

MEASUREMENT LAB TEST RESULTS

REQUESTER: R. S. Murphy TESTER: P. Conant DATE: 09/06/85
 REPORT NO.: 852482 WORK ORDER NO.: C-9054-315
 TEST TYPE: Developmental, Design Change.

FIREARM STAT'S : MODEL: 700 CAL or GAUGE: 7MM REM EXP
 BARREL TYPE: _____ PROOFED: YES * NO _____

REASON FOR TEST : To shoot two M/700 7MM REM EXP rifles for accuracy. Five -
 three shot groups with each of the guns is required using ammo lot # D-6721.
 This ammo had been qualified prior to testing.

EQUIPMENT REQUIRED : To M/700 rifles Ser# A6879934 and A6874599, 12X scope.

TEST PROCEDURE : The rifles were shot for accuracy as required with gun
 serial number A6879934 and gun serial number A6874599 shot by Paul Conant.

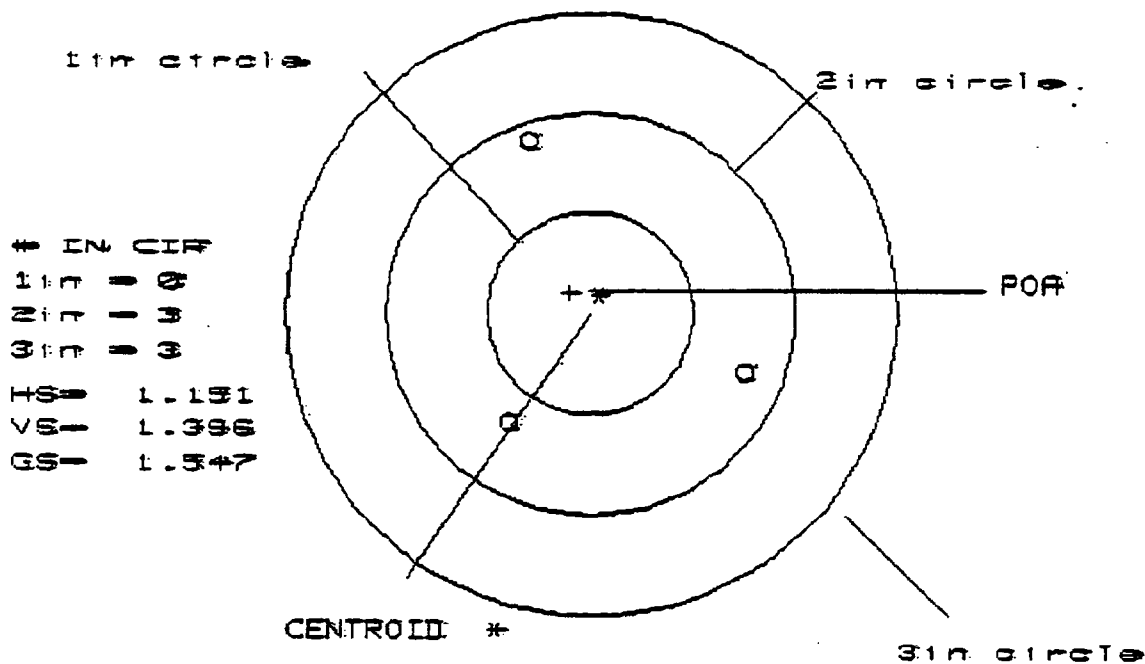
TEST RESULTS : The averages of the extreme spread for three shot groups is
 listed below:

Ser # A6879934	3 shot - 1.510 inches
Ser # A6874599	3 shot - 1.042 inches

* Group results and graphics accompany this report.

Ser # A6879934

CENTERFIRE PATTERNS # 1

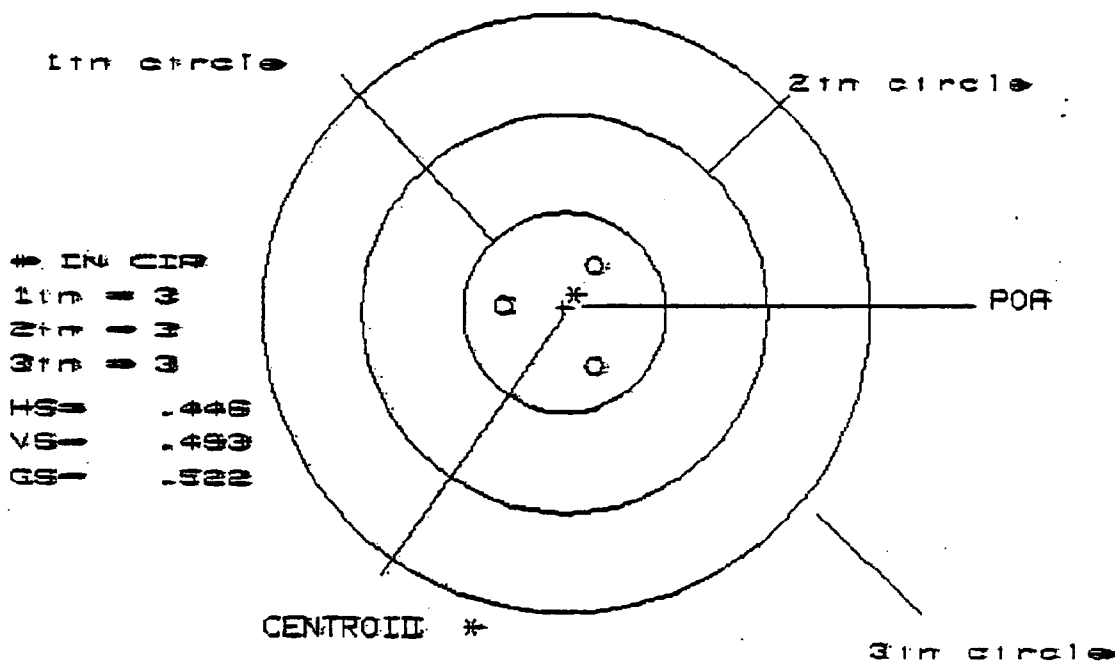


PATTERN: # 1

NUMBER OF SHOTS	=	3	
MAXIMUM X & Y	=	.833	-.318
MINIMUM X & Y	=	-.733	-.663
CENTROID X & Y	=	.098	-.118
POA TO CENTROID RAD	=	.1471	
MIN RADIUS	=	.6923	
MEAN RADIUS	=	.7944	
MAX RADIUS	=	.9018	
HORIZONTAL SPREAD	=	1.1518	
VERTICAL SPREAD	=	1.3968	
EXTREME SPREAD	=	1.5467	
NUMBER IN ONE INCH CIRCLE	=	0	
NUMBER IN TWO INCH CIRCLE	=	3	
NUMBER IN THREE INCH CIRCLE	=	3	

Ser # A6879934

CENTERFIRE PATTERNS # 2



PATTERN #

NUMBER OF SHOTS	=	3	
MAXIMUM X & Y	=	.161	-.285
MINIMUM X & Y	=	-.198	-.298
CENTROID X & Y	=	.006	-.031
POA TO CENTROID RAD	=	.0320	
MIN RADIUS	=	.2766	
MEAN RADIUS	=	.2890	
MAX RADIUS	=	.2970	
HORIZONTAL SPREAD	=	.4460	
VERTICAL SPREAD	=	.4930	
EXTREME SPREAD	=	.5215	

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

SER # A6879934

CENTERFIRE PATTERNS # 3

1 in circle

2 in circle

IN CIP

1 in = 0

2 in = 2

3 in = 3

HS = 1.3300

VS = 1.8210

GS = 1.8306

POA

CENTROID *

3 in circle

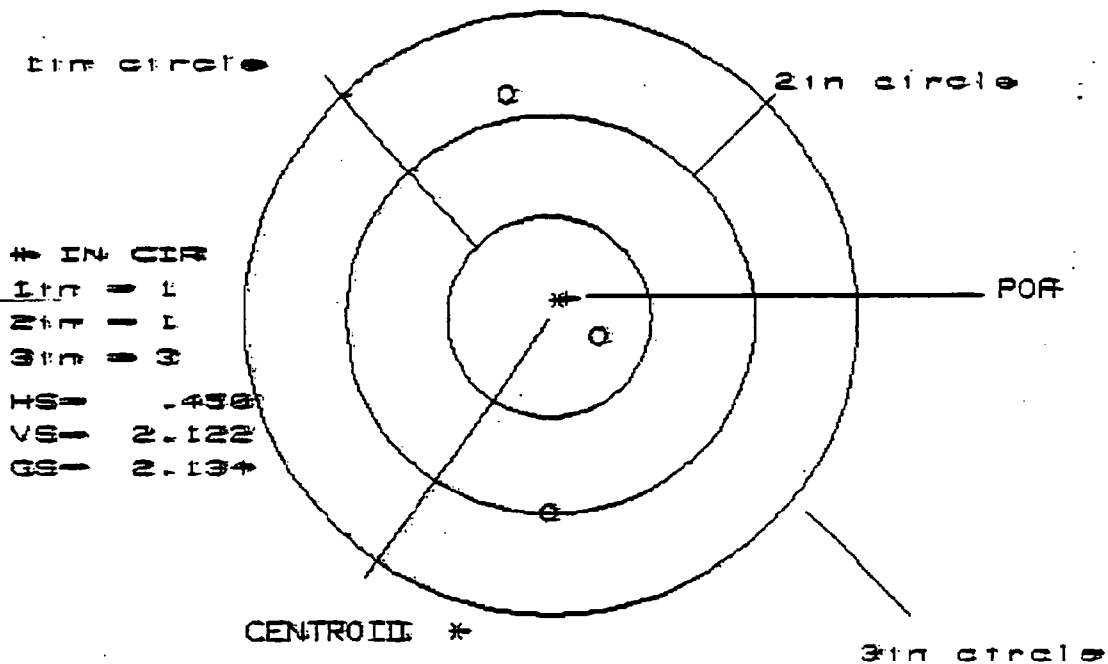
PATTERN #

NUMBER OF SHOTS	3	
MAXIMUM X & Y	.822	-.508
MINIMUM X & Y	.888	-.933
CENTROID X & Y	-.002	-.002
POA TO CENTROID RAD	.0033	
MIN RADIUS	.8253	
MEAN RADIUS	.9434	
MAX RADIUS	1.0592	
HORIZONTAL SPREAD	1.3300	
VERTICAL SPREAD	1.8210	
EXTREME SPREAD	1.8306	

NUMBER IN ONE INCH CIRCLE	=	0
NUMBER IN TWO INCH CIRCLE	=	2
NUMBER IN THREE INCH CIRCLE	=	3

Ser # 176879987

CENTERFIRE PATTERNS # 4



PATTERN # 4

NUMBER OF SHOTS	=	3	
MAXIMUM X & Y	=	.133	-.317
MINIMUM X & Y	=	1.006	-1.116
CENTROID X & Y	=	-.091	-.106
POF TO CENTROID RAD	=	.1397	
MIN RADIUS	=	.2461	
MEAN RADIUS	=	.7970	
MAX RADIUS	=	1.1347	
HORIZONTAL SPREAD	=	.4500	
VERTICAL SPREAD	=	2.1220	
EXTREME SPREAD	=	2.1342	

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

SER # A6879934

CENTERFIRE PATTERNS # 5

1in circle

2in circle

IN CH

1st = 1

2nd = 1

3rd = 0

HS = 1.037

VS = 1.244

GS = 1.515

CENTROID *

POA

3in circle

PATTERN #

1

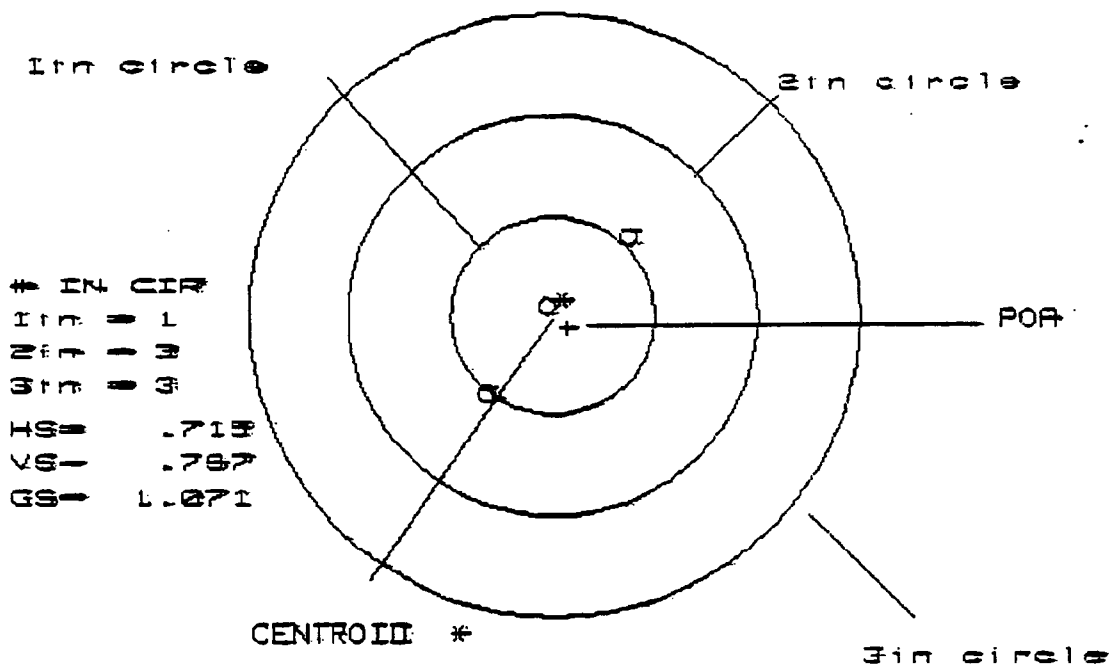
5

NUMBER OF SHOTS	=	3	
MAXIMUM X & Y	=	.317	-.720
MINIMUM X & Y	=	.813	-.429
CENTROID X & Y	=	-.086	.147
POA TO CENTROID RAD	=	.1706	
MIN RADIUS	=	.4132	
MEAN RADIUS	=	.6588	
MAX RADIUS	=	.8568	
HORIZONTAL SPREAD	=	1.0370	
VERTICAL SPREAD	=	1.2440	
EXTREME SPREAD	=	1.5152	

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

Ser # A6874599

CENTERFIRE PATTERNS # 1



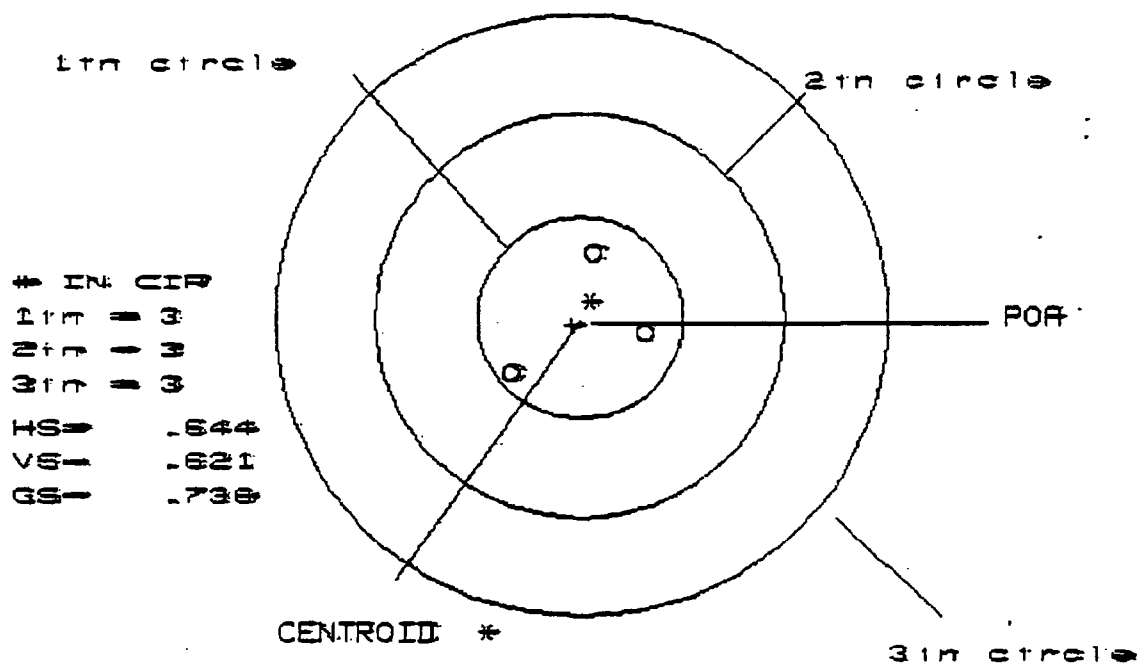
PATTERN # 1

NUMBER OF SHOTS	"	3	
MAXIMUM X & Y	"	.296	-.419
MINIMUM X & Y	"	.428	-.369
CENTROID X & Y	"	-.873	.049
POA TO CENTROID RAD	"	.8882	
MIN RADIUS	"	.0456	
MEAN RADIUS	"	.3724	
MAX RADIUS	"	.5424	
HORIZONTAL SPREAD	"	.7158	
VERTICAL SPREAD	"	.7978	
EXTREME SPREAD	"	1.0787	
NUMBER IN ONE INCH CIRCLE	"	1	
NUMBER IN TWO INCH CIRCLE	"	3	
NUMBER IN THREE INCH CIRCLE	"	3	

Ser # A6874599

CENTERFIRE PATTERNS

2



PATTERN #

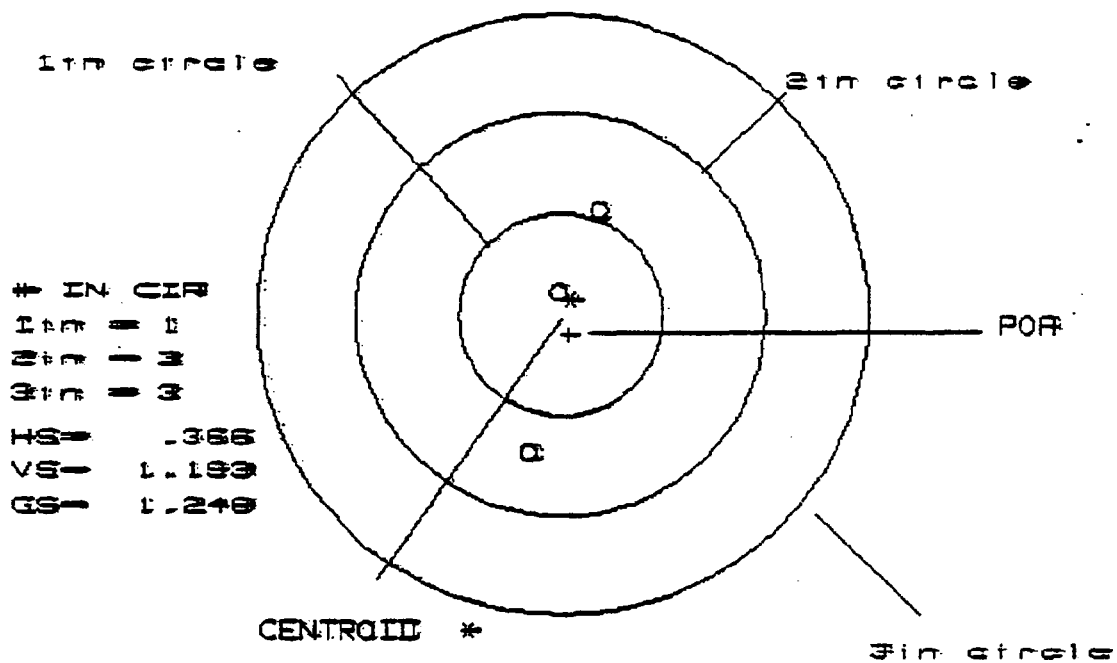
2

NUMBER OF SHOTS	3
MAXIMUM X & Y	.336 - .308
MINIMUM X & Y	.371 - .250
CENTROID X & Y	.039 .025
POA TO CENTROID RAD	.0464
MIN RADIUS	.3052
MEAN RADIUS	.3660
MAX RADIUS	.4428
HORIZONTAL SPREAD	.6440
VERTICAL SPREAD	.6210
EXTREME SPREAD	.7376

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

Ser # A 6874599

CENTERFIRE PATTERNS # 3

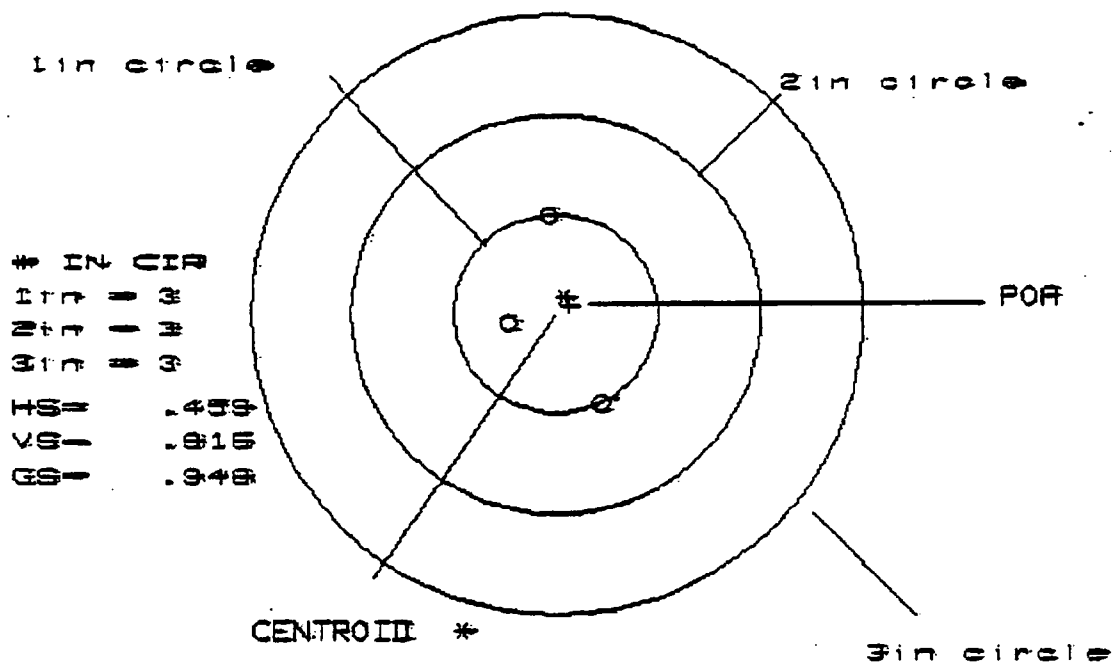


PATTERN # 3

NUMBER OF SHOTS	=	3	
MAXIMUM X & Y	=	.158	-.208
MINIMUM X & Y	=	.616	-.577
CENTROID X & Y	=	-.039	.082
POR TO CENTROID RAD	=	.0910	
MIN RADIUS	=	.1286	
MEAN RADIUS	=	.4594	
MAX RADIUS	=	.6807	
HORIZONTAL SPREAD	=	.3660	
VERTICAL SPREAD	=	1.1930	
EXTREME SPREAD	=	1.2479	
NUMBER IN ONE INCH CIRCLE	=		1
NUMBER IN TWO INCH CIRCLE	=		3
NUMBER IN THREE INCH CIRCLE	=		3

SCR # A6874599

CENTERFIRE PATTERNS # 4



PATTERN # = 4

NUMBER OF SHOTS = 3

MAXIMUM X & Y = .168 - .291

MINIMUM X & Y = .438 - .477

CENTROID X & Y = -.067 -.058

POA TO CENTROID RAD = .8841

MIN RADIUS = .2320

MEAN RADIUS = .4026

MAX RADIUS = .4885

HORIZONTAL SPREAD = .4590

VERTICAL SPREAD = .9150

EXTREME SPREAD = .9478

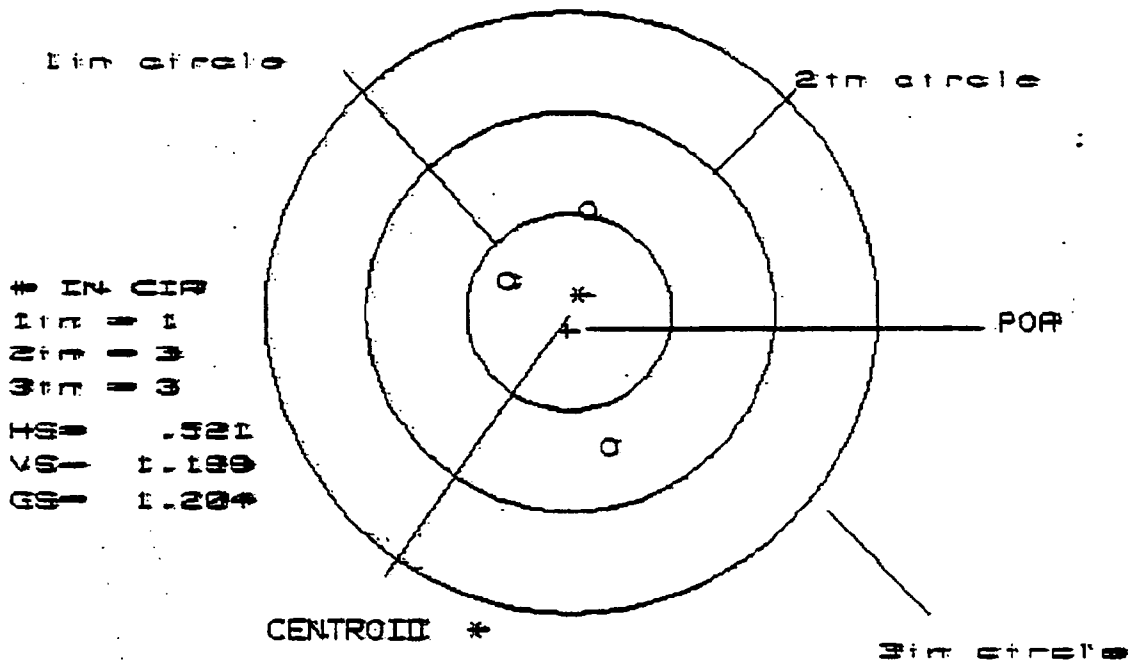
NUMBER IN ONE INCH CIRCLE = 3

NUMBER IN TWO INCH CIRCLE = 3

NUMBER IN THREE INCH CIRCLE = 3

Ser # A6874599

CENTERFIRE PATTERNS # 5



PATTERN #

NUMBER OF SHOTS	"	3	
MAXIMUM X & Y	"	.217	-.384
MINIMUM X & Y	"	-.600	-.599
CENTROID X & Y	"	.007	.084
POA TO CENTROID RATIO	"	.0843	
MIN RADIUS	"	.3533	
MEAN RADIUS	"	.5312	
MAX RADIUS	"	.7143	
HORIZONTAL SPREAD	"	.5210	
VERTICAL SPREAD	"	1.1990	
EXTREME SPREAD	"	1.2039	

NUMBER IN ONE INCH CIRCLE	"	1
NUMBER IN TWO INCH CIRCLE	"	3
NUMBER IN THREE INCH CIRCLE	"	3