

cc: H.J. Hackman

Ilion, New York
September 27, 1955W. E. LEEK
R. D. COMBOY
W. A. BESTMODEL 721-722 ACCURACY TESTING DEVICE

I have been asked by J.B. Maupin to see what might be done to properly dispose of this item, which at present remains as an open project for the rebuilding of the accuracy testing device. Perhaps the best way to arrive at any practical recommendation would be to pull together all of the pertinent facts.

The purpose of this memorandum is to provide a background of pertinent information which may or may not be fully complete or entirely correct but which might very well be used for a meeting between those of us who are interested in this job, and after which recommendations will be made for disposition.

The M/721 Accuracy Testing Device was developed incidental to the introduction of this new bolt action rifle and believe that the equipment has been used through the firing of at least five million rounds. This device was more or less of an experimental nature and the design being largely based on the ideas of Wayne Leek, who at the time was Supervisor of the Research Testing Unit. It was constructed using certain available materials and standard items together with a specially constructed carriage and holding mechanisms with the controls, linkages and connecting circuits. This first accuracy device was built without any drawings and is what might well be called an "inventor's model". However, for record purposes drawings were made after the fact.

As usual with any equipment of this nature, various improvements have been made during the past five years of use. Some of the changes were for maintenance reasons and others to provide better control or performance.

Some time ago it was concluded that this equipment should be given a complete overhaul or rebuilt to incorporate certain ideas which would improve efficiency and perhaps reflect some of the experience which has been gained in the development of similar equipment which is now in use in the gallery. At the same time it was proposed that consideration be given to modification of the carriage and holding means so that it might be possible to accommodate the

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the M/40-X rifle or any center fire and target versions of the M/722 such as the Caliber 222 Remington which has been proposed.

A project was therefore drawn up to cover the work and at the time estimates were submitted for model making and it was indicated that savings might be affected by doing this work in the Plant Tool Room. Prior to this time the writer had requested that effort be made to reduce this type of activity from standpoint of Research personnel in order to expedite the several arms developments which were more pressing from standpoint of schedules. It was also suggested that the maintenance on the Gallery equipment which had been previously handled by Research be turned over to Plant Works Engineering Section and for the same reasons. Apparently the latter item has been working out fairly well.

It later developed that the Works Engineering estimate for rebuilding the M/721 Accuracy Device was based on the present available drawings. W.E. Leek then called attention to the fact that these drawings could not be relied upon for adequacy in accomplishing the desired results since the nature of the work was experimental to the extent that it had been planned that model making be coordinated very closely with design. Apparently this condition was reflected in the higher estimate for model making which had been prepared by R&D. As result of this situation work was stopped and for the past several months the unit has been inactive and rifles are having to be tested by shoulder shooting.

In the meantime W.E. Leek suggested that drawings might be brought up to date by one of the engineers from the Works Engineering Section and an offer was made to lend personal assistance during the evenings if necessary. Apparently this is also not practical since it is understood that the work was finally stopped.

It is now proposed to re-appraise the entire problem in order to come up with proper recommendations for satisfactorily accomplishing the objectives and of course to completely overhaul the unit so that it may be put back into production.

I would like to plan for a meeting with individuals to whom this is directed and in the meantime would appreciate your advising me personally of any other information which should be included in the pertinent facts of the situation, and of course any suggestions which might point to a solution.

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