

Mailed 3/28/78

LIMITED DISTRIBUTION
ILION RESEARCH DIVISION
MONTHLY PROGRESS REPORT
MARCH 1978

MODEL 1100 IMPROVEMENTS

All dry cycle testing of interlocked connector/disconnector systems is complete, awaiting results. Two guns have been sent to the Test Lab for shooting tests.

All design and drawing work for weighted LT-20, 28 and 410 Ga. Skeet guns is complete and transmitted to the Model Shop. One part is being made by an outside vendor and has been ordered. At Marketing's request we are also pursuing a contingency design which will match the three small gauge guns, but not the 12 Gauge.

Three guns with the spring loaded feed latch retention design have been sent to the Test Lab for additional shooting tests.

MODEL 1100 WATERFOWL GUN

Design and drafting work is 50% complete. The job is on schedule and should be transmitted to the Model Shop within two to three weeks.

XSG

12/20 burst testing is complete on the XSG-2 version. Two barrels were shot although both were undersize at the $4\frac{1}{2}$ inch position. The first barrel was stopped after two exposures due to small cracks starting in the barrel. The second went 20 exposures showing .040 expansion at the $4\frac{1}{2}$ inch position. High pressure testing to follow.

Model making on the XSG-3 prototypes is 85% complete. The critical path for completion is three parts from an outside vendor which are due in early April.

Remington Arms Company, Inc.

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M/742-760 NEW GENERATION

Three redesigns of the firing pin have been made and are in test. All three designs use smaller tip diameters to prevent primer blanking during proof. Other dimensions have been adjusted to allow shortening of the tip to maintain strength.

P.E. & C. has now sent Trial and Pilot pins to an outside vendor for shot peening rather than doing it in house. Also, new breech bolt processing is planned to maintain better concentricity of internal holes.

NYLON 66 IMPROVEMENTS

All design and drawing work for the bolt lock is complete. Drawings have been transmitted to the Model Shop and outside vendors for prototypes.

Work on a new barrel mounted scope mount is still in the layout stage.

MODEL 870 COMPETITION TRAP

Two shotguns have been completed with the latest gas cylinder having increased braze area. One gun is now in endurance test, and has been fired 37,000 rounds with satisfactory performance. Test is continuing. It also has the new short fore end sleeve that is functioning satisfactorily.

The second shotgun has been pattern tested and is now being measured for shoulder force against a Model 1100.

Receivers for the four Marketing field test guns are ready for color.

MODEL 600 CARBINE STYLING

A Model 600 action with the M/700 fire control and bolt handle has been fitted to a stock. The model will be complete by April first.

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MODEL 541 - 22 Hornet

Design work has begun on an ejector. During the first week in April a single shot prototype will be assembled.

MODEL 700

Two of the prototype bolt lock systems are on rifles. The third is being fitted.

A new trigger and sear safety cam are being worked on in the Model Shop. The projected end of March completion date may extend into the first week of April.

BENCH REST BULLETS

Fifty thousand 6mm, 68 gr. bench rest bullets have been shipped to the warehouse.

Word has not been received on confirmation of the new world's record using the 6mm BR bullets.

Industrial Engineering is reviewing the bullet manufacturing process prior to an efficiency study.

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