

File # 74

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FIREARMS RESEARCH DIVISION  
PROGRESS REPORT — HIGHLIGHTS  
JANUARY 1982

*Remington Arms Company, Inc.*

NEW PRODUCT DEVELOPMENT

XSG/XPG Shotgun Design

Work is progressing on XSG contingency designs for the carrier release, locking block, and gas system. One of two carrier release designs currently undergoing functional tests is scheduled for endurance testing in February. The rear lock design will also be ready for preliminary function testing in February. Test results continue to look promising for the forward bleed gas system. However, work is progressing on a contingency design based on the tandem orifice concept.

M/7400/7600 Rifles

A sample lot of 100 M/7400 - 7mm Express Rem., with the altered barrel extension to correct feeding problems, will be tested in February.

Screw machine firing pins have been endurance tested to 3,000 rounds. The Research goal is 10,000 rounds without failure.

A sample lot of 3300 wave washers, to eliminate fore-end rattle in the M/7600, has been turned over to Production. Model drawings are complete and have been transmitted to the Plant.

M/4 Limited Edition

All model drawings have been transmitted to the Plant. Two sample guns have been fabricated for testing and evaluation. Endurance testing on one sample has completed 1,000 rounds with no apparent problems.

M/4 - 6 Carbines

Research has provided samples to Marketing for evaluation. No further work is planned until their evaluation is complete.

Bolt Action Rifles

Five M/700 fire controls with blocked sears and blocked triggers are in the Test Lab for evaluation. Sample fire controls are being assembled without a connector to eliminate a part, insure a more positive lift, and maintain proper clearance.

The second M/7 Bolt Action Gun is complete with long action.

Bob Emmons Styling - Bolt Action Rifles

Two samples will be complete by mid-February. One will be similar to our present classic, the second will have Bob Emmons special items - butt plate, grip cap, fore-end tip, etc.

Bolt Action Carbine

Prototype stamped no-bind followers will be tested in February. A second generation master stock is due February 8.

CURRENT PRODUCT DEVELOPMENT

Model 870 Limited Edition

Artwork is being refined and will be ready by February 1.

Model 870 Competition Trap Shotgun

Endurance testing has been completed to 25,000 rounds on two guns. Production has been authorized to hold a .035" maximum bolt to receiver clearance by increasing bolt height .008".

1982 Model 870 Ducks Unlimited Shotgun

Drawings for all three models will be transmitted to the Plant by February 1.

Model 700 Upgrade

Four model stocks will be completed by February 8 for a Marketing research panel evaluation of stock shape.

Model 700 Classic - 257 Roberts Caliber

Remington ammunition is not available in any Remington plant. Initial tests indicate feeding problems (stemming on the magazine and chamber) from the long action magazine. Work is in progress to determine the cause of the stemming problem and to identify potential solutions.

Model 700 Scope Mounts

Prototype scope mounts based on the aluminum extrusion design will be tested in February. Material has been ordered by Research for 3,000 sets.

Model 700 No-Bind Follower

Prototype testing is satisfactory except for the 222 Caliber. A larger quantity of samples is being made for additional testing of all calibers in the line.

PROCESS DEVELOPMENT

Injection Molded Metal and Ceramic Components

Runoff of the Witec equipment will begin on January 26 in San Diego.

Renovation of Bldg. 76-2 will be completed by the end of January.

The first quotations for marketable product will be mailed out on January 25.

#### Four-Slide Machine

Installation is complete in the N/C machining area, and a demonstration has been conducted for Research and Production personnel.

Tooling for the M/7400 and M/7600 short magazine followers is being designed. Quotes have been requested for tooling for the Bolt Action Carbine magazine follower.

#### Form-Rolling

A purchase requisition is being prepared for Rol-Flo Engineering, Inc., West Kingston, Rhode Island, to develop tooling for the M/1100 trigger plate pins.

#### Cut Checkering

Work has begun again on the CO.RE.MA. cut checkering machines. The quality of the latest sample run is comparable to that produced when the machines were first purchased. The next step is to determine if the quality is good enough, and what design changes are required to improve machine reliability.

#### CNC Vertical Machining Center

Deliveries of the Matsuura machine center, post processor, and tooling are due by the end of February.

#### M/979 Seismic Guns

A total of 81 guns have been shipped against MAPCO's order for 83 guns. One additional gun is ready to ship. There are three other Hofmann guns in transit from Bridgeport, and Marketing has instructed that they be converted and shipped to Mapco as soon as possible.