REMINGTON ARMS COMPANY INC. LONGKE. ARKANSAS

April 30, 1992

TO:

T. C. DOUGLAS

FROM:

L. R. SROKA XZ.

SUBJECT:

MONTHLY REPORT

## \* EXPLOSIVES RESEARCH LAB

The concrete slabs for the pilot mixhouse, energetic materials storage magazine, and the environmental conditioning magazine have been poured. The outside steam line stanchion foundations have been poured and the steam line has been relocated and reconnected. The foundations for the blast wall and steel building frame supports for the main lab building have been poured and preparations are well underway to pour the concrete slab for the main lab building on Monday, 5/4.

To date, construction progress is approximately two weeks behind schedule because of weather delays.

## \* STL 12 TGT (Original 12/86 Lordship Load, 1-3/16 oz. #6 shot)

The subject load was originally primed with a primer which has been obsoleted. Ballistics tests were run to qualify the currently used primer for this load and all test results were found to be very good. A revised Ballistics Instruction Letter indicating this change in primer specification has been issued. It is understood that this load will serve as an interim load for target shooting at the Remington Farms until the development of the new specification 12 ga. steel target loads is complete.

## \* STL 20 TARGET - 7/8 oz. #8 SHOT

Ballistics screening tests have been completed using various primer and powder combinations and modified shot containers. A second iteration of tools to produce experimental shot containers on the Arburg molding machine has been completed and these tools will be run as soon as repairs to the Arburg have been completed.

Monthly Report - L. R. Sroka April 30, 1992 Page 2.

This latest tool revision has been made to fine tune the shot container's internal volume and to relieve difficulty being experienced with stripping the wad off the core pin. These experimental shot containers have been designed to eliminate the wad / body interference which exists with the unibody shell. Ballistics testing will resume as soon as a quantity of acceptable shot containers have been made.

\* STL 20 EXPRESS - 3/4 oz., 2, 4 & 6

Same as above.

## \* 12 GA STEEL TARGET LOADS

Previous ballistics testing of the new specification steel target loads showed encouraging results using an experimental X59 primer mix. However, further testing of the X59 mix was suspended when the possibility of a tetracene - lead peroxide reaction was brought to our attention by Fran Lopata. A full curve drop test of three X59 primer samples made in September of 1990 and stored in a primer dry house for the past 17 months was recently completed and compared with the original drop test results of 9/90. The comparison of the original and latest drop tests did not show any decrease in sensitivity. Based on this information, CETR was contracted by Fran to do a study of the decomposition of tetracene by lead peroxide and to determine the rate of decomposition in the wet state and when dry. Any further testing of X59 mix remains on hold pending the completion of this study.

A specially approved shipping container has been received from CETR and preparations are being made to send tetracene and lead peroxide samples to CETR to begin testing.