

June 4, 1993

TO: K.W. Soucy  
FROM: W.A. Warren, Jr. *WAW*

PROGRESS REPORT June 1993

M700 VS. Long Action "Sendero Special"

We have completed approval of samples from all eight of the stock vendor's molds. All molds are now ok'd to run production. The duration of this activity has been 2 1/2 months. This is more than double the vendor's original estimate.

Other related activities now completed:

- o duplicate top inletting attribute gauges are now in use
- o At our request, vendor has added mold # and "date of manufacture" information to each stock. This can facilitate problem analysis and corrective action.
- o In response to a small quantity of M700 Police rifles (stock from same vendor) returned for "barrel not central to fore-end", we developed a tighter specification for this "professional use" product. It has been accepted.

A Trial and Pilot test on caliber 7mm Rem. Mag. has been completed. Results are still pending. The Test Lab has requested another T&P run in 300 Win. Mag. A minor design improvement opportunity identified in the first T&P will be transmitted the week of 6-8-93.

I will remain active in any technical issues thru successful 300 Win. Mag. T&P testing.

1994 Modification: fluted barrel (PI-2 5-18-93)

This adds six cut longitudinal flutes in the barrel. The purpose of these is to reduce weight and enhance appearance. This will be done on the "Sendero Special" in a way that maintains the ultimate strength of the current Magnum barrel; flute depth will not extend below the current Magnum profile. Maximum weight reduction can be obtained by "contouring" the flutes on an existing vertical spindle CNC mill with workpiece rotation.

There has also been a recent flurry of activity assisting production with fluting other M700 barrel contours.

BASIC RESEARCH-RELEASE MECHANISMS

Measurement Apparatus: Requisitions for all major or long lead time components have been entered. Several have arrived. The last to arrive will be the table-drive motor. It is due 3d week in June.

Status:	<u>Per cent complete</u>
o purchasing, designing and fabricating small components	10
o learning the operation and setup of the force transducer	0
o " " " " " " displacement "	5
o linking above to the Tektronics transient data capture device	5
o learning the programming and operation of the motor-driven motion control system	5

NBAR: Effective 3-1-93, my release mechanism activity has become focused on developing a new fire control for this model.

OVER →

DESIGN-RELATED

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

SAFETY

R&D safety committee: 17 hours. An R&D employee, who is a volunteer fireman, presented an illustrated case history review of recent local motor vehicle accidents he had responded to. He identified documented causes and illustrated the relationship between severity of personal injury and use of personal restraint devices by vehicle occupants. It was very well done and very well received.

MISC

Minor litigation support on accessing process record information.

UPCOMING

I will be attending 24 hours of instruction on Geometric Dimensioning and Tolerancing during June.

END