

M. H. WALKER

January 28, 1963

Weekly Report
Special Products Section
Week Ending Jan. 25, 1963

Nick Dum

Hi-Pressure Rim Fire

Master patterns for the block, frame, and cocking lever, are being made. The block and lever should be done by the end of this week. The frame should be finished early next week. Revisions were made on the casting drawings to allow some of the ten pilot castings to be made into center fire.

Bill Blair

Sabot Development

The Sabot mold is being reworked to .243 caliber and to add a hot water circuit for cooling the mold during cycle. 243 progressive twist barrel will have to be mounted on its action and stock. When the mold is successfully reworked, new rounds will be loaded for testing.

M/700 Report

The final draft is nearly completed for Mr. Alvis' review. Final reproduction should start next week.

M/11-'48 Recoil /Study

A series of function tests were performed using the polished magazine tube, Teflon strip friction piece, and variable thickness springs on the friction piece. Testing was done in light firing jack using 6 loads from $2 \frac{3}{4} - 1 \frac{1}{8}$ to $2 \frac{3}{4} - 1 \frac{1}{4}$ and 25° cone on recoil spring and 30° cone on barrel guide. Five rounds each were fired at each load and four spring thicknesses. Function was satisfactory in all conditions but appeared best with .040 thick spring. The .040 spring was then tried with cones reversed in position (30° on spring and 25° on barrel). No function occurred in the light loads, intermittent function with field loads, and the express load worked. A further test was run with 25° cones on both at the express load only; only intermittent function occurred.

A bolt-velocity test will be performed to determine how this new condition compares with the standard 11-'48 and if successful a series of shoulder force tests will be run for comparison.

Paul Gogol

The 3 M/40X-B rifles have been assembled and tested. Accuracy for ten tests consisting of three groups, ten shots per group (per rifle), was very good. Average groups for the test were 1.04, 1.04, and .98. The results for the Win. M/52 rifles have not been received.