To: Ken Soucy
From: Ken Rowlands/Tom Bauman

MONTHLY REPORT - JUNE 1993: OVER/UNDER SHOTGUN

Two of the five pre-design acceptance guns have been endurance tested to 10,000 rounds each (50% 3" magnum loads), with no part breakages. Some ejection and fail-to-fire malfunctions were experienced, but the cause has been identified and can be easily corrected. The three remaining guns will be ready for testing after the July plant shutdown.

An adjusting screw will be added to the fore-end iron to take up the clearance between the rear of the iron and the bottom of the barrel when the frame pivot radius is mated with the fore-end iron pivot radius. This will ensure more positive cocking of the hammer cocking rods. The ejectors and their cam cuts in the frame will also be modified to increase primary extraction so that fired cases that stick in a dirty chamber can be more reliably ejected.

There is a concern about the uncontrollability of the flame hardening process for the frame ejector cam cuts and breech face, as well as the hammer cocking rod cam surfaces in the fore-end iron. Alternate surface hardening processes are being investigated.

Estimated weight reduction of the latest barrel assembly design with separate side ribs instead of a solid middle spacer is only .25 ounces. This means that 2.35 ounces still has to be saved from somewhere. Potential candidates are:

* Aluminum instead of steel barrel side ribs - which would save 1.74 ounces.
* Aluminum instead of steel frame side plates - which would save 2.36 ounces.
* M/3200 type plastic butt plate instead of vented rubber recoil pad - which would save 2.85 ounces.

The only way that aluminum will be substituted for steel is if a coloring process can be found that acceptably matches the black oxided steel parts.

A non functional catalog gun is being built and should be available by early August. In order for the gun to be visually representative of the final product it will have the longer top lever and the latest barrel assembly design with separate side ribs.

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KINZER V. REMINGTON