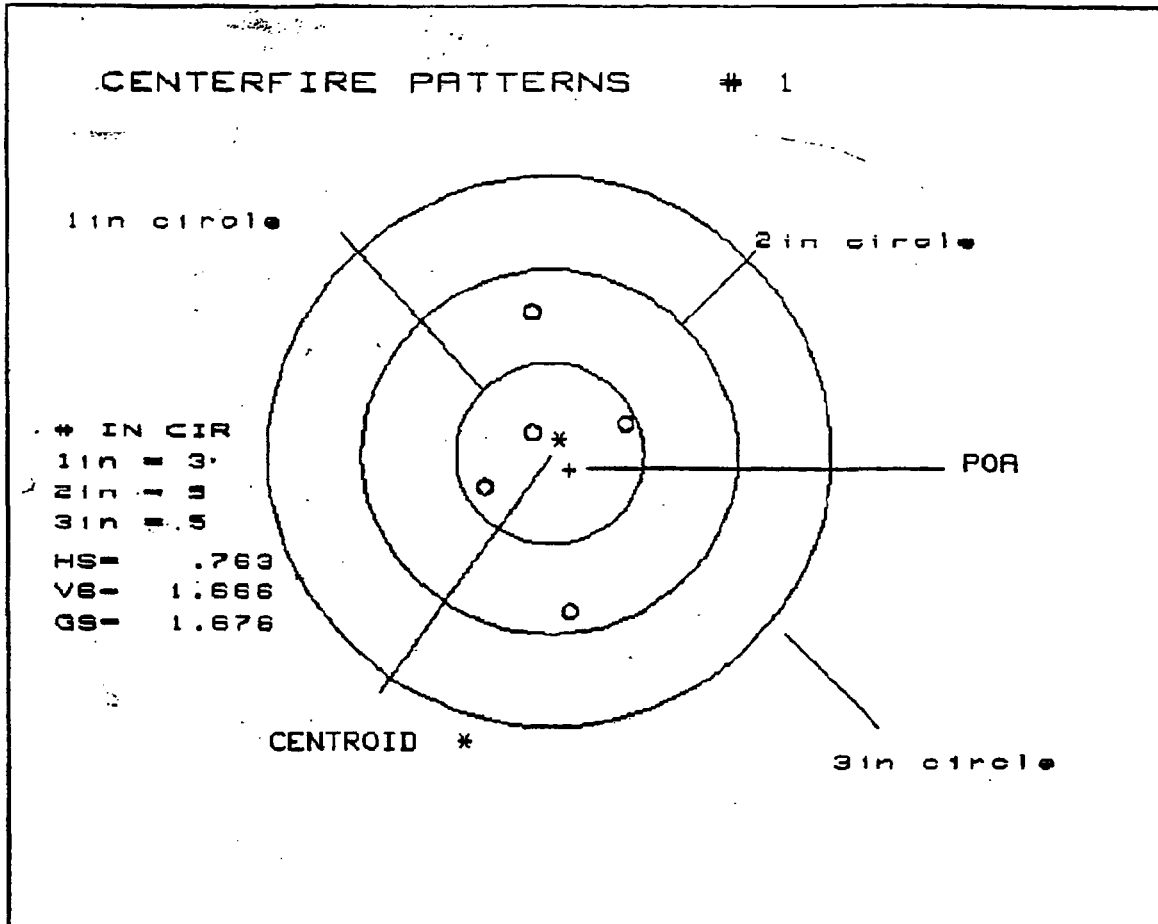
PATTERN # 1 2

NUMBER OF SHOTS	1	5
MAXIMUM X & Y	.972	-.839
MINIMUM X & Y	.920	-.334
CENTROID X & Y	.848	.215
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	1.8665	

NUMBER IN ONE INCH CIRCLE	0
NUMBER IN TWO INCH CIRCLE	3
NUMBER IN THREE INCH CIRCLE	5

43

12" TWIST



PATTERN # 1

NUMBER OF SHOTS	5	
MAXIMUM X & Y	.311	-.452
MINIMUM X & Y	.856	-.810
CENTROID X & Y	-.102	.078
POR 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

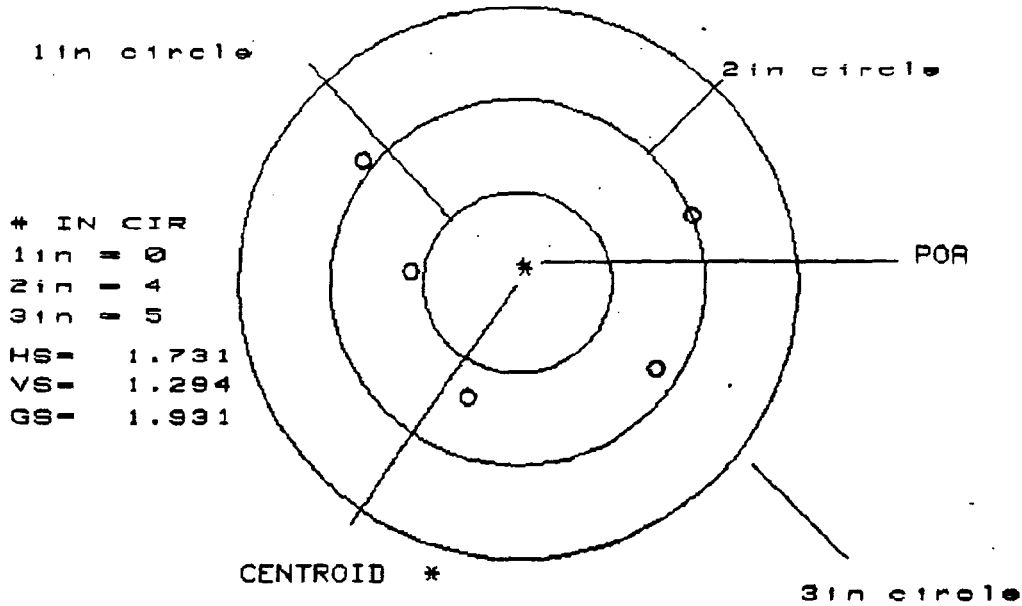
B-7511966-XP-100,223

REM. GALLERY Ammo.

55 GR. P.S.P.

LOT U2300 3640

CENTERFIRE PATTERNS # 2



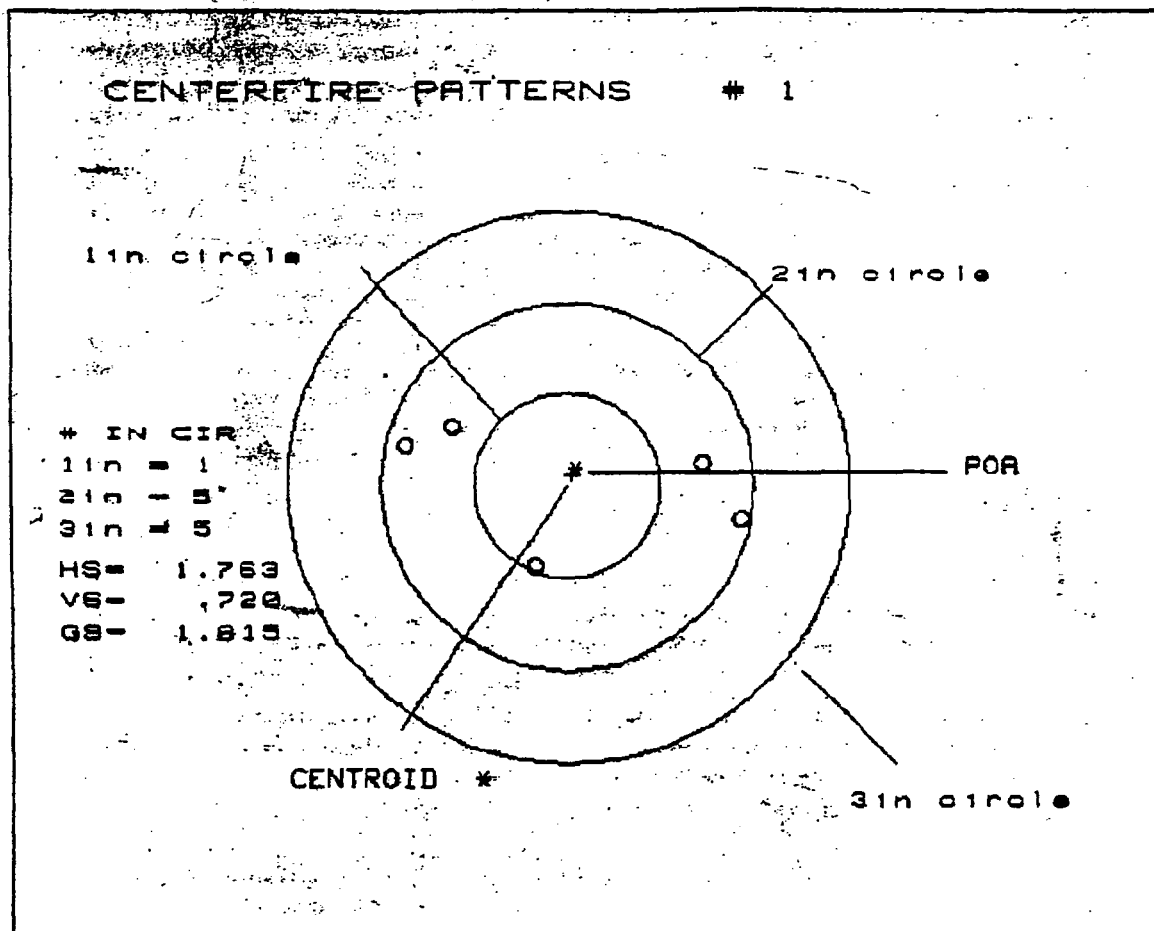
PATTERN # 2

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 #

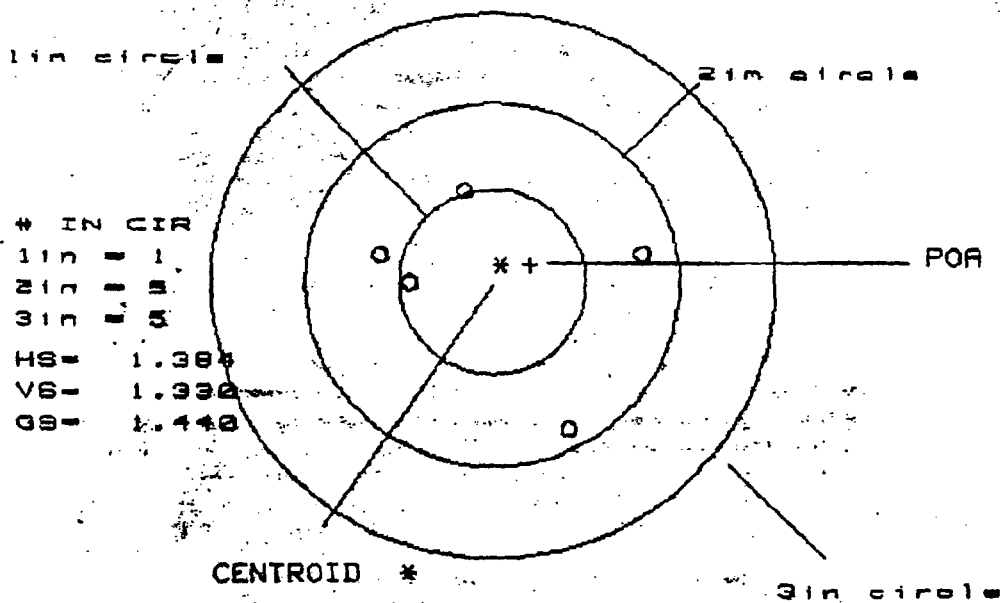
NUMBER OF SHOTS	5
MAXIMUM X & Y	.894
MINIMUM X & Y	.239
CENTROID X & Y	.026
FOR TO CENTROID RAD	.0692
MIN RADIUS	.4484
MEAN RADIUS	.7319
MAX RADIUS	.9341
HORIZONTAL SPREAD	1.7630
VERTICAL SPREAD	.7200
EXTREME SPREAD	1.8152

* 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

CENTERFIRE PATTERNS # 2



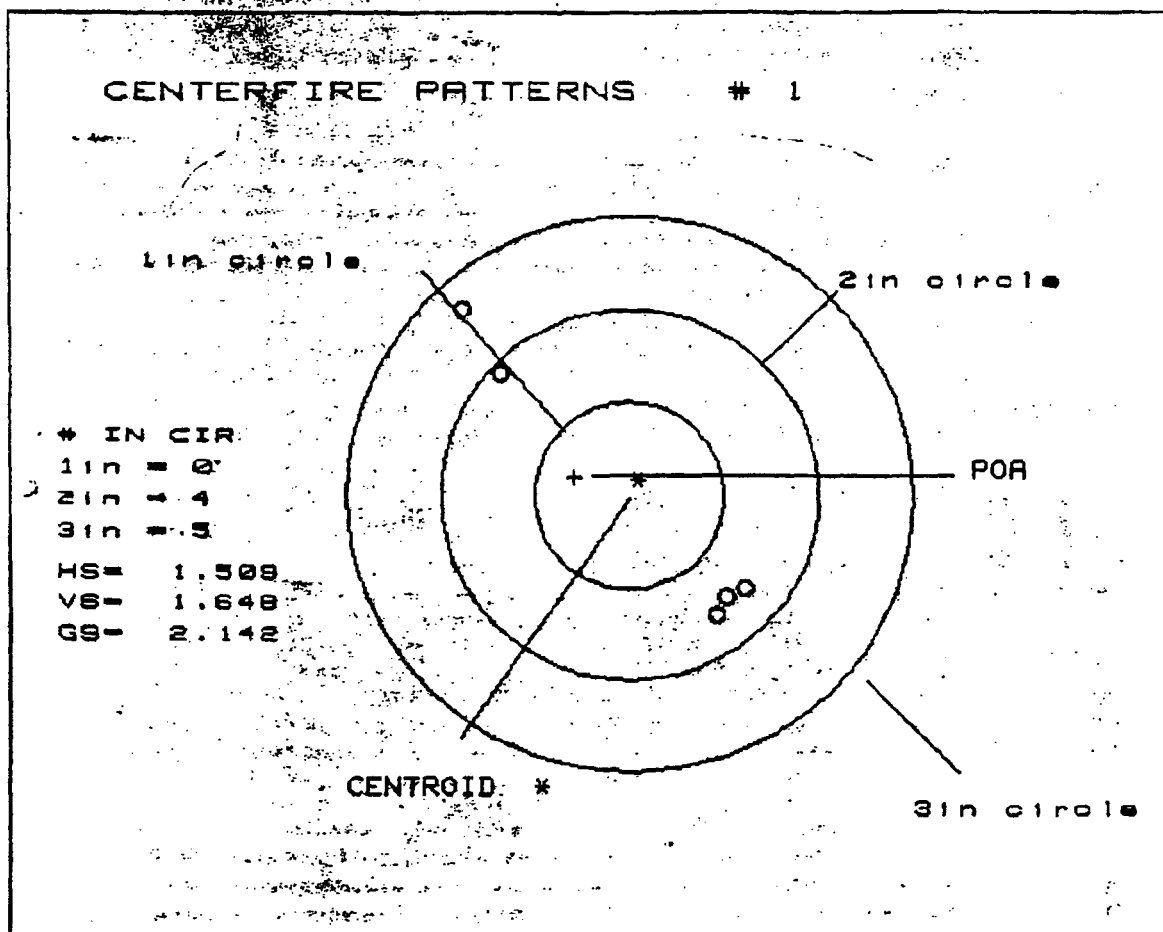
PATTERN #

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
NUMBER IN TWO INCH CIRCLE	5
NUMBER IN THREE INCH CIRCLE	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 : .3874

MIN RADIUS : .7519

MEAN RADIUS : .9186

MAX RADIUS : 1.3593

HORIZONTAL SPREAD : 1.5898

VERTICAL SPREAD : 1.6488

EXTREME SPREAD : 2.1424

NUMBER IN ONE INCH CIRCLE = 0

NUMBER IN TWO INCH CIRCLE = 4

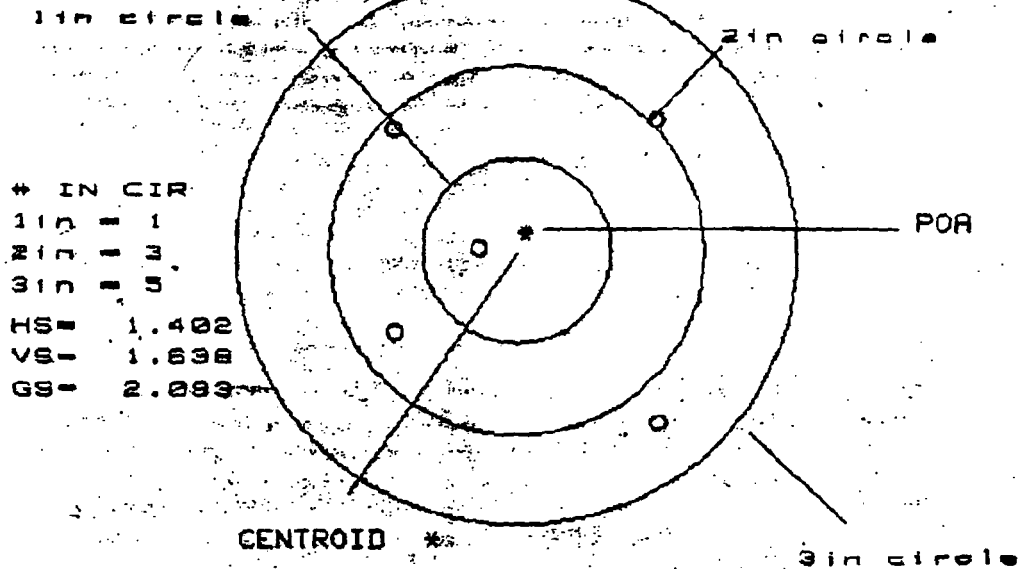
NUMBER IN THREE INCH CIRCLE = 5

B-7511642 XP-100-223

WINCHESTER 536R. 804.

LOT- 38 SM 90

CENTERFIRE PATTERNS # 2



PATTERN

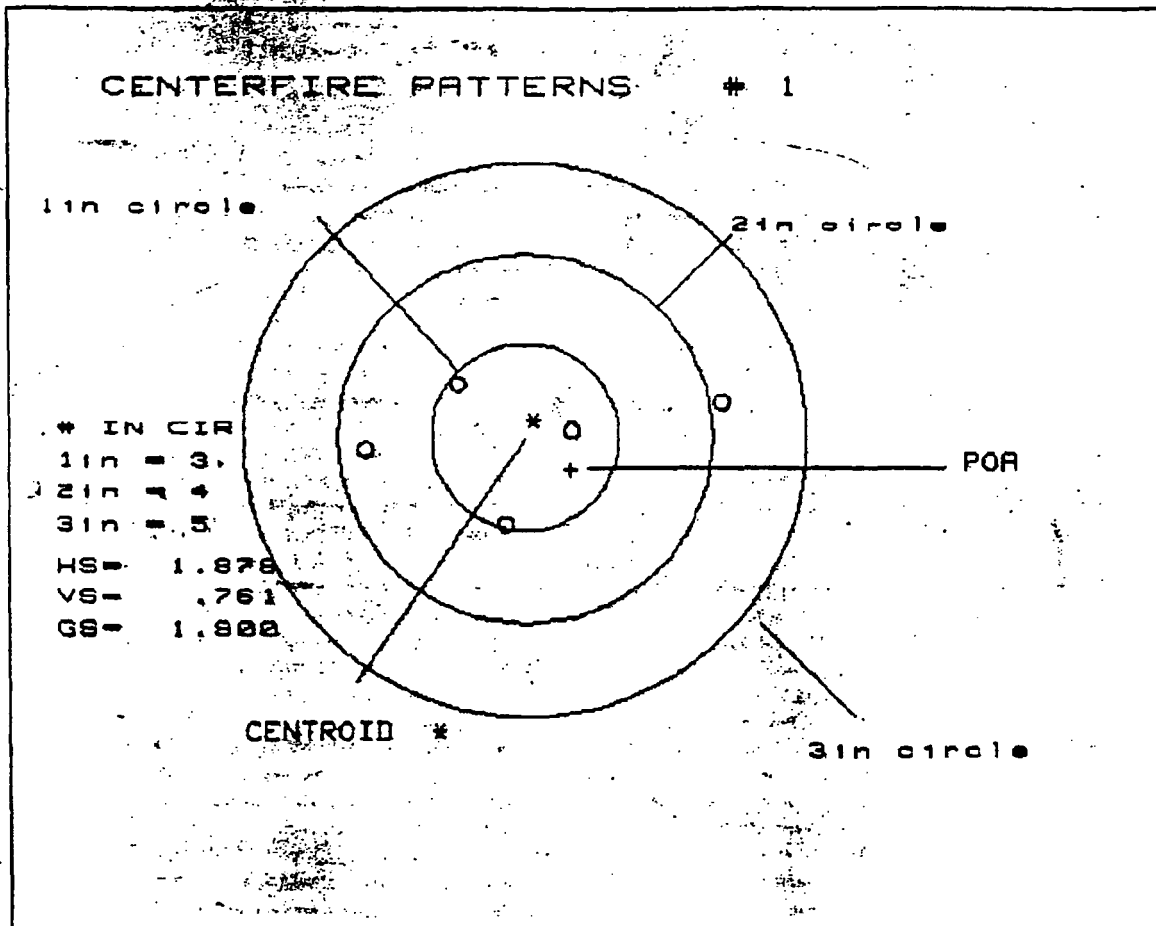
NUMBER OF SHOTS	5	
MAXIMUM X & Y	.789	-.693
MINIMUM X & Y	.608	-1.028
CENTROID X & Y	-.049	-.112
POA TO CENTROID RAD	1.225	
MIN RADIUS	.2233	
MEAN RADIUS	.9250	
MAX RADIUS	1.1685	
HORIZONTAL SPREAD	1.4020	
VERTICAL SPREAD	1.6360	
EXTREME SPREAD	2.0930	

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

R2516355

#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

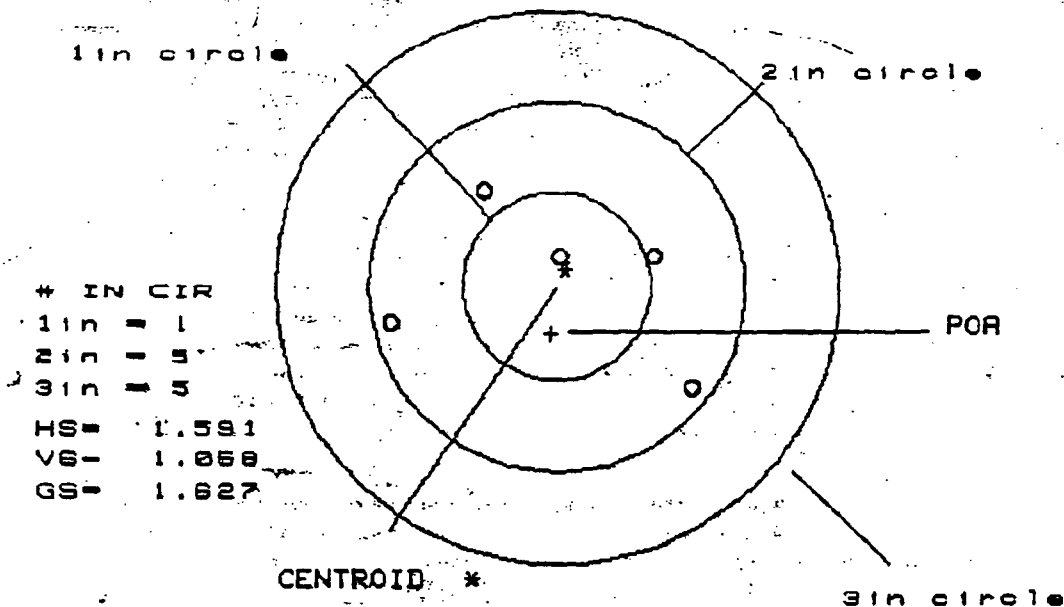
B-7511642 XP-100-223

REM GALLERY Ammo

65 GR. RSP

LOT-423 00 3640

CENTERFIRE PATTERNS # 2



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