REMINGTON ARMS COMPANY, INC.			XC:	L9 79 J.P.Lind Lob File	K-16
Reminsten.	PETERS				2-9
"CONFINE YOU	R LETTER TO ONE SUBJECT	ONLY"			
			Ilion, Decemb	, New York per 15, 19	75
TO:	W.E.LEEK				
FROM:	A. A. HUGICK				

DATE: DECEMBER 10, 1975

SUBJECT: M/700 SAFETY EVALUATION - REPORT #8

Work Orden E 0252

#### INTRODUCTION:

Design initiated a review of the bolt action rifle safety function. The final phase of this program involved the M/700 rifle. Consideration of standardizing on safety detent system between the 700 & 600 rifle control systems. Three M/700 rifles were delivered for safety dry cycle evaluation in the measurement and test dry cycle equipment. This allows M/700 trigger housings to be used in the M/600.

#### TEST OBJECTIVE:

Dry cycle test the sample M/700 rifles with safety detent system compatible with M/600 fire control system.

#### TEST RESULTS & OBSERVATIONS:

1. M/700 - S.N. 5898412 - Test Gun #1

Test Activity

- 50,000 Safe On Safe Off cycles.
- 10,000 Cock and Dry fire Cycles.
- W. D. 40 lubrication.
- Design fabricated rifles.

**Test Results** 

- Sear lift data showed variations Min. .007 to max. -.009.
  - Sear lift data indicated no trend.
  - Safe on force variation ranged from 7.5 lbs. max. to 4.5 min.
- Safe Off force variation ranged from 5.5 lb. max. to 3.0 mln.

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER KINZER V. REMINGTON

R2506418

W.E.Leek To: December 15, 1975 From: A. A. Hugick M/700 Safety Evaluation - Report #8 Page 2 \_\_\_\_\_ TEST RESULTS & OBSERVATIONS: - Contd. M/700 - S. N. 6898446 - Test Gun #2 2. Test Activity - 50000 Safe On - Safe Off cycles - 10000 cock & dry fire cycles - WD 40 lubrication - Design fabricated rifles. Test Results - Sear Lift data showed variations min .0048 to max .0073. - Graphing of data indicated a sear lift decrease trend. - Safe On force variation ranged from 6.0 lbs max. to 3.25 min. - Safe off force variation ranged from 6.5 lb max. to 3.50 min. - Striker and fire control parts inspection indications were good. M/700 - S. N. 6897681 - Test Gun #3 3. Test Activity - 50000 Safe On - Safe Off cycles - 10000 cock & dry fire cycles - W D 40 lubrication - Design fabricated rifles Test Results - Sear lift data showed variations between min .0053 and max .0068 inches. - Sear lift data indicate a minor trend of decreasing. - Safe on force variation ranged from 6.0 lbs. max. to 3.50 min. - Safe off force variation ranged from 6.0 lbs max. to 3.75 min. - Striker and fire control parts inspection indications were good.

AAH:bd Measurement/Test Lab Ilion Research Division



R2506419

W, E. Leek To: From: A. A. Hugick M/700 Safety Evaluation - Report #8 \*\*\*\*\*\*\*\*\*\*

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December 15, 1975

## BOLT ACTION RIFLE SAFETY EVALUATION PROGRAM

3 x M/700 RIFLES FOR DRY CYCLE EVALUATION

- Α. Trigger pull, Safe On force, Safe Off force Safe On - Lift of sear at trigger.
- Β. Check function of safe,
- с. Clean and lubricate fire control (WD 40)

10,000 Safe on - Safe Off dry cycles. D.

- Ε. Repeat "A"
- Repeat "B", and "C" F.
- Repeat "D" G.
- н. Continue test to a total of 50,000 Safe On - Safe Off dry cycles.
- Repeat "A", "B", and "C" 1.
- 10,000 cock and dry fire cycles. J.
- Repeat "A" and "B" ĸ.
- End of Dry cycle test L.

9/17/75 A. A. HUGICK

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"CONFINE YOUR LET	TER TO ONE SUBJECT ONLY"		
		Ilion, Decembe	New York er 15, 1975
TO:	W.E.LEEK		
FROM:	A. A. HUGICK		
DATE:	DECEMBER 10, 1975		
SUBJECT:	M/700 SAFETY EVALUATION	- REPORT	#8

Work Order: E 0262

#### INTRODUCTION:

Design initiated a review of the bolt action rifle safety function. The final phase of this program involved the M/700 rifle. Consideration of standardizing on safety detent system between the 700 & 600 rifle control systems. Three M/700 rifles were delivered for safety dry cycle evaluation in the measurement and test dry cycle equipment. This allows M/700 trigger housings to be used in the M/600.

# TEST OBJECTIVE:

Dry cycle test the sample M/700 rifles with safety detent system compatible with M/600 fire control system.

## TEST RESULTS & OBSERVATIONS:

1. M/700 - S.N. 6898412 - Test Gun #1

Test Activity	- 50,000 Safe On - Safe Off cycles.
	- 10,000 Cock and Dry fire Cycles.
	- W. D. 40 lubrication.
	- Design fabricated rifles.
Test Results	- Sear lift data showed variations Min
	to max,009.
	- Cost lift data indicated as trond

- Sear lift data indicated no trend.
- Safe on force variation ranged from 7.5 lbs. max. to 4.5 min.
- Safe Off force variation ranged from 5.5 lb. max. to 3.0 min.
- Striker & fire control parts inspection indications were good (A.)



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To: W.E.Leek From: A. A. Hugick M/700 Safety Evaluation - Report #8 

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December 15, 1975 Page 2

# TEST RESULTS & OBSERVATIONS: - Contd.

2.	M/700 - S. N. 689844 Test Activity	<ul> <li>6 - Test Gun #2</li> <li>- 50,000 Safe On - Safe Off cycles</li> <li>- 10,000 cock &amp; dry fire cycles</li> <li>- WD 40 lubrication</li> <li>- Design fabricated rifles.</li> </ul>
	Test Results	<ul> <li>Sear Lift data showed variations min .0048 to max .0073.</li> <li>Graphing of data indicated a sear lift decrease trend.</li> <li>Safe On force variation ranged from 6.0 lbs max. to 3.25 min.</li> <li>Safe off force variation ranged from 6.5 lb max. to 3.50 min.</li> <li>Striker and fire control parts inspection indications were good.</li> </ul>
3.	M/700 - S. N. 68976	i81 - Test Gun #3
	Test Activity	<ul> <li>SQD00 Safe On - Safe Off cycles</li> <li>10000 cock &amp; dry fire cycles</li> <li>W D 40 lubrication</li> <li>Design fabricated rifles</li> </ul>
	Test Results	<ul> <li>Sear lift data showed variations between min .0053 and max .0068 inches.</li> <li>Sear lift data indicate a minor trend of decreasing.</li> <li>Safe on force variation ranged from 6.0 lbs. max. to 3.50 min.</li> <li>Safe off force variation ranged from 6.0 lbs max. to 3.75 min.</li> <li>Striker and fire control parts inspection indications were good.</li> </ul>

AAH:bd Measurement/Test Lab Ilion Research Division

CONFIDENTIAL-SUBJECT TO PROTECTIVE ORDER **KINZER V. REMINGTON** 

: ł To: W.E.Leek . From: A. A. Hugick M/700 Safety Evaluation - Report #8 

December 15, 1975

# BOLT ACTION RIFLE SAFETY EVALUATION PROGRAM 3 x M/700 RIFLES FOR DRY CYCLE EVALUATION

- Α. Trigger pull, Safe On force, Safe Off force Safe On - Lift of sear at trigger.
- Β. Check function of safe.
- Clean and lubricate fire control (WD 40) C.
- 10,000 Safe on Safe Off dry cycles. D.
- E. Repeat "A"
- F. Repeat "B", and "C"
- G. Repeat "D"
- . н. Continue test to a total of 50,000 Safe On - Safe Off dry cycles.
- I. Repeat "A", "B", and "C"
- J. 10,000 cock and dry fire cycles.
- Repeat "A" and "B" κ.
- L. End of Dry cycle test

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9/17/75 A. A. HUGICK

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