

For: T. C. Douglas
From: R. P. Saszcuk

June 25, 1992

JUNE PROGRESS REPORT

SHOT CHARGER DEVELOPMENT

Components for a second Simplex counting type shot-charger, requested by Production, was ordered June 4th. with delivery scheduled for July 22nd. This will allow loading large size steel shot on two Simplex Loaders simultaneously.

Continued testing of the prototype charger, loading 3 1/2" 10GA & 12GA. "11" loads, showed that 99% of the loaded shells passed by the machine were within 2 pellets of the expected count. With #2 shot, approximately 88% of 12GA. and 96% of 10GA were within 2 pellets. This smaller shot possibly popped out at the load stations, shot detect or index. This will be investigated.

Some feeding problems were also experienced due to mixed shot sizes and "flakey" steel shot. Jerry Roach (Buyer) and myself are scheduled to visit Daisy, suppliers of our steel shot, on July 10th. We will discuss shot quality problems and tour the facilities to determine their capability to meet our requirements. Hoover Bearing, a potential supplier for our steel shot, will also be visited in mid-July to evaluate their ability to meet our requirements.

281APY 1 AM BODY FORMER - 410 & 28 GA.

An attempt to assemble 20,000 410 R/C bodies with brass heads at GH&P was made 6/3/92. Difficulty adjusting the machine and tools to obtain head pull and primer push out values equal to our current product, along with machine alignment problems, prevented completing our run in the 12 hours allocated. Sample product has since been hand assembled successfully. The GH&P machine has been re-scheduled for 6/30/92 to complete this test.

Ballistic testing of the 28 ga. R/C smooth body Skeet loads that were loaded last month, show performance similar to our current product. Visual appearance however, is not as good due to ink smears and a ring depression near the mouth caused by the crimping tool and/or adjustment. Also, body blowback was more evident on the smooth bodies. This was attributed to a ragged mouth opening caused by dull trim & skive tools. Examination of fired shells under microscope also revealed a defect in the primer hole. Cold tested shells (-20F) showed a

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12 Ga. 3 1/2" STEEL

Experimental runs were made with both TT and #2 steel shot. These runs made with the new steel wad gave excellent ballistic results. The present wad will have to be changed to reduce its volume, as it is presently too large for 9/16 oz. of shot.

10 Ga. 3 1/2" STEEL

Experimental runs were made with both TT's and 2's. These runs were made with S113 primer and 380.5 powder. There were no problems during the runs, which used the new counting shot charger. These shells are presently in ballistics for testing.

STEEL WAD IMPROVEMENTS

A continuing problem with gas seal failures in our steel wads has been addressed with a new wad design. To reduce cost and sample procurement time, this change was incorporated into the redesign of steel wad for TT-size shot. Drawings are being modified to implement this change in all steel wads if testing is successful.

12 Ga. INT. TARGET LOAD 24 GRAMS

The experimental run of the product was completed on 502 Duplex loader without any problems. This load uses the S113 primer, 257 powder, GL12 wad and 370 grains of shot. A velocity of 1325 fps is needed to obtain acceptable pressure. These shells are presently in Ballistics being tested.

300 WIN MAG 200 g SWIFT

The vendor has been contacted about producing a sample of 200 g bullets. Swift is in the process of changing his manufacturing procedure, and a sample will be produced when this equipment is running.

458 WIN MAG SWIFT

The nickel shells have been produced, and a solid crimper designed for hand-loading. Shells will be loaded and tested for bullet pull shortly.