G-88

## DON'T SAY IT - WRITE IT

To A.A. HUGICK	Date <u>1-5-79</u>
From C.I. SWEET	

M/700 CLASSIC PILOT LINE FIELD CYCLE TEST (243 CAL.)

SUBJECT: BOLT LUBRICATION

WEATHER: 9° F - WINDY - LIGHT SNOW

Extremely hard bolt lift was experienced during Field Cycle Testing of the M/700 Classic Pilot Rifles. After one quarter of the test was shot (50 rds.), shooters found it difficult to lift the bolt handle to unlock the bolt. One gun was so severe, the bolt handle could not be lifted unless the gun was held between the legs, and the bolt handle was lifted by using both hands. (One hand on the stock pulling down on the gun, and one hand on the bolt handle pulling up) Hard bolt lift was experienced after every fired round. A check was made by dry firing the guns. Hard bolt lift was evident, but not as severe as it was in live fire.

The bolts were then removed and inspected. The bolts had been lubricated with Molykote G-N Paste before testing. Small metal particles were noticed in the paste caused by the failure of the lubricant. The bolts were then cleaned and sprayed with WD-40 lubricant. The areas sprayed were the Cam Surface and the locking lugs. The bolts were then reassembled in the bolts and the test was completed (150 rds.). The bolts function well after lubrication with the WD-40.

The Molykote G-N Paste had hardened in the cold, which gummed up the bolt causing hard bolt lift.

THIS WAS APOLIED IN THE LAB JUST PALOR TO THE FIELD TESTS A.

CJS:js

DON'T BE SORRY — BE SAFE