

*with Miller
change in
etc*

cc: C.J. Theriault
R.A. Williamson
H.J. Hackman

Ilion, New York
January 8, 1959

D. E. MILLER

MODEL 725 - CAL. 222 Rem. - PILOT TESTING

You requested that more specific information be forwarded regarding observations made with respect to the trigger adjustment on the 10 rifles used in the recent R&D pilot test.

In investigating further it seems that specific measurement data was not included because it appeared obvious that the trigger adjustment operation #175 was probably missed at final assembly. There are 3 specific adjustments involved and apparently all of these varied for "this lot of rifles". These adjustments are as follows:

1. Trigger Pull for Weight - This should range between 4 & 5 lbs., and apparently some were found to be as high as 7 1/2 lbs.
2. Engagement for the Bear - The Process Record specifies that this should be .015"-.025" of engagement. Apparently this specification was established quite some time ago when it was experienced that assemblers were setting these up too "thin" and to extent that we would get "follow downs".
3. Overtravel - This is the item particularly mentioned in the R&D test report, and there is a stop screw which is adjusted to control the amount of overtravel. When properly adjusted this gives the fire control a "quality feel", and one of the M/721 fire control features.

In checking with the designers on these adjustments it is understood that the technique has been demonstrated a number of times and can be accomplished in approximately one half minute per rifle. If Research can assist in re-instructing any new personnel on this, please let us know.

SMA:T

S. M. Alvis, Manager
Ilion Research Division