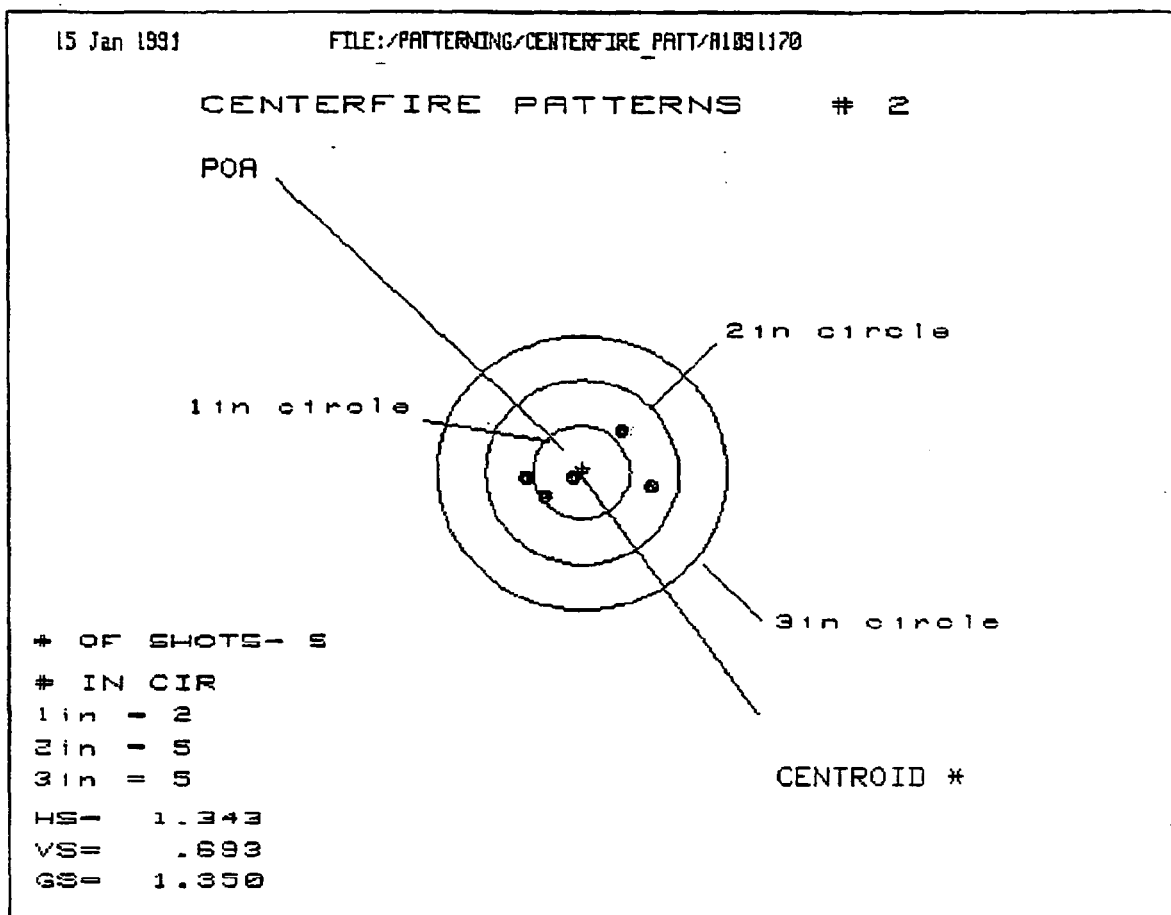


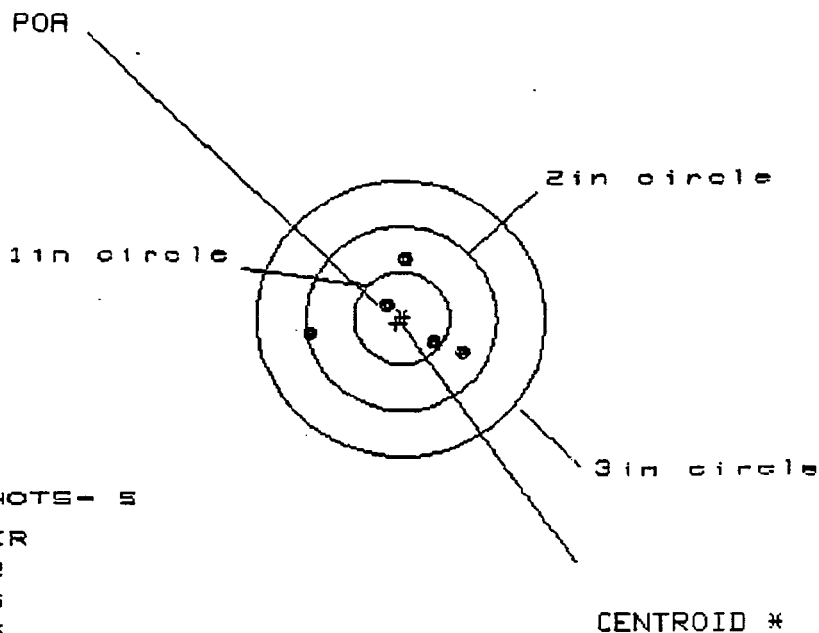


PATTERN #	:	2	4	3
SHOTS (BEST OF)	:	5	4	3
MAXIMUM X	:	.720	.605	.269
MINIMUM X	:	-.623	-.443	-.241
MAXIMUM Y	:	.471	.426	.063
MINIMUM Y	:	-.222	-.267	-.124
CENTROID X	:	-.013	-.193	-.395
CENTROID Y	:	-.046	-.002	-.144
POA TO CENTROID in.	:	.048	.193	.420
MIN RADIUS	:	.118	.105	.127
MEAN RADIUS	:	.517	.412	.217
MAX RADIUS	:	.742	.740	.276
HORIZONTAL SPREAD	:	1.343	1.048	.510
VERTICAL SPREAD	:	.693	.693	.187
EXTREME SPREAD	:	1.350	1.164	.510
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		5	

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1031170

CENTERFIRE PATTERNS # 3



OF SHOTS- 5

IN CIR

1in = 2

2in = 5

3in = 5

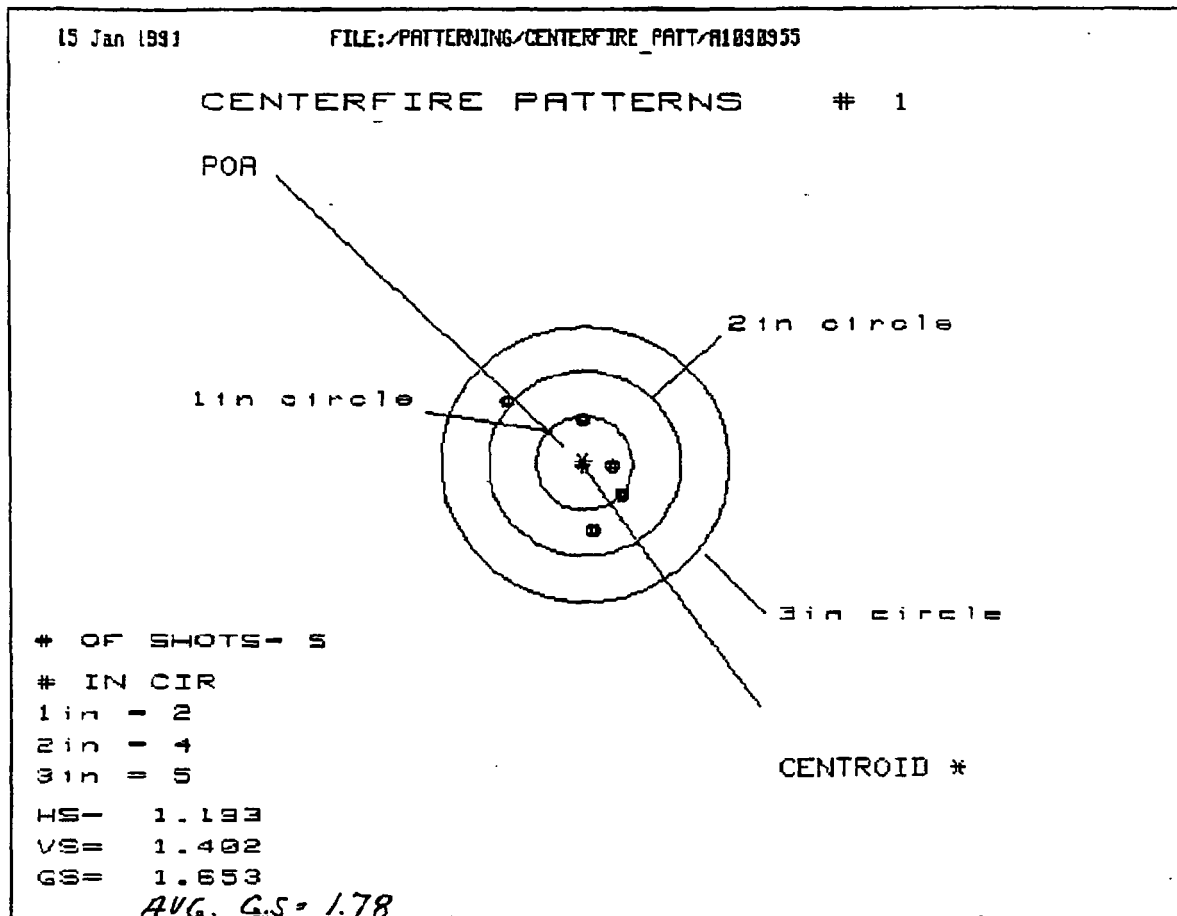
HS= 1.622

VS= .954

GS= 1.636

CENTROID *

PATTERN #	1	3	4	3
SHOTS (BEST OF)	5	4	3	
MAXIMUM X	.678	.442	.297	
MINIMUM X	-.944	-.434	-.286	
MAXIMUM Y	.597	.562	.431	
MINIMUM Y	-.357	-.392	-.412	
CENTROID X	.063	.299	.151	
CENTROID Y	.057	.092	.223	
POA TO CENTROID in.	.085	.313	.269	
MIN RADIUS	.246	.318	.287	
MEAN RADIUS	.605	.485	.409	
MAX RADIUS	.954	.591	.507	
HORIZONTAL SPREAD	1.622	.876	.583	
VERTICAL SPREAD	.954	.954	.843	
EXTREME SPREAD	1.636	1.127	.897	
NUMBER IN ONE INCH CIRCLE =	2			
NUMBER IN TWO INCH CIRCLE =	5			
NUMBER IN THREE INCH CIRCLE =	5			

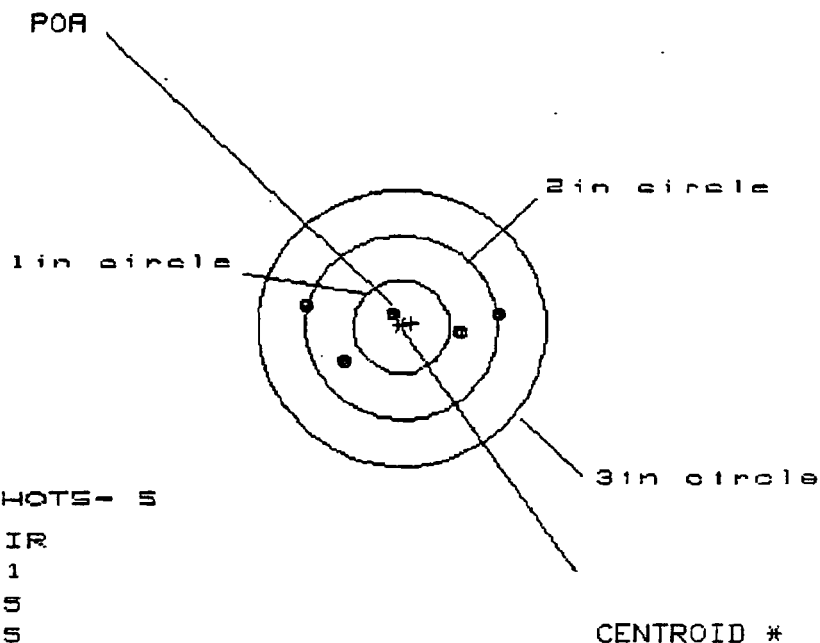


PATTERN #	1	2	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.429	.238	.211
MINIMUM X	-.764	-.222	-.249
MAXIMUM Y	.690	.634	.454
MINIMUM Y	-.712	-.540	-.374
CENTROID X	.012	.203	.230
CENTROID Y	.030	-.142	.030
POA TO CENTROID in.	.033	.248	.233
MIN RADIUS	.266	.119	.089
MEAN RADIUS	.609	.411	.345
MAX RADIUS	1.029	.672	.518
HORIZONTAL SPREAD	1.193	.460	.460
VERTICAL SPREAD	1.402	1.174	.828
EXTREME SPREAD	1.653	1.183	.947
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1030355

CENTERFIRE PATTERNS # 2



OF SHOTS- 5

IN CIR

1 in = 1

2 in = 3

3 in = 5

HS= 1.919

VS= .521

GS= 1.922

PATTERN #	2	3	4	5
SHOTS (BEST OF)	5	4	3	
MAXIMUM X	.967	.728	.655	
MINIMUM X	-.952	-.786	-.543	
MAXIMUM Y	.188	.134	.177	
MINIMUM Y	-.333	-.286	-.243	
CENTROID X	-.184	.135	-.108	
CENTROID Y	-.032	-.079	-.122	
POA TO CENTROID in.	.108	.156	.163	
MIN RADIUS	.146	.380	.210	
MEAN RADIUS	.676	.592	.488	
MAX RADIUS	.971	.836	.659	
HORIZONTAL SPREAD	1.919	1.514	1.198	
VERTICAL SPREAD	.521	.420	.420	
EXTREME SPREAD	1.922	1.570	1.237	
NUMBER IN ONE INCH CIRCLE =		1		
NUMBER IN TWO INCH CIRCLE =		5		
NUMBER IN THREE INCH CIRCLE =		5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1090955

CENTERFIRE PATTERNS # 3

POA

1 in circle

2 in circle

3 in circle

OF SHOTS- 5

IN CIR

1 in = 2

2 in = 5

3 in = 5

HS= 1.724

VS= .480

GS= 1.768

CENTROID *

PATTERN #

3

SHOTS (BEST OF)	5	4	3
MAXIMUM X	.761	.520	.540
MINIMUM X	-.963	-.689	-.516
MAXIMUM Y	.262	.230	.261
MINIMUM Y	-.218	-.251	-.174
CENTROID X	-.063	.178	.005
CENTROID Y	-.123	-.090	-.167
POA TO CENTROID in.	.138	.200	.167
MIN RADIUS	.222	.319	.176
MEAN RADIUS	.624	.501	.434
MAX RADIUS	.972	.714	.578
HORIZONTAL SPREAD	1.724	1.209	1.056
VERTICAL SPREAD	.480	.480	.435
EXTREME SPREAD	1.768	1.210	1.112
NUMBER IN ONE INCH CIRCLE	= 2		
NUMBER IN TWO INCH CIRCLE	= 5		
NUMBER IN THREE INCH CIRCLE	= 5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1090961

CENTERFIRE PATTERNS

1

POA

1in circle

2in circle

3in circle

OF SHOTS- 5

IN CIR

1in = 2

2in = 5

3in = 5

CENTROID *

HS= 1.018

VS= .985

GS= 1.332

AVG. G.S. = 1.31

PATTERN #

1

SHOTS (BEST OF)

5

4

3

MAXIMUM X

.549

.432

.535

MINIMUM X

-.469

-.393

-.290

MAXIMUM Y

.421

.280

.344

MINIMUM Y

-.564

-.339

-.246

CENTROID X

.153

.270

.167

CENTROID Y

.162

.302

.209

POA TO CENTROID in.

.223

.406

.267

MIN RADIUS

.237

.398

.264

MEAN RADIUS

.527

.458

.434

MAX RADIUS

.733

.549

.589

HORIZONTAL SPREAD

1.018

.825

.825

VERTICAL SPREAD

.985

.620

.590

EXTREME SPREAD

1.332

1.014

1.014

NUMBER IN ONE INCH CIRCLE =

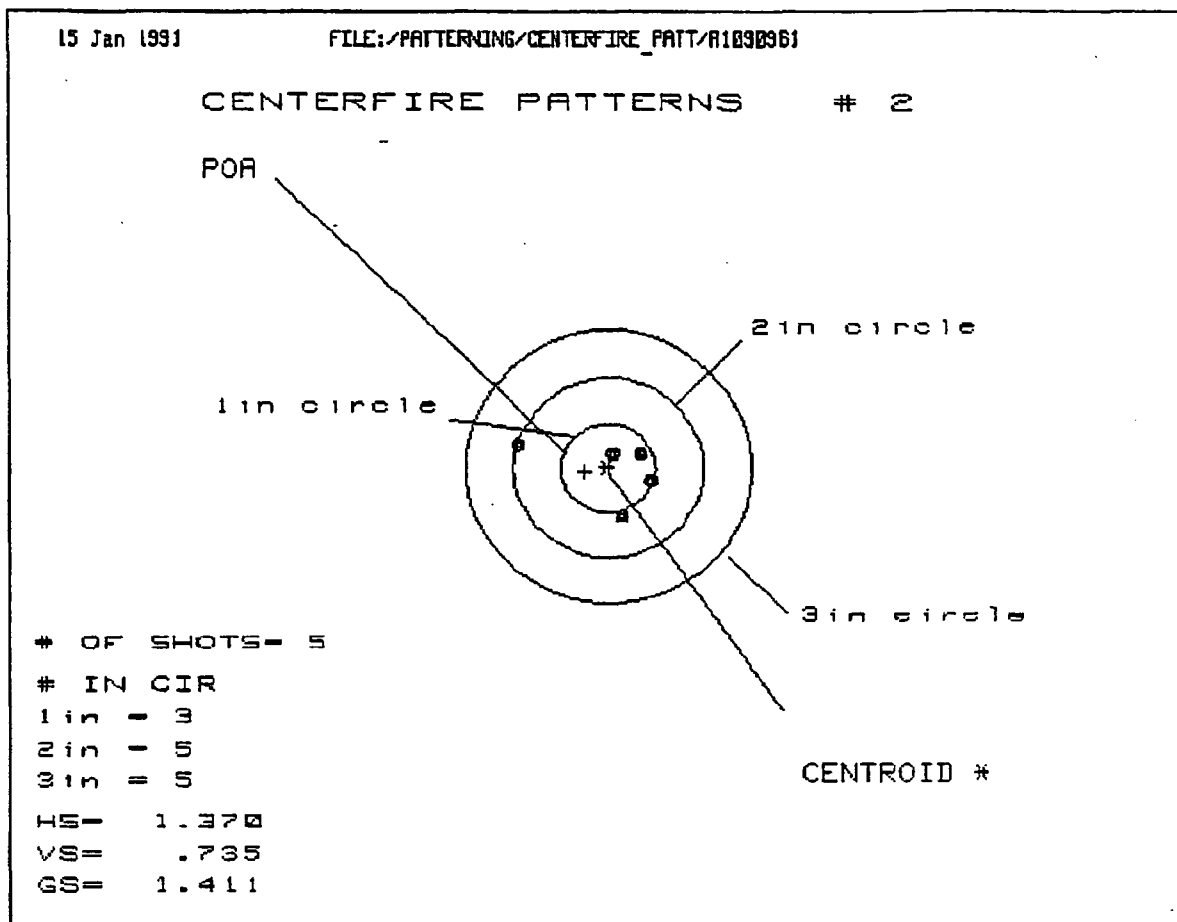
2

NUMBER IN TWO INCH CIRCLE =

5

NUMBER IN THREE INCH CIRCLE =

5



PATTERN #	2	4	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.409	.169	.130
MINIMUM X	-.961	-.152	-.191
MAXIMUM Y	.216	.265	.111
MINIMUM Y	-.519	-.465	-.220
CENTROID X	.252	.492	.531
CENTROID Y	.034	-.020	.134
POA TO CENTROID in.	.254	.493	.547
MIN RADIUS	.229	.181	.125
MEAN RADIUS	.515	.312	.201
MAX RADIUS	.985	.479	.256
HORIZONTAL SPREAD	1.370	.321	.321
VERTICAL SPREAD	.735	.730	.331
EXTREME SPREAD	1.411	.760	.461
NUMBER IN ONE INCH CIRCLE =		3	
NUMBER IN TWO INCH CIRCLE =		5	
NUMBER IN THREE INCH CIRCLE =		5	

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1090961

CENTERFIRE PATTERNS # 3

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS- 5

IN CIR

1 in = 3

2 in = 5

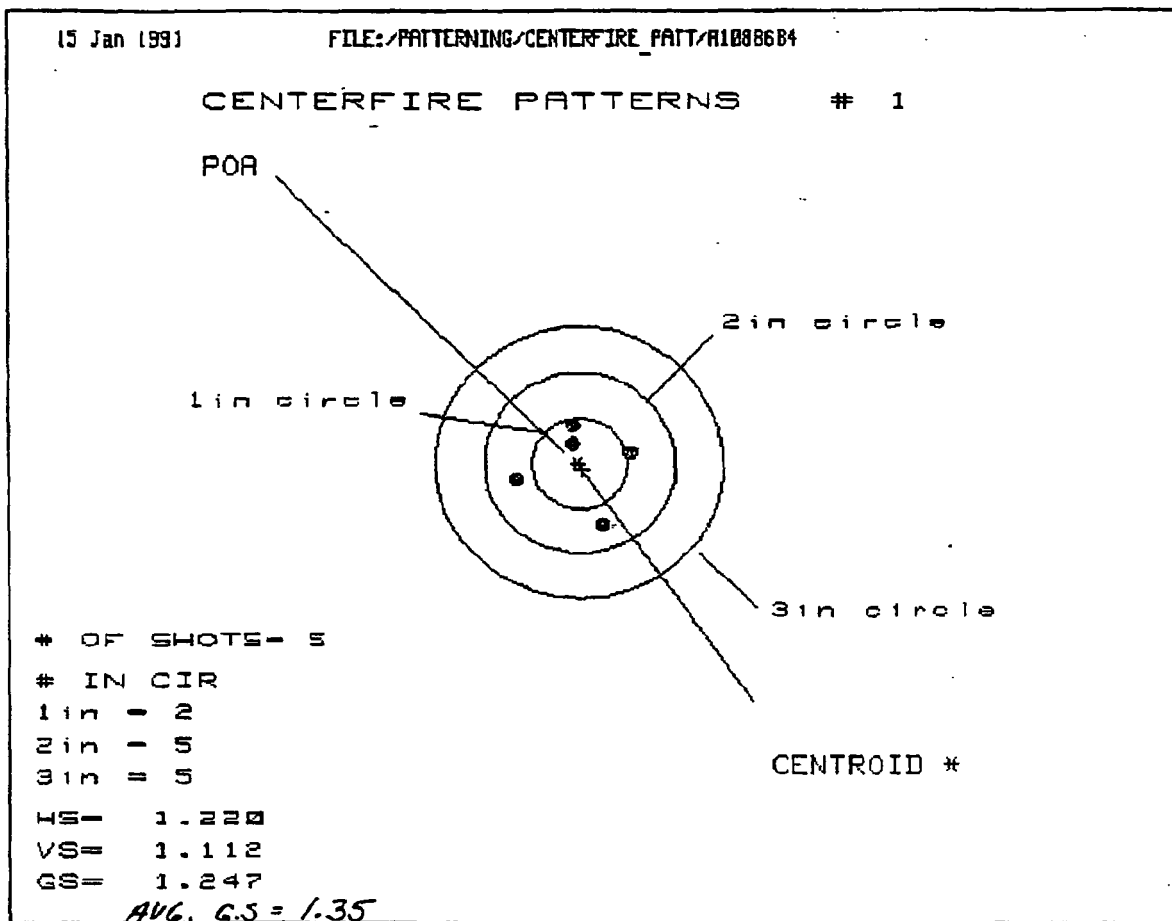
3 in = 5

HS= 1.140

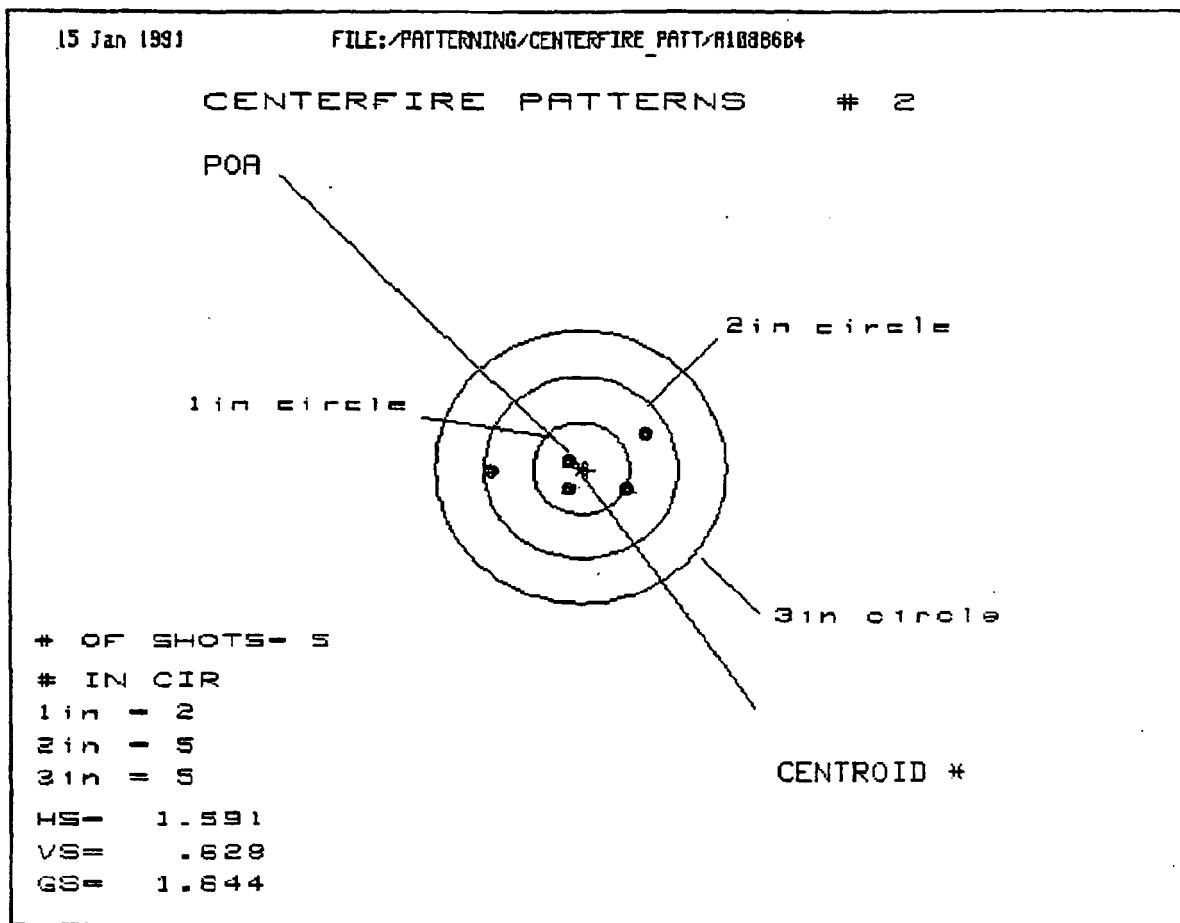
VS= .432

GS= 1.195

PATTERN #	:	3	4	3
SHOTS (BEST OF)	:	5	4	3
MAXIMUM X	:	.578	.381	.242
MINIMUM X	:	-.562	-.417	-.478
MAXIMUM Y	:	.192	.132	.151
MINIMUM Y	:	-.240	-.128	-.108
CENTROID X	:	-.026	-.171	-.032
CENTROID Y	:	.020	.081	.061
POA TO CENTROID in.	:	.033	.189	.069
MIN RADIUS	:	.236	.355	.246
MEAN RADIUS	:	.442	.388	.334
MAX RADIUS	:	.626	.421	.482
HORIZONTAL SPREAD	:	1.140	.798	.712
VERTICAL SPREAD	:	.432	.259	.259
EXTREME SPREAD	:	1.195	.807	.745
NUMBER IN ONE INCH CIRCLE	=		3	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		5	



PATTERN #	1	2	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.507	.329	.354
MINIMUM X	-.713	-.205	-.180
MAXIMUM Y	.464	.423	.193
MINIMUM Y	-.648	-.689	-.176
CENTROID X	-.032	.146	.121
CENTROID Y	.066	.107	.337
POA TO CENTROID in.	.074	.181	.358
MIN RADIUS	.254	.295	.181
MEAN RADIUS	.532	.447	.279
MAX RADIUS	.731	.693	.395
HORIZONTAL SPREAD	1.220	.534	.534
VERTICAL SPREAD	1.112	1.112	.369
EXTREME SPREAD	1.247	1.145	.643
NUMBER IN ONE INCH CIRCLE	= 2		
NUMBER IN TWO INCH CIRCLE	= 5		
NUMBER IN THREE INCH CIRCLE	= 5		



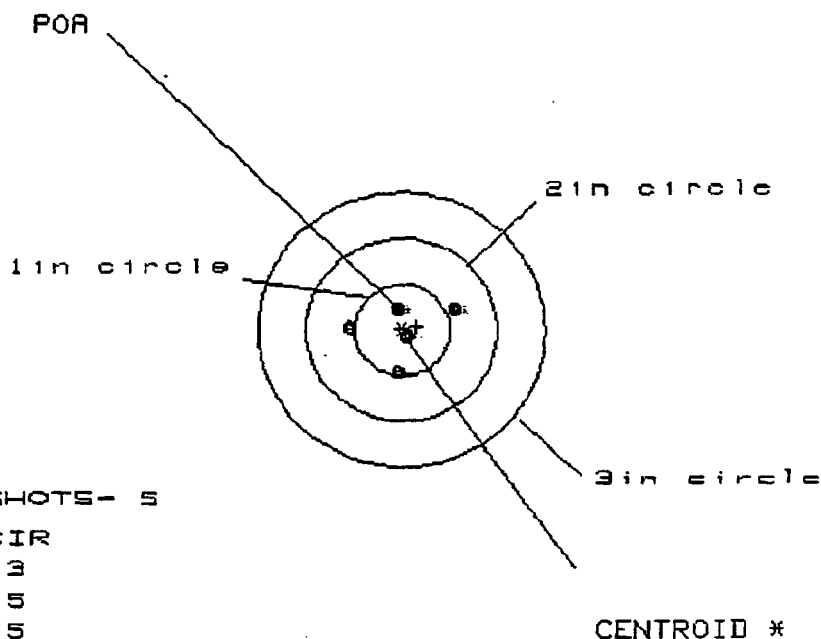
PATTERN #	2	4	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.697	.473	.441
MINIMUM X	-.894	-.402	-.244
MAXIMUM Y	.377	.368	.194
MINIMUM Y	-.251	-.260	-.137
CENTROID X	-.065	.159	.001
CENTROID Y	.018	.027	-.096
POA TO CENTROID in.	.067	.161	.096
MIN RADIUS	.155	.363	.250
MEAN RADIUS	.531	.447	.330
MAX RADIUS	.895	.600	.462
HORIZONTAL SPREAD	1.591	.875	.685
VERTICAL SPREAD	.628	.628	.331
EXTREME SPREAD	1.644	1.032	.720
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/R1088684

CENTERFIRE PATTERNS

3



OF SHOTS- 5

IN CIR

1in = 3

2in = 5

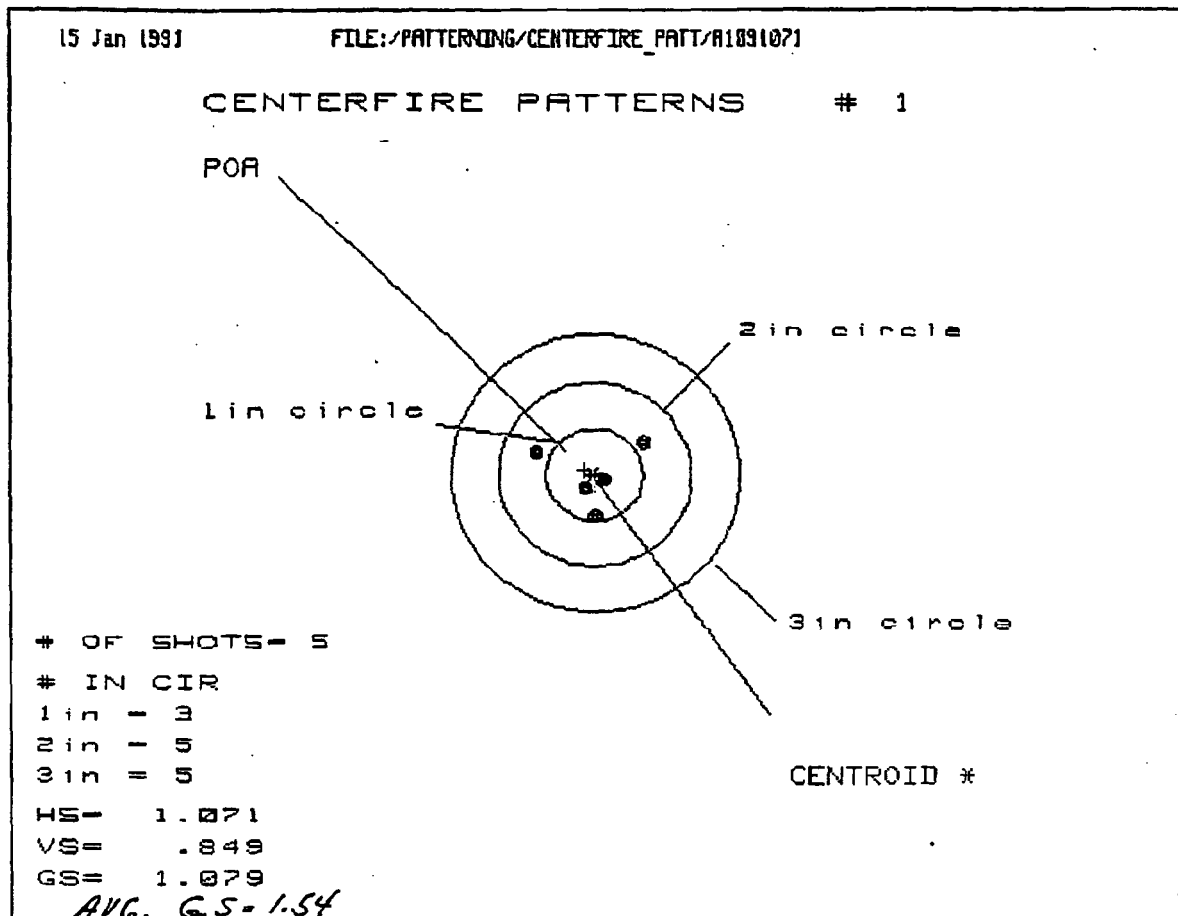
3in = 5

HS= 1.146

VS= .672

GS= 1.163

PATTERN #	5	4	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.596	.154	.020
MINIMUM X	-.550	-.401	-.019
MAXIMUM Y	.231	.286	.312
MINIMUM Y	-.441	-.386	-.360
CENTROID X	-.149	-.298	-.164
CENTROID Y	-.036	-.091	-.117
POA TO CENTROID in.	.153	.312	.282
MIN RADIUS	.033	.156	.052
MEAN RADIUS	.378	.320	.242
MAX RADIUS	.635	.408	.360
HORIZONTAL SPREAD	1.146	.555	.039
VERTICAL SPREAD	.672	.672	.672
EXTREME SPREAD	1.163	.693	.672
NUMBER IN ONE INCH CIRCLE =		3	
NUMBER IN TWO INCH CIRCLE =		5	
NUMBER IN THREE INCH CIRCLE =		5	

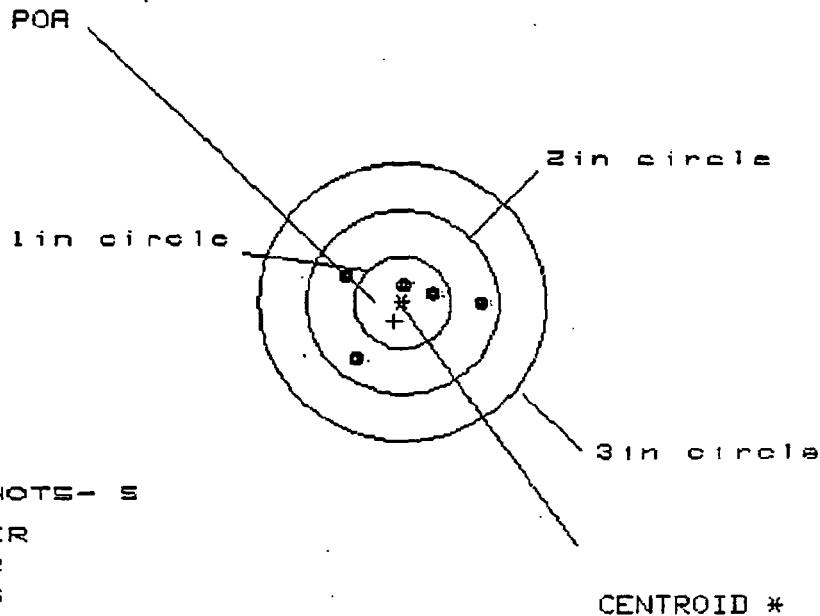


PATTERN #	1	2	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.521	.235	.096
MINIMUM X	-.550	-.419	-.107
MAXIMUM Y	.385	.349	.214
MINIMUM Y	-.464	-.367	-.251
CENTROID X	.100	-.031	.109
CENTROID Y	-.055	-.152	-.268
POA TO CENTROID in.	.114	.155	.289
MIN RADIUS	.105	.085	.114
MEAN RADIUS	.405	.321	.200
MAX RADIUS	.648	.545	.252
HORIZONTAL SPREAD	1.071	.655	.203
VERTICAL SPREAD	.849	.716	.465
EXTREME SPREAD	1.079	.916	.473
NUMBER IN ONE INCH CIRCLE =	3		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/R1091071

CENTERFIRE PATTERNS # 2



OF SHOTS- 5

IN CIR

1in = 2

2in = 5

3in = 5

HS= 1.473

VS= .876

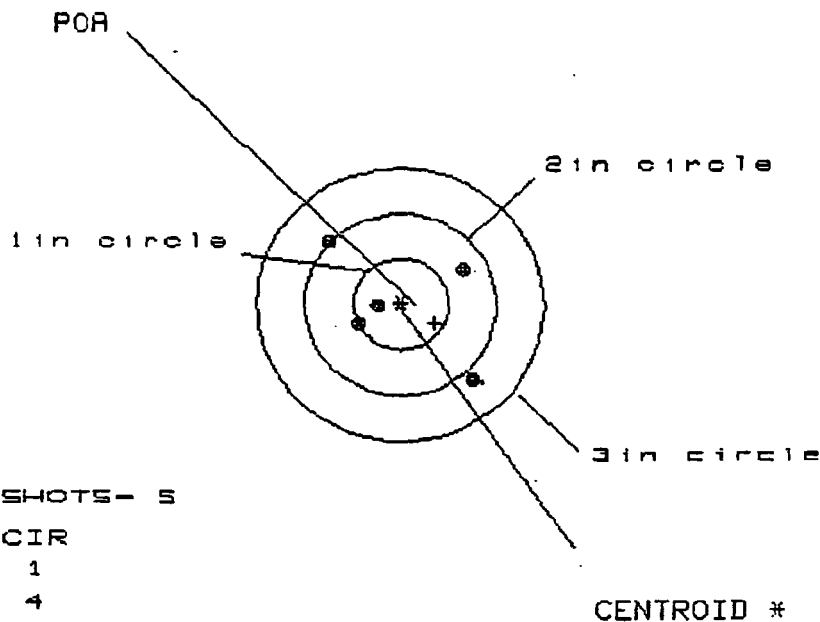
QS= 1.512

PATTERN #	2	4	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.843	.494	.390
MINIMUM X	-.630	-.419	-.523
MAXIMUM Y	.303	.294	.100
MINIMUM Y	-.573	-.582	-.075
CENTROID X	.087	-.124	-.020
CENTROID Y	.197	.206	.400
POA TO CENTROID in.	.215	.240	.401
MIN RADIUS	.190	.290	.135
MEAN RADIUS	.562	.493	.355
MAX RADIUS	.844	.660	.532
HORIZONTAL SPREAD	1.473	.913	.913
VERTICAL SPREAD	.876	.876	.175
EXTREME SPREAD	1.512	1.067	.930
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/R1891071

CENTERFIRE PATTERNS # 3



HS= 1.423

VS= 1.433

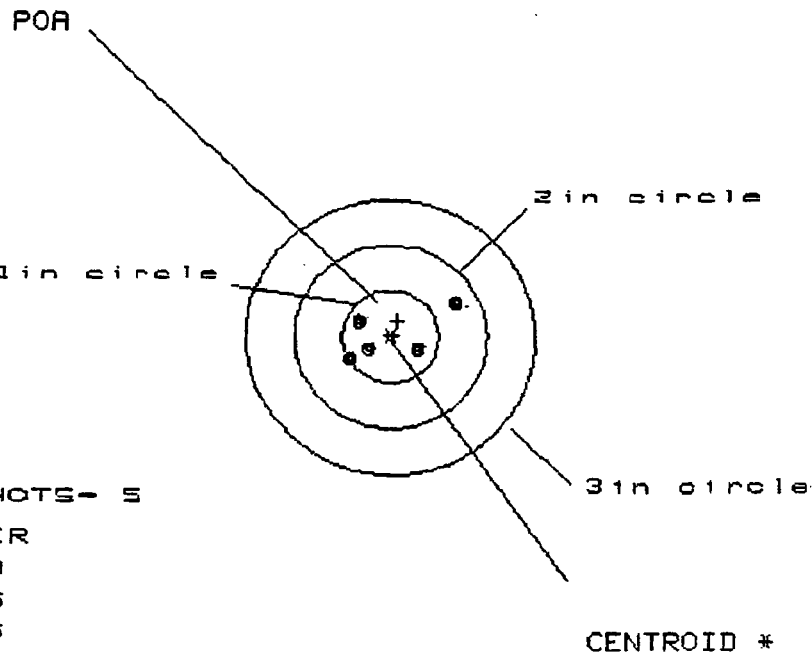
GS= 2.020

PATTERN #	5	4	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.708	.837	.657
MINIMUM X	-.715	-.538	-.453
MAXIMUM Y	.639	.440	.350
MINIMUM Y	-.794	-.458	-.311
CENTROID X	-.352	-.529	-.349
CENTROID Y	.214	.413	.266
POA TO CENTROID in.	.412	.671	.439
MIN RADIUS	.203	.187	.208
MEAN RADIUS	.703	.569	.501
MAX RADIUS	1.064	.861	.745
HORIZONTAL SPREAD	1.423	1.375	1.110
VERTICAL SPREAD	1.433	.898	.661
EXTREME SPREAD	2.020	1.395	1.292
NUMBER IN ONE INCH CIRCLE =	1		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/A1091279

CENTERFIRE PATTERNS # 1



OF SHOTS- 5

IN CIR

1 in = 3

2 in = 5

3 in = 5

HS= 1.105

VS= .558

GS= 1.238

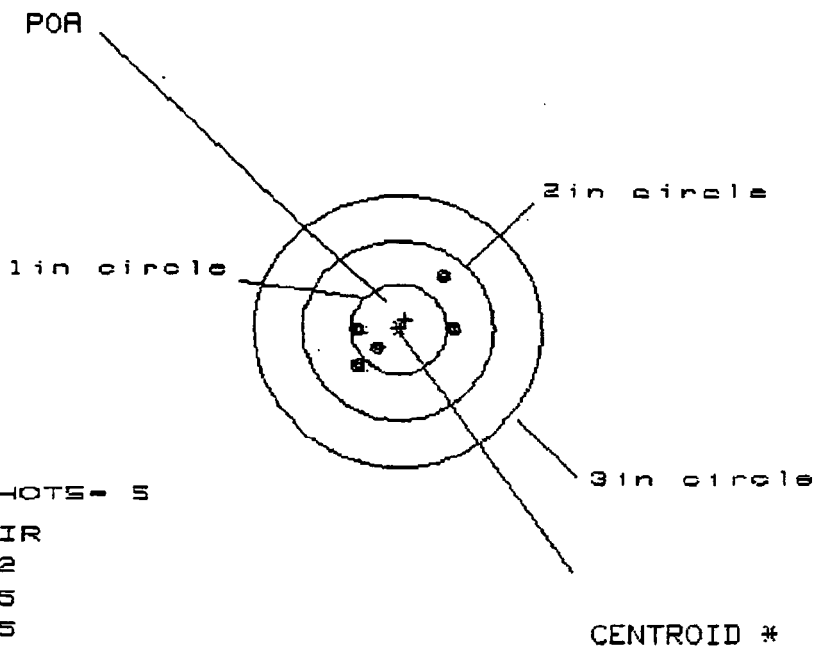
AUG. G.S. = 1.19

PATTERN #	1	2	3
SHOTS (BEST OF)	5	4	3
MAXIMUM X	.653	.445	.349
MINIMUM X	-.452	-.288	-.220
MAXIMUM Y	.338	.244	.199
MINIMUM Y	-.220	-.135	-.123
CENTROID X	-.072	-.236	-.140
CENTROID Y	-.168	-.253	-.208
POA TO CENTROID in.	.183	.346	.251
MIN RADIUS	.254	.084	.178
MEAN RADIUS	.425	.281	.277
MAX RADIUS	.736	.446	.357
HORIZONTAL SPREAD	1.105	.733	.569
VERTICAL SPREAD	.558	.379	.322
EXTREME SPREAD	1.238	.740	.632
NUMBER IN ONE INCH CIRCLE =		3	
NUMBER IN TWO INCH CIRCLE =		5	
NUMBER IN THREE INCH CIRCLE =		5	

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/R1091279

CENTERFIRE PATTERNS # 2



OF SHOTS - 5

IN CIR

1 in = 2

2 in = 5

3 in = 5

HS = .967

VS = .993

GS = 1.314

PATTERN #	2	4	9
SHOTS (BEST OF)	5	4	9
MAXIMUM X	.534	.653	.565
MINIMUM X	-.433	-.314	-.402
MAXIMUM Y	.551	.185	.083
MINIMUM Y	-.442	-.304	-.114
CENTROID X	-.070	-.190	-.101
CENTROID Y	-.101	-.239	-.137
POA TO CENTROID in.	.123	.305	.170
MIN RADIUS	.245	.076	.199
MEAN RADIUS	.506	.378	.392
MAX RADIUS	.728	.667	.566
HORIZONTAL SPREAD	.967	.967	.967
VERTICAL SPREAD	.993	.489	.197
EXTREME SPREAD	1.314	1.018	.968
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	5		

15 Jan 1991

FILE:/PATTERNING/CENTERFIRE_PATT/11091279

CENTERFIRE PATTERNS # 3

POA

1 in circle

2 in circle

3 in circle

OF SHOTS- 5

IN CIR

1 in = 4

2 in = 5

3 in = 5

HS= .897

VS= .694

GS= 1.010

CENTROID *

PATTERN #	3
SHOTS (BEST OF)	5
MAXIMUM X	.459
MINIMUM X	-.438
MAXIMUM Y	.362
MINIMUM Y	-.332
CENTROID X	-.029
CENTROID Y	-.170
POA TO CENTROID in.	.173
MIN RADIUS	.226
MEAN RADIUS	.398
MAX RADIUS	.565
HORIZONTAL SPREAD	.897
VERTICAL SPREAD	.694
EXTREME SPREAD	1.010
NUMBER IN ONE INCH CIRCLE	4
NUMBER IN TWO INCH CIRCLE	5
NUMBER IN THREE INCH CIRCLE	5