March 20, 1980

MODEL XSG SHOTGUN

~~A current prototype model~~ a Prototype autoloader ~~is~~ in test and has ~~been~~ fired over 6000 rounds using ~~rounds of~~ 2 3/4" Magnum loads. The action bar - slide block braze joint failure is the most prevalent problem. Mechanical joint designs utilizing welding and swaging processes are being fabricated to improve the joint's strength.

The existing action spring design has set 2.28 inches, ~~in 58 rounds~~ this is unsatisfactory. Testing is continuing on this gun with a new spring of the same design.

A redesign of the action bar assembly was necessary to utilize a Model 1100 type gas system. This provides more room for the design of a lower stressed action spring. The design of a square wire action spring to reduce spring stress loads and setting is complete, with prototype parts currently on order from Connecticut Spring.

Two different locking systems with better mass distribution are being detailed.

A gas cut-off system has been designed to fit into an XSG or Model 1100 gas system. Component parts are being made for test to verify function and reduced bolt velocities for magnum loads.

scheduled to

revised

are

necessary