

cc: G.M. Calhoun
J.H. Lewis, Jr.
S.W. Rose

Ilion, New York
October 2, 1956

J. H. MILLER
Foreign Sales Division
Bridgeport

MODEL 40X - DESIGN - FIRE CONTROL MECHANISM
Capt. Benjamin Naiman

Earlier in the year (5/31) you forwarded us copies of the file of correspondence from Capt. Naiman, including sketches showing certain of the difficulties he had encountered in connection with the fire controls of the M/40X Rifles which he had been using. We returned this material through Dr. Calhoun along with a review of each item which had been reconciled with certain characteristics and variations that we had found prevalent in the early M/40X Rifles produced by the Ilion Plant.

Under date of September 10 you forwarded S.W. Rose of the Arms Service Division another letter from Capt. Naiman along with additional pencil sketches of some more ideas with respect to fire controls. Mr. Rose brought this over to us, pointing out that it involved technical information of a nature for which the Arms Service Division was not competent to handle.

We again had these suggestions reviewed by the members of our staff who are most familiar with these problems and here are the conclusions:-

The principal objection to the design of a sear as suggested by Capt. Naiman appears to us is the motion of the sear parts as required to effect a release and its corresponding influence on lock time. The short couple on the firing sear would result in long travel and more extended time values. We would also expect an undesirable motion to be transmitted through to the finger piece and thus be felt by the trigger finger. Apparently Capt. Naiman did not calculate the resultant load on the disconnect which is a function of the angle on the top of the sear.

We certainly have no objection to receiving as many suggestions from Capt. Naiman as he cares to submit, and we are always glad to receive the ideas and the comments from our customers.

J. E. Miller

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especially with regard to their experience in the use of our products. At the same time we are not too certain that we are always successful in conveying our conclusions to the correspondents; in fact, it is entirely possible that the limitations of this method of communication results in a lack of clarification so that we may not always fully understand the ideas being conveyed. We certainly hope that this does not promote a feeling of dissatisfaction on the part of our customers, and would appreciate the Sales Department properly explaining this position.

SMA:T

S. M. Alvis, Manager
Ilion Research Division