

November 9, 1977

1. M/700 - M/600 Fire Control Improvement

The development effort has been divided into two objectives. The first objective is developing a safety mechanism which is easy to understand, reliable and will allow the shooter to unload the rifle in the "ON SAFE" position. Three prototype safety mechanisms have been developed and at least two more will be developed. When completed the various designs will be rated by Marketing to determine the one with the greatest consumer appeal.

The second objective is to improve and simplify the firing mechanism to give a trigger with a better feel and which is externally adjustable within safe limits for pounds pull. The safety development will be completed in the first quarter of 1978; sample prototypes of the proposed new assembly should be complete by April 1978.

2. M/700 Classic - development work complete

3. M/700 Skip Line - development work complete

4. M/600 Carbine

Six prototype carbines have been fabricated and are ready for Marketing and production review. The rifles have design improvements and alterations to the stock, bolt handle, trigger guard, recoil pad, sights and bolt release.

Each of the rifles has design and styling improvements and modifications to the stock, bolt handle, trigger guard, recoil pad, sights and bolt release. The various design and styling combinations will be reviewed by Marketing, Research and Production to determine the optimum combination. The rifle can be

chambered for the major calibers with the addition of the 7mm 108 Rem. cartridge. The calibers would be 35, 30, 7mm, 6mm, and 224.

The rifles are on schedule but the final design will have to be finalized in December to meet the January drawing transmittal.

5. M/541 - 22 Hornet

A feasibility study to determine if the 580 Series rifles will accommodate the 22 Hornet cartridge has been completed with positive results. The design has started, and drawing of the barrel and extractors have been completed. Design effort is presently being concentrated on the firing pin, bolt assembly and magazine box. An initial prototype should be completed by May 1978.

10. M/581 Single Shot Conversion - development complete.

15. New Autoloading/Pump Line 22 Cal.

As described in the July presentation we are approaching the development of a new autoloading rimfire rifle with clearly defined check points and goals. We are approaching the problem from 5 different vantage points: Marketing input, competitive rifle analysis, firearms cost data, process data, and rifle design. The first three analysis items have been completed. We are just starting to look at process - design - cost relationships. We will have a recommendation in January meeting on our proposed next step of the development program.

25. M/1100 & 870 Target Trigger

Prototypes with various design concepts to give improved trigger performance are being developed and fabricated. Two prototypes have been completed, but neither has met our expectations. Development work is continuing and a number of new prototypes will be fabricated in the first quarter of 1978.

M/870 Competition Trap Gun

The shooting characteristics of the M/870 Competition shotgun have been compared to the leading competitive models. Comparative bird breaking ability of the guns was determined by extensive trap shooting with 10 average to excellent shooters. At 16 yards, with 825 targets per gun, the ratings were:

Winchester Model 12	87%
Remington 870 TB	86%
Perazzo Single	85%
Remington Competition & Browning BT99	82%

At 23 yard handicap 825 target per gun the ratings were:

Perazzi	73%
Remington 870 TB	72%
Winchester Model 12	71%
Browning BT99 and M/870 Competition	67%

The test results are being analyzed.

Moment of Inertia Data - will add next week.

The endurance testing was stopped with two guns at 7,000 rounds. The parts which showed inferior properties are being redesigned.

The analysis of the bird breaking data, inferior parts, and moment of inertia of the various models will be completed by Nov. 25, 1977. The designs will be altered and three new prototypes will be fabricated in the first quarter of 1978.

Mechanical Traps - nothing new to report.

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