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

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D. R. 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 lbs.
- 2. Engagement for the Sear 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/72I 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.

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S. M. Alvis, Manager Ilion Research Division