

REMINGTON ARMS COMPANY INC.
LONOKE, ARKANSAS

July 24, 1992

TO: T. C. DOUGLAS
FROM: L. R. SROKA *LRS*
SUBJECT: MONTHLY REPORT

* EXPLOSIVES RESEARCH LAB

The installation of the metal building system for the main lab building is complete. All remaining trim pieces, blast wall flashing, and gutters have been installed and the main lab building is now completely enclosed except for windows and doors. Work on the building interior is progressing at a good pace and, to date, the wallboard installation is complete, telephone lines have been installed, sheetmetal work on HVAC and exhaust ducting is approximately 60% complete, and the HVAC units have been set in place and are ready for mechanical and electrical installation. Also, all plumbing work, except for fixture installation, is complete and other mechanical pipefitting is approximately 65% complete. Additionally, inside electrical work, including distribution and circuit breaker panel installation, lighting and receptacle circuits, and other power wiring is approximately 70% complete.

Completed outside electrical work includes the electric utility pole installation and wiring, lightning protection pole installation, and underground conduit installation from the main lab building to the mix house and storage magazines. Also, pouring of the concrete sidewalks is approximately 50% complete and the siding installation on the mix house and the storage magazines is complete.

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

Ballistic testing of latest shot container made on the Arburg molding machine revealed a deficiency in internal volume offered by the 20 ga. unibody shell. Previous testing of the Stl 20 Tgt load showed a close fit using the unibody shell but a decent crimp was still possible with the shell trimmed to the max length of 2.760". The latest test used a new lot of shells which replenished the old handloading supply and whatever small cushion we had in the previous tests was lost with the new lot of unibody shells, which exhibit a slightly reduced internal volume and prevent getting an acceptable crimp. This problem has created a snag in supplying Remington Farms with a unibody Stl 20 Tgt load by mid September so we will utilize the SPLV shell to complete the Farms requirements. Further definition is needed to determine the limits of the unibody volume constraint problem and what remedies are available.

* STL 20 EXPRESS - 2, 4 & 6

From last month: "Because the payload volume of 3/4 oz. of #2,4,& 6 steel shot is significantly below that of 7/8 oz. of #8 steel shot, it will not be possible to load the 20 ga. 3/4 oz. express and 7/8 oz. target loads using a common shot container. However, 13/16 oz. of #2,4,& 6 shot is a good fit for the 7/8 oz. target shot container and this slightly heavier payload presents itself as a viable alternative to the 3/4 oz. load, which would require another shot container. Some preliminary ballistics testing of this alternative load produced velocity levels approaching 1400 fps but additional load development is required because the additional quantity of powder required for this load is pushing the loaded length limits. Testing will resume when the revised 7/8 oz. shot containers have been molded."

The unibody internal volume problem discussed under STL 20 TGT also creates problems with the STL 20 EXPRESS load. Again, further definition is needed to determine the limits of the problem and what remedies are available. Meanwhile, a load will be developed utilizing the SPLV shell as a contingency to the possibility that the unibody shell will require changes to the internal profile to increase the shell's volume.