Ilion, New York March 25, 1966

TO: C.H. MORSE

FROM: P. MASYPANY

## Firing Pin Point Clearance vs. Case Expansion

 This test was conducted as part of the center fire firing pin breakage investigation. A M/700 and a M/760 were used with ten (10) proof rads, being fired thru each gun as received and after each alteration.

Alterations consisted of increasing the diameter of the firing pin hole in the N/760 Bolt and decreasing the diameter of the N/700 Firing Pin point.

A total of 100 proof rads, were fixed thru the  $\rm H/760$  and 110 proof rads, thru the  $\rm H/700_{\circ}$ 

- 2. The W/700 Firing Pin Assembly was also lightened to approx.
  60% of the M/700 Firing Pin Assembly weight and fired with 10
  proof rads. He primers were blown or blanked altho the
  Firing Pin/Belt clearance was "021".
- 3. Head Space or Bolt dismeters did not increase during the test.

PX:gp