

LIMITED DISTRIBUTION

ILION RESEARCH DIVISION
PROGRESS REPORT - HIGHLIGHTS
NOVEMBER 1983

Distribution List

R. E. Fielitz	J. C. Hutton
W. H. Coleman, II	J. S. Martin
R. L. Hall	R. S. Murphy
<u>C. B. Workman</u>	C. E. Ritchie
J. W. Bower	R. J. Sanzo
J. W. Brooks	R. L. Sassone
D. S. Findlay	

Remington Arms Company, Inc.

NEW PRODUCT DEVELOPMENT

(J. S. Martin)

Model 1100 Special Field Shotgun

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

The elastomer buffer fore-end design has been transmitted to the Plant and tooling and part fabrication for trial and pilot has been initiated. Production deliveries to the warehouse are scheduled to begin in March.

Model 870 Special Field Shotgun

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

Samples for Marketing evaluation and catalog pictures are complete. Trial and pilot samples for testing and evaluation have been started. Pending Research approval, initial warehouse deliveries will begin in February.

Model 870 Restyle 12 Gauge

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

The Model 870 Restyle is being developed to replace the current 870 in 1985. The engineering estimate completed by Process on the drawing package supplied to them indicated a negative unit margin. As a consequence, Marketing, Research, and Process are reviewing current features, volumes, and selling prices to obtain a positive economic outlook for the program. It is anticipated that a revised economic forecast and drawing package will be ready to present in December.

Model 870/1100 Deer Gun

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

It is planned to introduce a new deer barrel in 1985 to replace the current offering. This redesigned barrel in both models in 12 gauge will feature a 21" barrel and a rear sight base capable of mounting a long eye relief scope with a variety of mounts. Drawings for estimating by Process have been completed and samples will be completed by November 30.

Model 700 Mountain Rifle

(R. S. Murphy, F. E. Martin)

A drawing package has been sent to Process for estimating. A question has been raised with respect to Production's ability to checker the stock and alternate patterns are being developed. A total of 36 barreled actions have been built. The stocks for these actions are being made by the Custom Shop. Final Research accuracy and function testing will begin when these rifles have been completed.

Sportsman 74, Sportsman 76

(R. S. Murphy)

The Sportsman 74 parts list and drawing package is complete and awaiting authorization for transmittal. The Sportsman 76 parts list

is complete and the related drawing package will be ready by November 25. Process Engineering will be building all rifles for test and evaluation.

Model 870P Police Shotgun

(A. A. Hugick)

Occasionally a shotgun shell can jam between the carrier and the slide assembly of Model 870 Riot Gun making the shotgun very difficult to operate. Several design modifications have been developed to prevent the malfunction or make it easy to correct. Cost estimates for these designs are being prepared and will be available for review in late November.

CURRENT PRODUCT DEVELOPMENT

(J. W. Brooks)

Model Seven Lightweight

Drawings for the aluminum trigger guard have been transmitted and sample parts are expected in early February. Trial and pilot quantities will be received with the sample parts. Production quantities will be ordered as soon as incoming inspection of sample parts is complete.

Sportsman 12 Pump

(T. J. Plunkett)

Production has sent models of this shotgun to the field force. Warehousing will begin in mid-December. Research will run a warehouse audit at that time.

Sportsman 78

(T. J. Plunkett)

Production has sent models of this centerfire rifle to the field force. Production will start in early 1984 with warehousing in April. Research will run a warehouse audit at that time.

Model 870 Waterfowl Shotgun
(1985 Introduction)

(T. J. Plunkett)

Ten (10) models are in the Test Lab for function and pattern testing. These models can be used for field testing by Marketing.

Model 1100 Waterfowl Shotgun
(1985 Introduction)

(T. J. Plunkett)

Twenty-five (25) models are being assembled. They will be function tested have patterns checked and will be available for a Marketing Field test.

NEW MATERIALS & PROCESS DEVELOPMENT (J. W. Bower)

Injection Molding - Firearms Components

(M. J. Topolski, B. Panagian,
K. C. Rowlands)

A value analysis of centerfire rifle magazine followers is complete. Results and recommendations have been published in a separate report.

Centerfire rear sight bases have been assembled to Model 700 rifles. Verification of point-of-impact will be done in the Research Test Lab.

Model 7400 operating handles have been molded.

Injection Molding - Commercial Applications - Metals

(J. A. Lawrence, B. Panagian,
K. C. Rowlands, M. Tasovac)

Sample crimping anvils have been supplied to AMP. Mold revisions will be completed after AMP's review of the samples.

Additional orders were received from Cordis (stainless steel surgical instruments), Grayhill (alloyed copper electrical contracts), and Eldon Vaughn (Fe-2% Ni puzzle segments).

Commercially acceptable stainless steel has been produced. Verification runs are scheduled for December.

Injection Molding - Ceramics Pilot Line

(K. C. Rowlands, M. Tasovac)

The Sweco mill has been received in Ilion. The Haake mixer is due in December.

Area layouts are completed and are circulating for approval.

Injection Molding - Commercial Applications - Ceramics

(B. Panagian, K. C. Rowlands,
M. Tasovac)

Glass covered alumina samples, processed in Wilmington, have been sent to Abbott Labs.

Cut Checkering Machine Development (R. J. Balaska, E. R. Owens)

Research is assisting Production with the purchase of additional Bostomatic machines for the Model 870 Restyle program. A preliminary meeting with Bostomatic was held in Ilion on November 21. Machines should be on order in early January to meet warehousing schedules.

Three-flute, carbide spiral cutters purchased from Ekstrom-Carlson should provide tool life superior to that experienced on the present 3-spindle machines. Plant Engineering is reviewing equipment for regrinding this design. In the meantime, they will be sent back to Ekstrom-Carlson for regrind.

The CO.RE.MA. fore-end machine is complete except for a lead screw, which CO.RE.MA. purchases. Machine runoff in Italy is expected in December.