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FIREARMS RESEARCH

SHOTGUN PRODUCT DEVELOPMENT

• Model 1100 Functional Improvements

Gas System development is continuing with several concepts. The elastomer seal/brake has reduced the spread of terminal bolt velocities from the 3" magnum to 1 oz. target loads to 270 in./sec. (one sample). This is close to the 225 in./sec. goal. The tossed action bar design has also demonstrated an ability to reduce the spread of velocities by 70-80 in./sec. (one sample). Both of these designs are in the Test Lab for additional evaluation.

Other designs currently being evaluated include:

- o Bolt shock absorber
- o Tandem orifices
- o Leaf spring pressure relief
- o Dual expansion volume
- o Expansion cut-off/pressure vent

A purchase requisition for a redesigned strengthened web carrier release has been sent to the vendor.

Endurance items in test include stainless steel magazine tubes, a new operating handle detent system, a square wire action spring, and an injection molded extractor.

• Choke Tube Development

Preliminary cost estimates indicate that it would be less expensive to source choke tubes for at least the first year. Specification packages are being forwarded to several potential vendors.

Briley Manufacturing and Trulock Tool Company were visited. A separate report on these companies has been issued.

Testing of the redesigned Remington choke tube is expected to be complete in September.

• Model 870 Restyle

Production's 12 gauge trial and pilot guns are in the Test Lab for evaluation. Marketing is reassessing the specifications.

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SHOTGUN PRODUCT DEVELOPMENT - Contd.

- New Generation Autoloading Shotgun

The product development team has been assigned:

- o K.C. Rowlands - Technical Leader
- o S.R. Franz
- o J.A. Lawrence
- o R.S. Murphy
- o E.W. Yetter

The program objective and potential goals were outlined on July 11. Team assignments have been made towards completing the basic data package by October.

RIFLE PRODUCT DEVELOPMENT

- Model 700 Mountain Rifle

The N/C Shop work on the stock has been stopped pending the receipt of a tool drawing. PE&C is preparing the drawing and is aware of a possible delay.

- New Bolt Action Rifle

A Marketing-Research meeting was held July 17 and a preferred design was selected. Questions remain regarding legal implications of the bolt lock, and customer preferences for the magazine box and bolt handle styling. Marketing will address these questions and supply estimated volumes and pricing.

A review with the business strategy team is expected in August.

- Model 7400 Functional Improvements

Research efforts to improve chambering, extraction, and feeding are continuing. The EDL work request to investigate chamber finish and friction has been approved and work has started. Prototype single lip stamped magazine boxes are in the Test Lab and work on the mold for a synthetic box is progressing.

Research Department

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