

To: T. C. Douglas  
From: J. M. Edwards  
Subject: Progress Report, March

April 2, 1993

12 Ga. Premier Slugs:

Only part of this month was spent assisting V.F. Scarlata with the workload on this project. Details of this months work is in V. F. Scarlata's progress report.

6.5mm x 55mm SWEDISH MAUSER:

The work on this project was halted due to the uncertain chamber dimensions of this cartridge. The discussion continues at SAAMI. Some progress has been made and a resolution seems forthcoming therefore work is resumed.

The bullet that was expected to be modified was not possible and a new bullet must be made. The bullet jacket tooling design is complete and tools are expected in mid April. The bullet assembly tooling is also complete and placed on order with an expected delivery of mid June.

The lettering on the head of the shell is under scrutiny at SAAMI and appears that it too will be changed. The new lettering will require a new bunter. To be prepared with the new lettering a new bunter was ordered just in case. The EX quantity of shells on hand is sufficient to evaluate tooling at both priming and loading. This action will enable the T & P to proceed uninterrupted. These same shells will be used for the handloading work-up data.

The warehouse position is now scheduled for late August. The delay is attributed to the uncertain chamber dimensions and ordering new bullet tooling that was unexpected.

7mm x 64 BRENEKE:

The shell tooling is on hand. The gages are expected late April. The EX run should be complete, including testing by early June and the T & P finished by mid year. Some short-cuts are possible because the shell is very similar to Remington's .280. The bullets required are already in production and the powder expected to be used is 4350 that is common.

The 175 gr pointed soft point bullet was evaluated for mush and was successful at 2750 fps. This is the fastest velocity that is expected for this bullet in this cartridge.

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20 GA. 2 3/4" PREMIER SLUGS

Machined slugs and Sabots have been produced and preliminary hand-loading indicates that less than 3" accuracy is obtainable at  $\approx$  1500 fps.

The 20 ga. rifled barrel will have to have a twist rate of at least 1-in-24 to stabilize this .45 cal. slug. A 1-in-15 barrel is also being tested. The 1-in-35 that is presently standard will allow the slug to tumble.

The project request for the capital needed to complete the product has been written. The Sabot and slug drawings are complete, and an experimental mold will be ordered when the project is approved.

16 GA. STEEL 15/16 OZ.

The T-P runs for this product have been completed without any problems, except the mold vendor had problems with the manufacture of the STL16 shot containers. The wad manufacturer is continuing to fine-tune his process..

The STL16 ga. shells produced during the T-P runs were excellent from a ballistic as well as a visual standpoint.

SUPPRESSED POWDER

No change from last month.

LARGE-SIZE STEEL SHOT 12 AND 10 GA.

Due to the difference in powder lot speeds, some changing of powders had to be made to several of the new large shot steel loads. To this point, all T-P runs have been successful.

12 GA. 3 1/2" STEEL

No change from last month.

410 2 1/2 SKEET

A new powder is being developed for the 410 Skeet load. The present powder is very dirty, leaves a lot of unburned powder, somewhat too fast, and not dense enough. Components are being sent to St. Marks for development.

458 WIN MAG 450 SWIFT

No change from last month.

300 WIN MAG 200 g SWIFT

The T-P run ( $\approx$  50,000) was completed last week. From a ballistics standpoint, there were no problems, V-P and accuracy all were well within spec. There were some minor visual problems that will have to be worked out.

A second run is scheduled for next month. This project is complete.

7M/M REM MAG SWIFT (SAFARI LINE)

The first bullet samples should be available for testing within three weeks.