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Third Quarter Progress Report  
September 23, 1983  
New Product Development

Highlights

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• Research has selected a design for the Model 1100 Special 12 Ga. fore-end.	2
• All drawings for the Model 870 Special have been transmitted and samples for Marketing are nearly complete.	2
• Samples and drawings for an estimate on the Model 870 Restyle have been completed and turned over to Process Engineering.	2
• Drawing work has been initiated on new design Model 1100 and 870 12 Ga. Deer Guns.	3
• Model 870P Riot Shotgun endurance testing of the slide latch anti-jam feature is complete. The step-feed latch as an alternate anti-jam design is being investigated to satisfy field disassembly-assembly requirements.	4
• Four Model 700 Lightweight Rifles have been assembled for further Marketing evaluation. The parts list and drawing transmittal will be completed by October 1, 1983. Initial accuracy testing has given excellent results - the four Model 700 LWT. .30-06 Rifles averaged 1.69", well below the 3.5" factory specification. Completion of the .280 Rem. is expected by September 28, 1983.	4
• The Model 7400 .223 Research Manual is up to date - AI Report will follow. Model 7400 7mm-08 and .25-06 work is complete. Drawings will be updated for transmittal when requested.	5

*Remington Arms Company, Inc.*

STATUS - NEW PRODUCT DEVELOPMENT

(J. S. Martin)

Model 1100 Special Field Shotgun

(D. S. Findlay, T. P. Powers)

The Model 1100 Special was developed to offer the shooter a lighter weight (7½ lb.), faster pointing Model 1100, with a significant change in appearance to supplement the 1100 line. Features include a 21" barrel, a slimmed down and shortened fore-end, English stock, cut checkering, medium gloss finish, and no roll marking.

Research effort on prevention of cracking in the 12 Ga. Special fore-ends had been concentrated on two primary designs; a magazine cap extension and an elastomer buffer design. Based on data from both designs, Research has selected the elastomer buffer for transmittal. A five gun test sample having the highest strain levels of the 40 gun sample were selected for endurance and are in test. Transmittal of the elastomer buffer design is expected by October 1, 1983.

Model 870 Special Field

(D. S. Findlay, F. H. Smith)

The Model 870 Special Field for introduction in 1984 is being developed to compliment the Model 1100 Special with the same appearance and performance features (i.e., 21" barrel, slimmed down and shortened fore-end, straight English stock, and cut checkering).

Design acceptance testing has been completed and all drawings have been transmitted to the Plant. Parts for five 12 Ga. Special and 5 LTWT-20's have been started for Marketing samples and catalog pictures and are complete except for barrel assemblies.

Model 870 Restyle - 12 Ga.

(D. S. Findlay, K. L. Calkins)

The Model 870 Restyle is being developed to replace the current

Model 870 in 1985. Specifications include a 3" chamber, new fore-end design, matted top receiver radius, and medium gloss wood finish with cut checkering.

A complete drawing package and parts list has been sent to Process to start work on the cost and capital estimates. Marketing samples and test guns have been completed and endurance testing has been started in the Test Lab.

Model 111 Autoloading Shotgun

(D. S. Findlay, J. L. Kast)

New autoloading and slide action shotguns are being developed as potential replacements for the Model 1100's and Model 870's, respectively. Objectives include decreased weight, increased reliability, and reduced manufacturing costs.

The design currently being developed involves the use of a new, patently novel locking system, (rocker arm), improved barrel contour, threaded in stainless steel magazine tube, orifice selector/choke tubes, and improved carrier latch system. Design specifications are being reviewed to ensure compatability with our long range product development strategy.

Model 870/1100 Deer Gun - 12 Ga.

(D. S. Findlay, F. H. Smith)

Introduction in 1985 of a new deer gun to replace the current offering has been initiated. This gun features a redesigned barrel in both models with a 21" barrel length and a rear sight base capable of mounting a long eye relief scope. The gun will also be parkerized with birch, oil finished wood, and a new camouflaged sling assembly. Drawings have been completed and will be turned over to Production for estimating by October 1, 1983. Samples for test and evaluation are to be completed by October 15.

Parker Double Barrel Shotgun

(D. S. Findlay)

Reintroduction of the classic Parker side-by-side double barrel shotgun is being considered. One VH Grade 12 Gauge Parker has been completed.

A partial set of drawings from Jesse Briley on a 20 Ga. Parker has been received. These drawings are undergoing engineering evaluation. Once the remaining drawings of the package have been received they will be sent to Process Engineering for cost estimating.

Model 870P Riot Shotgun

(A. A. Hugick)

Two Model 870P 12 Ga. Shotguns have been fired to 20,000 high base rounds and one Model 870 12 Ga. 3" Shotgun was fired to 20,000 rounds of 3" magnums. This completes the endurance of the altered carrier-slide latch anti-jam design. No apparent problems with the anti-jam components were encountered.

F.B.I. Academy objections to the disassembly-assembly with the slide latch design initiated a step-feed latch investigation. Prototype latches and action bars will be available from H&P in about four to five weeks.

Bolt Action Rifle Development

(F. E. Martin)

Model 700 Lightweight drawing and parts list transmittal will be completed by October 1, 1983. Work on this model is expected to be complete by October 20.

Work on the Model 700 BDL replacement will resume to meet the scheduled 1986 introduction. The new BDL will include the following functional improvements: a rotary box magazine for feeding reliability, a new fully enclosed claw extractor for added

strength, a no-bind easy lift bolt for a smoother action, a receiver with a heavier integral recoil bracket for stability, and a fully adjustable fire control with redundant safety switches.

Testing of the new extractor will be starting in September with the completion of prototype assemblies. A program for testing of the rotary box magazine will be determined on completion of prototypes.

Model 7400/7600 Centerfire Rifles

(R. S. Murphy, A. R. Eddy)

The Model 7400 and 7600 Rifles were developed as replacements for the Model 742 and 760, respectively, and were introduced in 1981. The Model 7400 .223 Carbine was being developed as a sporting version of that popular cartridge to augment this product line.

Due to the cancellation of this project, the Research Notebook has been updated recording all technical data and design specifications. For future reference, various prototypes will be completed and assigned to the Research Gun Library. An AI Report will follow.

All preliminary 7mm-08 and .25-06 work has been completed. A number of rifles in both calibers have been built and test fired satisfactorily. Drawings only would have to be updated for transmittal if this is desired.

One .257 Roberts Model 7400 has been built and orifice and pressure data is acceptable. This rifle has been field tested with very good results. Barrels are being readied so that additional models can be built to verify our results. Other calibers currently being considered for evaluation are the .250-3000 Savage, 7mm Mauser, and possibly the .35 Remington.

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