# REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.

PETERS

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

M.H. Walker - J.W. Brooks H.L. Hendrix File

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.

### Test Procedures:

- 1. A M/700 17 Caliber Rifle was set up in the Lab "Iron Lung" fixture.
- 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:sp

Measurement/Test Lab Ilion Research Division

Encl.

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





