

patterns to submit for final approval.

The Sales Department stated the increased competition the first of the year may mean that Custom Checkered Models 742, 760, or 11-48 be offered before January, 1964. Production indicated they need three months to complete facilities for a given model once the checkering and impressed pistol grip patterns are approved. They will begin work on the items they can as other work permits.

1963 FIREARMS LINE

The Sales Department reviewed several changes they propose for the 1963 firearms line. The discussion indicated there were some questions to be resolved before a decision could be reached. Sales and Production were asked to do this, and Sales to obtain Management approval. 83

SHOTGUNS

MODEL 1100 AUTOLOADING SHOTGUNS

Design and Testing Status

Three pre-pilot production guns have been tested for functioning and endurance in excess of 20,000 rounds, 17,000 rounds, and 9,000 rounds respectively. Testing has been conducted both with shooting jacks and in actual shoulder shooting. No functional problems have been encountered.

One of the guns displayed perfect functioning after 5,200 rounds. Each of the other endurance guns scored malfunction rates of 0.21% at 13,500 rounds and 11,200 rounds respectively.

From standpoint of endurance, the Plant and Research are working to improve the Action Bar Sleeve, Gas Cylinder and Ejector. Breakages experienced in the 20,000 round endurance gun were Ejectors (2), Extractors (1), and Firing Pin Spring (1). There were cracks in the Action Bar Sleeve and Gas Cylinder, but the parts were adequate to continue testing. This also applies to a crack observed in the Barrel Extension which it is believed can be eliminated by a minor change in the geometry of the machining.

Testing to date shows significant improvement over the functional performance and endurance life of the Sportsman 58. The malfunction rate of current Sportsman 58's is about 1%. The endurance life of Model 1100 parts appear two to three times longer than those