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File

## REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

*Remington*  
OUTPORT*PETERS*  
OUTPORT

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

Ilion, New York  
July 27, 1972

To: C.B. Workman  
From: A.A. Hugick  
Date: July 20, 1972  
Subject: Dangerous Center Fire Cartridge Combinations  
Work Order: G-0410  
Test Period: 6/9/72 through 6/10/72

Introduction:

A customer complaint (P.I.) came into Ilion Research via E. Larson, involving an R-P 221 cartridge fired in a M/700 - 17 Caliber Rifle. The Measurement/Test Lab set up a test to duplicate this occurrence for purposes of reviewing results.

Test Objective:

Duplicate customer firing of a R-P 221 Cartridge in a M/700 - 17 Caliber Rifle

Test Observations:

1. The 221 Cartridge chambers in a M/700 - 17 Caliber Rifle with normal feel of bolt lock up.
2. The 221 Cartridge fire formed to a straight case. (Note enclosed photo.)
3. The 221 Case Head expanded into the ejector assembly hole portion located in the shroud, thus allowing gas leakage at this point due to case failures. (Note enclosed photo, Item #2, proof.)
4. Gas impingement indications were noted on the blotter board located approximately 6" out from the port opening.

Dangerous Center Fire Cartridge Combinations

July 27, 1972

Page 2

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Test Procedures:

1. A M/700 - 17 Caliber Rifle was set up in the Lab "Iron Lung" fixture.
2. Headspace was checked with "GO" and "NO GO" gages and check in okay.
3. One standard factory R-P 221 Cartridge was fired in 17 Caliber Rifle.
4. Debris was recorded on white blotter paper and "Protect" cream. The blotters were located approximately 6" out from port and at shooter's head position.
5. Test results were reviewed.
6. A second bolt was fitted to the rifle and test was repeated with a second factory round.
7. Test results were reviewed.
8. A third bolt was fitted to the rifle and test repeated with a R-P Proof Round.
9. Test results were reviewed.

*A.A. Hugick*

A.A. Hugick:sp  
Measurement/Test Lab  
Ilion Research Division  
Encl.

R-P 221 fired in M700 17 cal.  
meas./test



Proof