PLANT REPORT

M/721 - DEFECTIVE AMMUNITION TEST

Period: 10/10/44 to 3/29/46
Project: FTD-151 Plant Order #7C273
Amount Authorized: $400 Expended: $762.53
Previous Reports: None
Notebook: 238
Prepared By: H. C. Moss

The Defective Ammunition Tests on .300 Magnum Cal. - M/721 were conducted in accordance with Gun Test #20 of the Gun Test Manual. One gun only was tested so that no comparative information is available on competitive makes. The following information may be of interest:

Burst Heads - 10 proof loads were prepared by sawing through a section of the head in a direction parallel to the longitudinal axis of the case. When these cartridges were fired, considerable gas leakage was noted through the area between the Bolt and the Receiver. No gas escaped around the Bolt Plug - Firing Pin area. No erosion or part failure was observed and the gun functioned satisfactorily for the 10 rounds.

Split Cases - 10 standard cartridges and 10 proof loads were prepared by sawing a slot through the case shoulder about 1-1/2" long, in a direction of approx. 30° with the longitudinal axis. When these cartridges were fired, no perceptible gas leakage was noted. It appears possible that gas leakage was prevented by minimum chamber dimensions in this gun.

Punctured Primers - For this test a firing pin .010" smaller in diameter and .020" longer than the standard firing pin was used. 10 proof rounds were fired with this firing pin. We were unsuccessful in puncturing any primers.

A complete model gun was used for the above tests. This gun is still in usable condition and has been returned to the Design Section.

HHG:HC
4/2/46