## FIREARMS

# Model 1100 Improvements

The spring loaded feed latch retention design has been tested with satisfactory results. The test included shooting, dry cycling, assembly/disassembly cycles, and drop tests. Additional testing is scheduled.

Additional lots of latch retainer equipped fire controls for 3" Magnum gums are being assembled by Production.

Dry cycle tests of the interlocked connector/disconnector system are complete for all six models. The test results will be analyzed after completion of the experimental control testing now in progress.

A tooling revision to reverse the direction of blanking on the carrier latch latching slot is being made by the vendor. This change will eliminate burrs on the latching surface and is intended to cut down on the "hang up in the rear" malfunctions.

Conceptual design work for weighted and balanced small gauge skeet guns is complete. Some layout work and all detail drawings remain to be done. The customer will be able to retrofit this option to duplicate 12 gauge gun weight and center of gravity in the small gauge skeet guns. The extra weight will be mounted inside the magazine tube. The diameter of the action spring tube nut will be increased to obtain the correct balance point.

## Model 1100-A

The redesigned, low-bounce receiver buffer was shot approximately 400 rounds. While it performed better than the first design, endurance is still inadequate. The problem is being investigated.

We will start 12-20 burst tests and high pressure strength tests next week.

Model Shop work for A3 prototypes is approximately 50% complete. Outside vendors are also on schedule.

•		
Research Department	-2-	February, 1978

### M/742-760 New Generation

Firing pin breakage problems are being experienced in trial and pilot guns. Breech bolt hole dimensions, chamfer operations, heat treatment and shot peening of firing pins and retaining pin location are being investigated as possible causes.

Accuracy of the 25-06 prototype was acceptable.

#### Model 3200 Skeet Set

No research activity on this project.

#### Nylon 66 Improvements

Design and drawing work on the bolt lock is 75% complete. We are waiting for Zytel ST 801 material samples from Du Pont for bolt handle fabrication. Our stamping vendor is evaluating the receiver cover alteration.

## Model 870 Competition Trap

Two gums without gas seals gave adequate recoil reduction, however, both failed where the gas cylinder is brazed to the barrel. New parts are being made in the Model Shop and will be ready next week. They will then be brazed to barrels and finished up for endurance testing in approximately two weeks.

A redesign to hold the fore end to the sleeve has been completed. It has passed 1500 rounds of dry cycle testing to date.

# Model 600 Carbine Styling

Seven prototypes have been finished to date. One additional gun with the M/700 fire control and bolt handle on the M/600 action will be complete by mid-March.

Research Department

-3-

February, 1978

### Model 541 - 22 Hornet

Bolt head and bolt body blanks and firing pins have been finished. The bolt body blanks cannot be finished on plant equipment and are being finished in the Model Shop. The receiver and recoil lug drawings are in the Model Shop. The drawing for alteration to the stock should be ready next week. A single shot prototype is scheduled for March.

## Bench Rest Bullets

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

Inquiries regarding availability of bullets are constantly being received; some dealers have reported that they have many sales pending delivery.

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

Research Department

-4-

February, 1978