cc: J.W. Brooks

## REMINGTON ARMS COMPANY, INC.

Remington . OPPORD

DETERS

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"\_

Ilion, New York July 11, 1966

C. B. Workman

FROM: A. A. Hugick C. Q.

## POWDER METAL ENDURANCE TESTING

A 100,000 cock-and-fire dry cycle test was run on the M/700 PM sear in the Measurement Lab dry cycle machine. The hardness of this sear was measured as 88.5 - RISN. Initial radius at the connector edge was measured as .0013" on the optical comparitor. The radius was measured as .0033" at the dry cycle test completion. All dry cycle testing was conducted with the sear lubricated with lubriplate.

Initial test trigger pull as adjusted by production was 4.55 lbs. During the dry cycle testing two firing pin tips broke. (@ 20,000 and 20,000).

AAH:c