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Elion, New York  
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S. M. ALVIS

INTERIM REPORT  
MODEL 552 PILOT LINE TEST  
ALSO  
COMPARISON OF THE MODEL 550

For your information, the subject test was started on January 29, 1957 with ten guns in each model withdrawn from warehouse. It was decided that the M/552 had considerably more rounds fired in gallery than the M/550; therefore, these rifles were cleaned. Also, in the initial test, the weather condition was approximately 20° F. Leaving the M/552 standing in a gun rack outside the field house and cooling between firing each type of shorts, these rifles failed to blow back on Winchester and Western high speed shorts. Therefore, it can be assumed that the M/552 may not always function properly in cold weather. With this condition existing, the test was repeated but with the rifles stored inside when cooling.

Seventeen types of ammunition, ranging from Remington new and improved shorts on up to Federal long rifle high speed, were used. Fifty rounds of each type were fired on each rifle for a total of 850 rounds. The weather conditions on this test remained approximately the same.

The results are as follows.

Model 552			Model 550		
Gun No.	No. of Malif.	Rate	Gun No.	No. of Malif.	Rate
1	6* (800 rds.)	.75%	1	41	4.8%
2	5	.59	2	47* (450 rds.)	10.
3	2	.23	3	107.	12.7
4	10	1.28	4	115	13.5
5	6	.71	5	39	4.6
6	3	.35	6	41	4.8
7	12	1.4	7	27	3.2
8	13	1.53	8	25	3.1
9	10	0	9	14	1.7
10	2	.24	10	48	6.
	58	.68%		504	6.3%

\*Gun failure due to firing  
 pin breakage.

\*Test discontinued due to  
 excessive jams.