M/722 Pilot Test 2/25/48

Gun	Ej	Feed
25412	1	1
23998	6	6
25397	7	—
25418	2	—
25361	3	—
25297	5	—
25347	10	—
24728	7	—

120 rds each.

120

Acc.

Acc.

Acc.

DATE	R.T.#	TEST	ROUNDS FIRED	MALFUNCTION RATE								MALFUNCT					
				OVERALL		ADVERSE			NORMAL								
				TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	FIRING	UNLOCKING	PRIMARY EXTRACTION	SECONDARY EXTRACTION	EJECTION	
									60	0	0%						
			10 1060	55	5.2%				1060	55	5.2%	1				54	
April 1948	13																

ICES				B	R	GF	A	REMARKS
COCKING	FEEDING	LOADING	LOCKING	BREAKAGES	REPLACEMENTS	GUN FAILURES	ADJUSTMENTS	
								Muzzle .308" ±
								1" .309"
								2" .309"
								3" .309"
								4" .3088"
								4. Ammunition of questionable accuracy.
								Two types of ammunition have been used one of
								which was standardized at 1.4"—100 yds. The
								other type being the same lot as used in
								Plant testing. Shortage of the latter unknown
								Every effort is being made to obtain suitable
								ammunition before proceeding with the test
					2	1		

DATE	R.T.#	TEST	ROUNDS FIRED	MALFUNCTION RATE								MALFUNC				
				OVERALL		ADVERSE			NORMAL							
				TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	FIRING	UNLOCKING	PRIMARY EXTRACTION	SECONDARY EXTRACTION	
1/14/48	11	Live Fire 441-1000	441-1000						560	42	7.5%					(4)
									1000			1				5
									560	42	7.5%					4
			1000	55	5.5%				1000	55	5.5%	1				4
	12	1001-1010	1010													

#25397

TIONS				B	R	GF	A	REMARKS
COCKING	FEEDING	LOADING	LOCKING	BREAKAGES	REPLACEMENTS	GUN FAILURES	ADJUSTMENTS	
)								30 - Slow functioning 9 Med. Functioning 3 - Fast Function
								In 30 of the Cases primer were protruding from the head of
								the shell & Catching on the edge of the ejector. It is
								believed that the fail to eject malfunctions are caused by
			or indirectly by the following:					
								1. Incorrect Chamfer dimension on inside rim of
								recessed Bolt Head.
								2. Ejector - Min length
								3 Shell length of Cartridge are under 4 in as Compared
								with a Master Chamber.
					(1)			Bolt with Correct Chamfer.
					1			
					2	1		
								Accuracy firing shows the following
								Average Extreme Spread 4.6" - High 5.7" - Low 4.1"
								Conditions of Test
								Ammunition Lot RP RLE 103 180 Gr SP Range 100 yd
								2x Power Scope, Bench Rest. Fore End Supported by Bench Rest
								Shooter M - Walker & W Leek 3 - 10 shot groups
								Weather Clear & no wind. This accuracy is not Consider
								good & (yawing) of several bullets was noted.
								Poor Accuracy may be attributed to the following
								Conditions:
								1. Shell length under 4 in as Compared with Chamber
								2. Poor bedding of the barrel & action.
								3. Dimension of iron at rifle section are Large
								especially the section under the sight ramp.

M722 P. 201
Gun #2

DATE	R.T.#	ROUNDS FIRED	MALFUNCTION RATE							MALFUNCTION						
			OVERALL		ADVERSE			NORMAL								
			TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	FEEDING	CLOSING	PRIMARY EXTRACTION	SECONDARY EXTRACTION	EJECTION	COCKING	FEEDING
	5	0-120													(7)		
								120	7	5.8%					7		
			7	5.8%				120	7	5.8%					7		
	6	121-180															
								60	0	0%							
			7	3.9%				180	7	3.9%					7		
	9	181-381									1						
											6				(4)		
								200	5	2.5%	1				4		
			12	3.7%				381	12	3.2%	1				11		
	~~10~~	~~381-440~~															
	10	381-440						~~60~~	~~1~~	~~1.67%~~					(1)		
								~~440~~ 60	1	1.67%	1				1		
			13	3%				440	13	~~3%~~ 2.72%	1				12		
	11	~~441-1000~~													42		
															(1)		

'ine Test (.300 Savage)

5397 (Endurance Gun)

LOADING	LOCKING				B BREAKAGES	R REPLACEMENTS	GF GUN FAILURES	A ADJUSTMENTS	REMARKS
									Accuracy firing shows the following:
									E.S. 3.4" Ammo-Lot
									20 Power Scope, Bench Rest
									Shooters M-Walker, W- Engush
									Fired indoors
						(1)	(1)		1-malfunction Changed Firing Pin Assembly (old assembly was
						1	1		binding because of burrs on base of firing pin.) These
						1	1		burrs retarded the forward acceleration of the firing pin
									resulting in [illegible] of the primer. This condition could
									be [illegible] in an occasional hang fire!
									60° down
						1	1		
									~~Not Counted Changed see discussion below~~ the fired Cases ~~are~~
									~~Primers are protruding from fired cases. Shell length below min.~~
									~~Protruded primer catches on edge of ejector at the same time~~
									~~the side of the base, the shell binds against the recessed bolt head~~
									~~chamfer. The chamber dimensions are believed to disagree~~
									~~with the drawings [illegible] and are being checked~~
									~~for verification. The shoulder bearing area of the~~
									~~300 S. shell is very small and it is believed by the writer that~~

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KINZER V. REMINGTON

R2501285

DATE	R.T.#	ROUNDS FIRED	MALFUNCTION RATE							MALFUNCT						
			OVERALL		ADVERSE			NORMAL								
			TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	FEEDING	UNLOCKING	PRIMARY EXTRACTION	SECONDARY EXTRACTION	EJECTION	COCKING
3/4/48																

LOCKING	B	R	CF	A	REMARKS
	BREAKAGES	REPLACEMENTS	GUN FAILURES	ADJUSTMENTS	EACH SERIES OF 10 SHOT GROUPS WERE FIRED WITH EACH GUN (2 SHOOTERS FIRED THREE GROUPS EACH) AT 100 YDS. FROM A BENCH REST USING A 10 POWER SCOPE. AMMO: (7030) 180 Gr. Soft Pt. Core-Lokt Exp. Lot M21C STAND. (100YD) 1.44 AVG EXTREME SPREAD RESULTS AS FOLLOWS:

GUN #	AVG EXTREME SPREAD
25297	2.85"
24728	3.78"
25418	5.3"
23998	5.2"
25341	2.94"
25361	3.8"
25412	3.1"
25397	3.4"

GUN # 25397 WILL BE USED AS THE "ENDURANCE GUN"

M1722

DATE	R.T.#	ROUNDS FIRED	MALFUNCTION RATE						MALFUNCTION						
			OVERALL		ADVERSE			NORMAL							
			TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	ROUNDS	TOTAL	PERCENT	FIRING	UNLOCKING	PRIMARY EXTRACTION	SECONDARY EXTRACTION	EJECTION	COCKING	FEEDING
	5	0-120	2	1.7	—	—	—	120	2	1.7					1		1
	5	0-120	12	10	—	—	—	120	12	10							6
															6		
	5	0-120	7	5.8	—	—	—	120	7	5.8					7		
	5	0-120	2	1.7	—	—	—	120	2	1.7					2		
	5	0-120	3	2.5	—	—	—	120	3	2.5					3		
	5	0-120	5	4.2	—	—	—	120	5	4.2					5		
	5	0-120	10	8.3	—	—	—	120	10	8.3					10		
	5	0-120	7	5.8	—	—	—	120	7	5.8					7		

LINE TEST (.300 SAVAGE)

S	LOADING	LOCKING				B BREAKAGES	R REPLACEMENTS	GF GUN FAILURES	A ADJUSTMENTS	REMARKS
										8 M/722 RIFLES WERE CHOSEN FROM A LOT OF FIFTY AND FIRED 120 RNDS. EACH WITH RESULTS AS FOLLOWS;
										GUN # 25412
										BOLT OVER RODE 5TH RND.
										FAILED TO EJECT (SLOW)
										GUN # 23998
										4- BOLT OVER RODE SHELL (SLOW)
										2- SHELL JAMMED RAILS (SLOW)
										FAILED TO EJECT (SLOW)
										GUN # 25397
										FAILED TO EJECT (SLOW)
										GUN # 25418
										FAILED TO EJECT (SLOW)
										GUN # 25
										FAILED TO EJECT (SLOW)
										GUN # 25
										FAILED TO EJECT (SLOW)
										GUN # 24
										FAILED TO EJECT (SLOW)
										GUN # 24728
										FAILED TO EJECT (SLOW)
										W.J.E. - 2/26/45