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Quarterly Report

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REMINGTON ARMS COMPANY, INC.

FIREARMS RESEARCH

FOURTH QUARTER PROGRESS REPORT - 1984

DECEMBER 19, 1984

Distribution

W.H. Coleman, II
J.W. Bower
K.C. Rowlands

D.S. Findlay
R.S. Murphy
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HIGHLIGHTS

Shotgun Development

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- o Several alternatives are being pursued to lower the stress level of the leaf spring being developed for a new Model 1100 gas system. 3
- o Specifications for the Model 1100 Restyle have been provided to Process Engineering. 3
- o Development of a new concept action system and fire control is continuing. 3
- o All Model 870 Restyle (12 gauge) drawings have been transmitted. 4

Rifle Development

- o Completion of six prototype new bolt action rifles is expected by January 15. 4
- o The Custom Shop is heading prototype 350 Rem. Mag. Classics. 5
- o The N/C Shop fabrication of the Mountain Rifle stock former is continuing. 5

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SHOTGUN DEVELOPMENT

Model 1100 Functional Improvements

This program is aimed at maintaining the Model 1100's position in the marketplace until its replacement by the New Concept Shotgun. Improvements have been focused in the areas of gas system design, action smoothness, feeding, and endurance life.

Gas system design is now centered around a leaf spring-pressure vent system. Knife edge valves and cone valves have both demonstrated terminal bolt velocity spreads (between 3" - 1 7/8 oz. and 2-3/4" - 1 oz. loads) well within the goal of 200 in/sec. Strain gage measurements indicate that the current spring design is overstressed. Several alternatives are being investigated, including a new material, increasing the spring's cross sectional area at high stress points, and prestressing the spring.

Five guns with new carriers have been tested. The malfunction rate, for carrier related problems, was 0.7%, compared with 2.3% with standard Model 1100 carriers.

Research and Production are working closely together to expedite introduction of these functional improvement items.

Model 1100 Restyle Program - 12 Ga.

This cosmetic program is a complement to the Model 1100 Functional Improvement Program. Specifications include cut checkering, 30-gloss wood finish, two-piece butt plate, screw machine magazine cap, and choke tubes for 1986 introduction. Testing of a 30 gun sample will begin in January and will incorporate the additional specification of a stainless steel magazine tube.

Specifications, drawings, and parts lists have been given to Process Engineering to develop an estimate and economics.

New Concept Shotgun

The Model 1100 was introduced in 1963 and immediately became the industry standard for autoloading shotguns. However, few significant changes have been made since then, while competition has blunted our technological advantage. This program, which is designed to replace the Model 1100, will re-establish Remington as the innovator and technical leader in autoloading shotguns.

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New Concept Shotgun - cont'd.

Development of a new action system and new fire control are the critical path items. Assignments have been made to Remington and Du Pont engineers. The two groups are meeting twice a month.

Monthly meetings continue with PDS for the development of a new fire control.

Model 870 Restyle

This cosmetic program will improve the perceived price/value relationship of the Model 870. Specifications include 30-gloss wood finish, cut checkering, new recoil pad, and choke tubes.

All 12 gauge drawings have been transmitted to Production. Trial and pilot is underway.

A partial drawings package for the 20, 28, and .410 gauges has been sent to Process Engineering for estimating. 20 gauge choke tube samples will be ready for test by the end of January.

RIFLE DEVELOPMENT

New Bolt Action Rifle

A new bolt action rifle is being developed as a potential replacement for the Model 700, possibly in 1988. Technical improvements over the Model 700 include enhanced safety, a detachable magazine, a claw-type extractor, an independent bolt lock, and integral scope mounts.

Completion of six prototype rifles for design evaluation is now expected by January 15. Bolt assemblies and magazine followers are the critical path components. Bolts will go to Production by December 21 for final machining, and then to the Custom Shop for heading with the barrel assemblies. Magazine followers are in process in the N/C Shop.

Five rifles are ready for focus panel reviews of several cosmetic features including receiver, bolt handle, bolt plug, and stock styling. Marketing is scheduling the reviews that may start as early as January.

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Model 700 Classic - .350 Rem. Mag.

Remington is continuing the limited run, special caliber offerings in the Classic line by reintroducing the .350 Rem. Mag. for 1985. Research involvement is limited to testing for strength, accuracy, and feeding.

The Custom Shop is heading the rifles and a test program has been agreed upon.

Model 700 Mountain Rifle

Scheduled for 1986 introduction, the Mountain Rifle will address the higher end of the bolt action line and replace the Model 700 Classic.

N/C Shop fabrication of the stock former is continuing.

JWB:sps
12/19/84