RO-48  REV. 4-34

# REMINGTON ARMS COMPANY, INC.
### INTER-DEPARTMENTAL CORRESPONDENCE

Remington

c:  B. K. Daubenspeck
    T. W. Rawson
    R. A. Partnoy

Bridgeport, Conn.
July 25, 1980

E. G. LARSON

## PROPELLANT MIX - 7mm EXPRESS REMINGTON AND OTHER CARTRIDGES

Two complaints from the field were received concerning the performance of the 7mm Express Remington 150 PSPCL load. They came from a Mr. Swistak in Massachusetts and later from a Mr. Paisley in Montana. Each stated that the bolt of their Model 700 rifle locked up due to firing an apparent high pressure round. The fired cases from the rounds which locked these bolts were returned to Remington along with the remaining rounds in the ammunition boxes. In addition, the rifle used by Mr. Swistak was also returned. It was discovered in Lonoke that the ammunition contained a mix of powders. What appeared to be 4198 powder was included with the normal powder, 7514. At this point, the Ammunition Research Division was asked to investigate the nature and extent of the problem.

### Initial Investigations

Ammunition from four loadings or lots was returned to Bridgeport. The codes were M06I, M07I, M09I, and M13I. The code fired by Swistak was M09I. The initial investigations and tests were reported in a letter from W. D. Nickel to E. G. Larson dated July 1, 1980. A recapitulation of that letter along with the table of test results is given here for convenience.

1.  Visual checks were made to determine the extent of the mix. A total of 20 samples were taken from the four lots. This visual inspection showed that the propellant mix extended through all four lots at approximately the same level.

2.  A physical count of different propellant granules was made to determine more accurately the level of mix. The check confirmed that the proportions of 4198 and 7514 propellants were basically uniform throughout all lots. The results are summarized in Table 1.

3.  At least 10% of each lot was fired to determine the pressure level of the product. Results of this test are shown in Table 2.