To: Ken Soucy

From: Ken Rowlands/Tom Bauman

MONTHLY REPORT - NOV. 1992: OVER/UNDER SHOTGUN

Ten guns where shipped to the Gun Writers Seminar where they received generally good marks. The guns were built from preproduction sample parts that in some cases did not meet design specifications and required extensive hand fitting. Problem areas were noted and will be addressed before the trial and pilot guns are built.

Marketing has requested the following design changes:

- * Recoil Pad to be radiused at the heel and toe.
- * Sides of mono-block to be enhanced by jewelling.
- * Forcing cone to be lengthened.

The recoil pad and forcing cone changes are feasible. Jewelling the mono-block will be difficult with the existing time constraints.

Four guns of the latest design are being endurance tested and are currently at the 9000, 6200, 3900 and 800 round levels. Problems so far encountered are ejecting live rounds, failure to fire caused by light firing pin indents, and fore-end screws falling out. Solutions have been developed for all of these problems and the guns are now shooting well. The only breakage to occur has been the front spacer on one barrel assembly that failed because of a poor braze.

In order to improve accuracy, a number of barrel assemblies have been built with varying degrees of barrel convergence at the muzzle. Small sample testing to date indicates that the point-of-impact spread between the top and bottom barrels has been reduced from 10" to 4.5". Additional testing to further reduce the spread is planned as soon as more barrel assemblies become available.

Process Engineering has requested that the top lever spring plunger hole be relocated to eliminate a potential polishing problem. The only way this can be accomplished is to reduce the diameter of the plunger and to utilize two smaller stacked springs instead of the larger spring now used. New springs have been designed and are in the four guns being endurance tested.

A number of plant assembly personel have been trained in the R & D recommended assembly procedure.

Work has started on the Field Service Manual.