March 5, 1993

TO: K.W. Soucy FROM: W.A. Warren, Jr. H

### PROGRESS REPORT Feb., 1993

M700 VS Long Action "Sendero Special"

- o The vendor's master stock was approved 2-12-93.
- o The first "production" stock from vendor's (H-S Precision) new tooling was reviewed 3-3-93. The vendor felt this sample was representative of his production process and quality system. Three significant opportunities for improvement were identified and communicated to the vendor. A duplicate inletting gauge and various "try" gun parts have been provided to him.
- o we have requested a sample from each of the six new molds being built before each is used for production. The vendor says that it takes him 2-3 days to complete a new mold.

# BASIC RESEARCH-RELEASE MECHANISMS

Measurement Apparatus: The detailed cost estimate for this project was completed on 3-5-93 and submitted for financial analysis and write-up. Most of the expenditures will be in 2093. This apparatus will provide an objective way to measure the force vs. displacement behavior of user-operated firearms' devices.

Benchmarking: competitive purchases-no change. Savage model 116FCS (stainless steel, synthetic stock, detachable box magazine) is cataloged in '93, but not yet available.

Change in activity focus: Effective 3-1-93, my release mechanism activity has become focused. This is now directed toward the specific objective of developing a fire control system for the current NBAR program.

### DESIGN-RELATED

On an ongoing basis, I am assisting M. Reeney with his NBAR process-design integration program.

The Customer Repair computer data base, now being used by repairmen, has the potential to provide additional insight into customers' field experience with our products. I have requested of plant systems a systematic ranking/sorting of the data to look for patterns which might reveal opportunities to improve. This initial inquiry would be applicable to NBAR.

#### SAFETY

Monthly time invested in the R&D safety committee was 19 hours. The quarterly Safe Gun Handling Review for all R&D employees is 95% complete.

# **ATO**

I completed a technical briefing for a production foreman to help him with a 3d step grievance over a quality-of-execution issue on the common fire control.

I assisted ATO Engineering and Design with a cost saving opportunity (on a high-volume common fire control component) identified as a result of a need for new vendor tooling.

END