

*P Eccles for
E. K. Wheeler
for info*

File 5/17/54

May 12, 1954

TO: A. B. Gordon

FROM: M. H. Walker

SUBJECT: TARGET AND TEST RESULTS ON MODEL 721

At the request of your section I have spent some time investigating low shooting of the M/721 30-06. According to reports, up to 7 or 8% rejects at target have been experienced with this caliber for low shooting.

Several items were found which would contribute toward low shooting. Inability of the barrel straightener to correct downward bends at the muzzle due to interference of the front sight ramp is a major cause of low shooting. Lack of draw at the front gauge screw between the action and the stock is a second cause of less importance, but definitely contributing. The most important reason, however, is the use of front sights which are .020-.025" higher than the model drawing dimensions. This contributes to low shooting in all calibers. This conclusion is verified by some of the recent target and test reports.

The drawings show a front sight height of .327" ± .0075 with the 24" barrel using statistical analysis. Of approximately 30 rifles examined during the last five months, none were found with front sights lower than .330" while 40 to 50% ran as high as .353". It is apparent that these higher figures result from the use of M/740 sights which are not visibly different than the standard front sight.

M. H. Walker
M. H. Walker
Research & Development Dept.

MHW:ML