

C6611409

MODEL 700™ M24

Model **SMS**™

Action

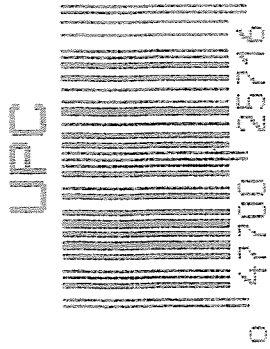
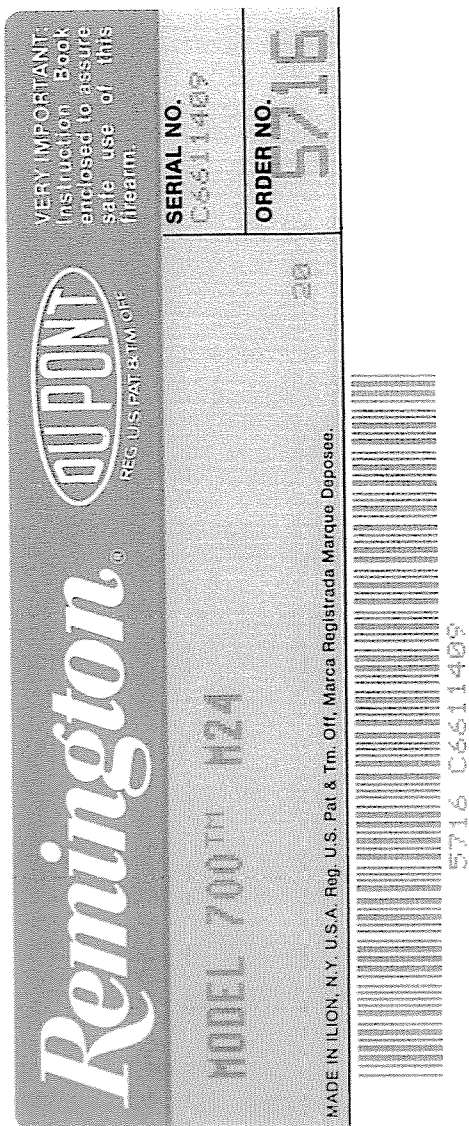
Barrel Length

Capacity

Order No. **5716**

*Includes 1 in chamber.





CFM

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6611409

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock	1 25	91	RW
600	Proof	1 25	91	RW
607	Check Headspace	1 25	91	RW
610	Dis-assemble Gun	1 25	91	RW
612	Magnaflux Barrel Action			KR
	Magnaflux Bolt	1 25	91	KR
615	Rollmark Caliber	1 25	91	GL
617	Drill and Tap Sight Holes	1 30	91	LB
618	Polish Barrel <i>RB</i>	1 30	91	LB
620	Apply Coatings (Barrel Action)		2-10-91	JA
	Apply Coating (Bolt)			
625	Final Assembly			
	A) Clean inside of Bolt Assembly		2/11/91	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		2/11/91	RW
	C) Inspect Ejector Hole for Chamfer		2/11/91	RW
	D) Oil Firing Pin Ass'y		2/11/91	RW
	E) Adjust Trigger Pull to Min Setting and Stake		2/18/91	JA

op. #	BARBER M24 0076372	READINGS					DATE	INIT
625 cont.	F) Safety On Force	4 1/2	4 1/2	4 1/2			2/18/91	WB
	G) Safety Off Force	3	3	3			2/18/91	WB
	H) Trigger Pull Test & Retainability						2/18/91	961
	I) Firing Pin Indent	.021	.0212	.021			2/18/91	WB
	J) Assemble Stock						2/19/91	RW
	K) Assemble Swivel Studs						2-22-91	K
	L) Attach Front and Rear Sight Assemblies						2/19/91	RW
	M) Iron Sight Alignment						2/19/91	RW
	N) Detach Front & Rear Sights & place in numbered container						2/19/91	RW
	O) Attach Scope to Rifle						2/19/91	RW
	P) Detach & Attach Scope 20 Times						2/19/91	RW
640	Gallery Target & Test						2-20-91	AC
	A) Time						2-20-91	AC
	B) Malfunctions						2-20-91	AC
	C) Pierced Primers						2-20-91	AC
	D) Optical Clarity of Scope						2-20-91	AC
645	Inspect for Live Ammo						2-20-91	AC
655	Final Inspection							
	A) Headspace						2-22-91	K
	B) Trigger Pull	2.43	2.40	2.44	2.44	2.42	2/21/91	961
	C) Function						2-22-91	AC
660	Pack						2-18-91	WB

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# + .50#

3.00# + .75#

4.00# + 1.00#

SERIAL NO. C6611409

DATE 2/18/91

TESTER JH

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.24	2.35	2.28	2.43	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.16	2.33	2.33	2.40	
PULL #3	2.52	2.30	2.30	2.44	
PULL #4	2.26	2.16	2.25	2.44	
PULL #5	2.34	2.26	2.25	2.42	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.51	3.35		
PULL #2	3.34	3.33		
PULL #3	3.21	3.20		
PULL #4	3.30	3.30		
PULL #5	3.30	3.38		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.22	4.44		4.10
PULL #2	4.51	4.48		4.37
PULL #3	4.48	4.32		4.44
PULL #4	4.46	4.37		4.36
PULL #5	4.47	4.42		4.46
TOTAL				
AVG.				

· TIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6611409
20 Feb 1991

CENTROIDAL DISTANCES

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0 TO 1 .366922
1 TO 2 .331344
1 TO 3 .22573
1 TO 4 .418306
1 TO 5 .558142
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21⁴ 7⁵ (-----FOA

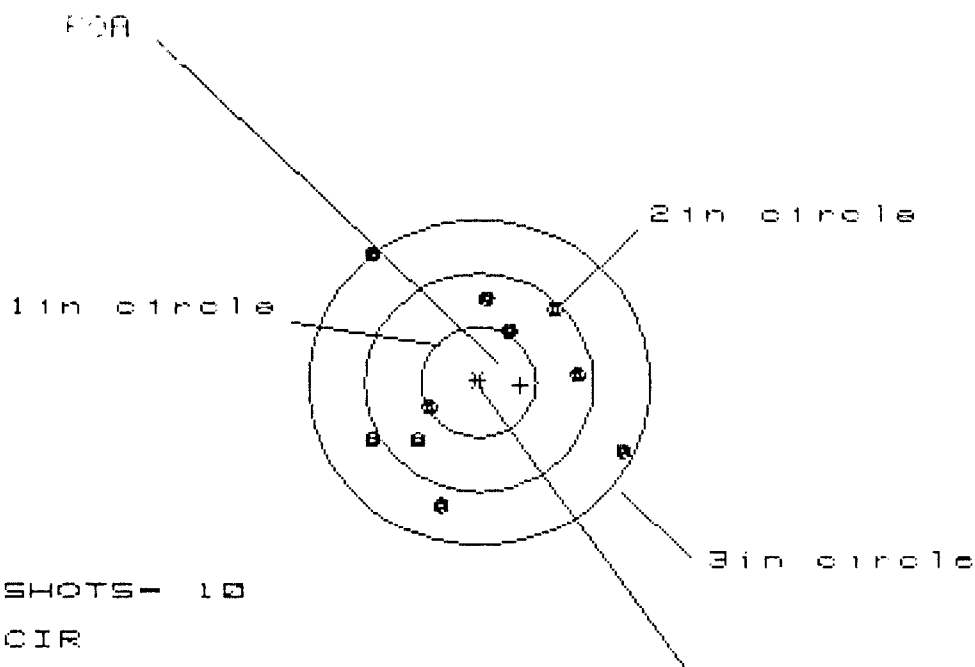
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.2364
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0642
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .244962

AME FOR THIS RIFLE IS: .9982

28 Feb 1911

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CENTERFIRE PATTERNS # 1



OF SHOTS- 10

IN CIR

1 in = 0

2 in = 6

3 in = 9

HS= 2.197

VS= 2.269

GS= 2.818

CENTROID #

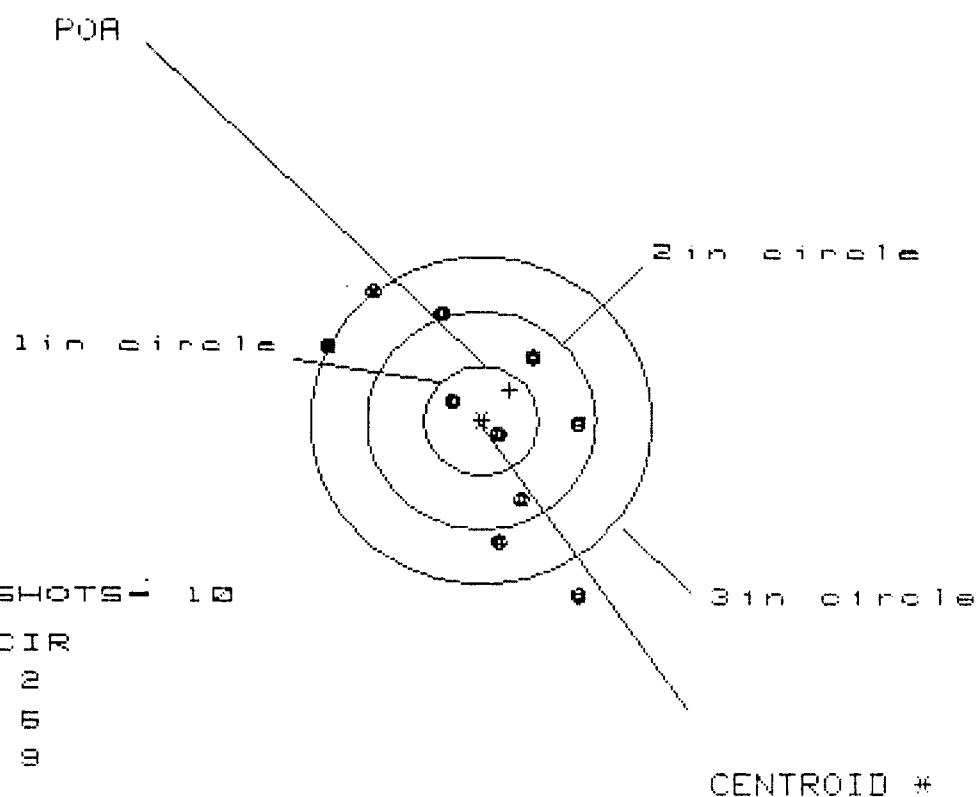
PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.226	1.118	.941
MINIMUM X	-.971	-.998	-.859
MAXIMUM Y	1.147	.859	.797
MINIMUM Y	-1.122	-.994	-1.056
CENTROID X	-.366	-.258	-.398
CENTROID Y	.026	-.102	-.041
POA TO CENTROID in.	.367	.277	.400
MIN RADIUS	.519	.573	.461
MEAN RADIUS	.952	.890	.829
14 RADIUS	1.503	1.221	1.100
HORIZONTAL SPREAD	2.197	2.116	1.799
VERTICAL SPREAD	2.269	1.853	1.853
PLANE SPREAD	2.818	2.116	2.091
SHOTS IN ONE INCH CIRCLE =	0		
SHOTS IN TWO INCH CIRCLE =	6		

NUMBER IN THREE INCH CIRCLE = 9

26 Feb 1991

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CENTERFIRE PATTERNS # 2



OF SHOTS- 10

IN CIR

1 in = 2

2 in = 5

3 in = 9

HS= 2.194

VS= 2.729

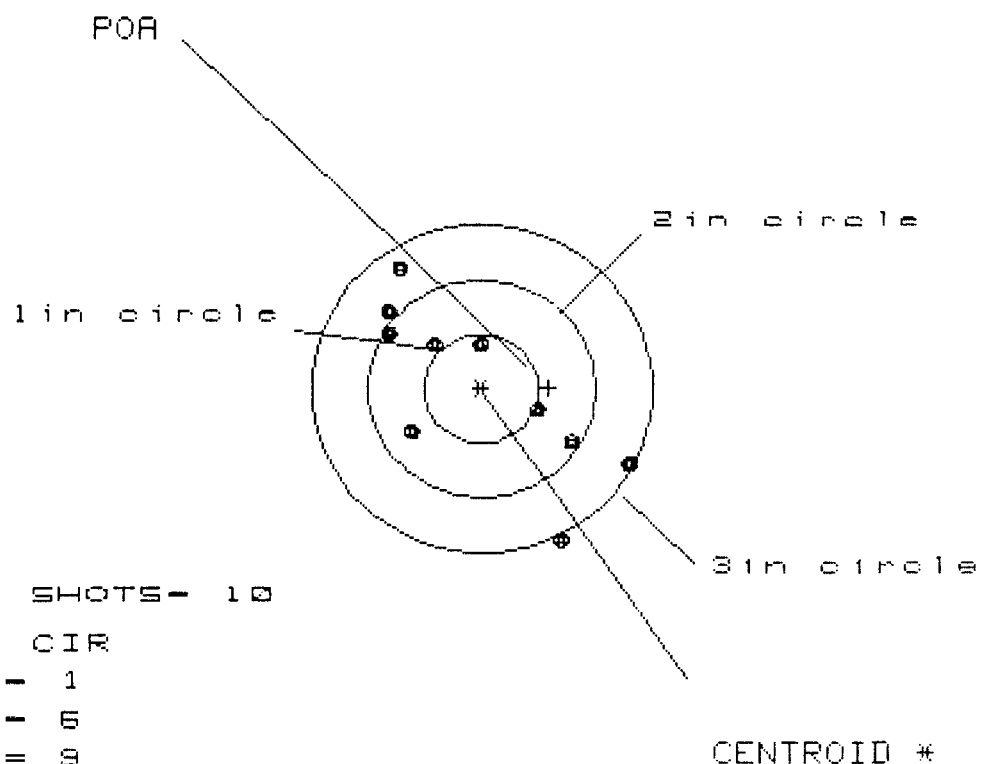
GS= 3.276

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.871	.909	.756
MINIMUM X	:	-1.323	-1.227	-.998
MAXIMUM Y	:	1.139	.962	1.023
MINIMUM Y	:	-1.590	-1.281	-1.220
CENTROID X	:	-.249	-.345	-.192
CENTROID Y	:	-.284	-.107	-.168
POA TO CENTROID in.	:	.377	.361	.255
MIN RADIUS	:	.181	.204	.217
MEAN RADIUS	:	.973	.875	.797
MAX RADIUS	:	1.813	1.321	1.429
HORIZONTAL SPREAD	:	2.194	2.136	1.754
VERTICAL SPREAD	:	2.729	2.243	2.243
EXTREME SPREAD	:	3.276	2.512	2.512
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		9	

28 Feb 1991

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CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1in = 1

2in = 6

3in = 9

HS= 2.126

VS= 2.501

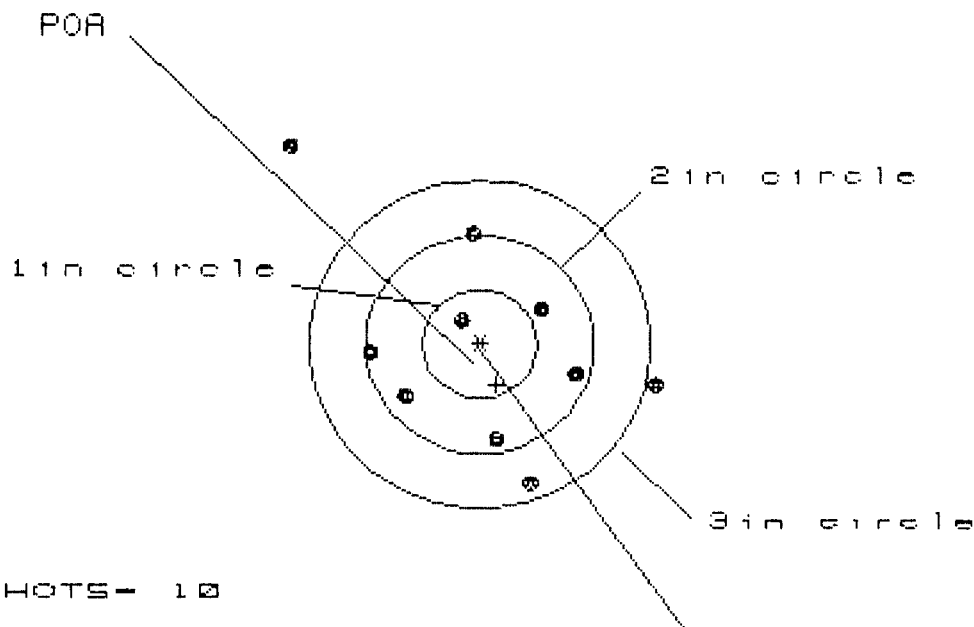
GS= 2.849

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.326	1.404	1.039
MINIMUM X	:	-.800	-.722	-.547
MAXIMUM Y	:	1.064	.904	.901
MINIMUM Y	:	-1.438	-.820	-.712
CENTROID X	:	-.589	-.667	-.842
CENTROID Y	:	-.009	.150	.253
POA TO CENTROID in.	:	.589	.683	.879
MIN RADIUS	:	.406	.267	.212
MEAN RADIUS	:	.949	.842	.698
MAX RADIUS	:	1.598	1.626	1.259
HORIZONTAL SPREAD	:	2.126	2.126	1.586
VERTICAL SPREAD	:	2.501	1.724	1.513
EXTREME SPREAD	:	2.849	2.634	2.096
NUMBER IN ONE INCH CIRCLE	=		1	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		9	

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CENTERFIRE PATTERNS # 4



OF SHOTS- 10

IN CIR

1in = 1

2in = 7

3in = 8

HS= 3.192

VS= 3.061

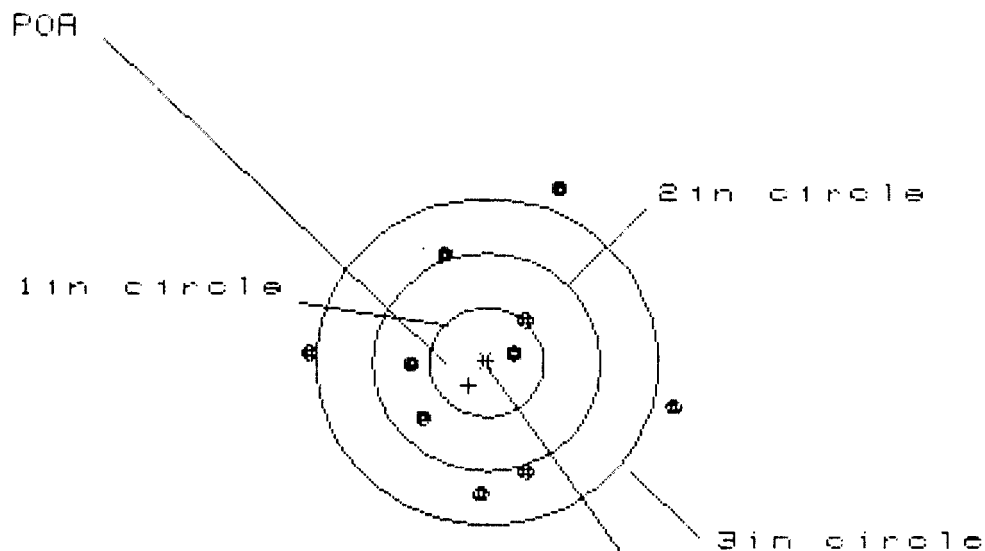
GS= 3.865

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.547	1.364	.837
MINIMUM X	:	-1.645	-1.173	-1.002
MAXIMUM Y	:	1.798	1.177	1.155
MINIMUM Y	:	-1.263	-1.063	-1.085
CENTROID X	:	-.140	.043	-.128
CENTROID Y	:	.378	.178	.200
POA TO CENTROID in.	:	.403	.183	.238
MIN RADIUS	:	.304	.575	.460
MEAN RADIUS	:	1.076	.910	.838
MAX RADIUS	:	2.437	1.376	1.156
HORIZONTAL SPREAD	:	3.192	2.537	1.839
VERTICAL SPREAD	:	3.061	2.240	2.240
EXTREME SPREAD	:	3.865	2.560	2.286
NUMBER IN ONE INCH CIRCLE =			1	
NUMBER IN TWO INCH CIRCLE =			7	
NUMBER IN THREE INCH CIRCLE =			8	

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CENTERFIRE PATTERNS # 5



OF SHOTS- 10

IN CIR

1in = 1

2in = 4

3in = 7

HS= 3.107

VS= 2.833

GS= 3.150

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.592	1.663	.635
MINIMUM X	:	-1.515	-1.444	-1.236
MAXIMUM Y	:	1.612	1.188	1.158
MINIMUM Y	:	-1.221	-1.042	-1.072
CENTROID X	:	.162	.091	-.117
CENTROID Y	:	.210	.031	.061
POA TO CENTROID in.	:	.265	.096	.132
1IN RADIUS	:	.238	.394	.374
MEAN RADIUS	:	1.041	.958	.850
MAX RADIUS	:	1.735	1.681	1.260
HORIZONTAL SPREAD	:	3.107	3.107	1.971
VERTICAL SPREAD	:			