

ILION RESEARCH DIVISION  
MONTHLY PROGRESS REPORT  
JANUARY 1978

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MODEL 1100A

500 rounds of 2 3/4 inch magnums were shot in the A2 version in order to test the new energy absorbing buffer. The buffer performed well - 70% reduction in rebound velocity - however, it was no longer serviceable after the 500 rounds due to extensive surface crazing. The buffer has been redesigned to provide more volume for expansion under load. It will be retested before the end of the month.

All work on the A3 version is on schedule for assembly in April.

M/742-760 NEW GENERATION

Bolt velocities have been taken on a 742 NG prototype in 25-06 Rem. caliber using both carbine and standard barrel lengths. Results were excellent and the condition of fired cases was good (no bent rims from excessive extractor pull).

A test was performed to determine the cause of an "extremely hard unlock" malfunction reported on a field test gun. The malfunction could be duplicated with snow in the action and a subsequent melt/refreeze cycle. However, the problem was more severe in a Browning BAR and a production 742 that were used for experimental controls. Further investigation of this problem will be undertaken after receipt of trial and pilot guns.