

cc: G. M. Calhoun  
D. E. Miller ) In  
H. J. Hackman ) turn  
J. J. Phillips  
M. H. Walker

Ilion, New York  
October 19, 1961

Memorandum

To: J. A. Roberts  
From: S. M. Alvis

MODEL 700 DESIGN

The Model 700 Design Project provided funds for the work which was new in the way of parts to make up this model. The rifle is planned on a basis of "add using" a number of current parts. Subsequently it was found that some improvements to process and in some cases perhaps design improvements need be made to the current parts and equipment if we are to bring quality up to standard believed to be required for acceptance.

In reviewing charges against the Model 700 project it was noticed that the Design Group has not taken care of the accounting in the way of obtaining necessary work orders or approvals for the design improvement phase of the job. In fact, some of it is on machinery and processing. The total involved including that estimated to complete is approximately \$3000. The items of work are as follows:

1. Stock Forming Machine

An R&D designer (R.J. Service) spent part time during the past three or four weeks along with a tool maker working on the carving machine. Apparently the salary card was made out charged against a gun design.

2. Housing and Fire Control

The vendor has indicated that it is not possible to hold the required tolerances for the pierced holes in the housing and therefore Research has about completed a re-design so that it may be processed to meet the drawing tolerances and eliminate what has been a problem on the Models 721, 725, etc.

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3. Receiver Processing

For many years the Plant has had a problem in trying to meet the drawing requirements of alignment, concentricity, etc., between the barrel, receiver, bolt, etc. PE&C has maintained that the drawing requirements could not be met with the equipment and process as previously established.

M.H. Walker and a designer have been working with PE&C in an effort to improve the process and possibly make design changes if required to accommodate the condition.

4. Barrel Processing

There were problems relating to the concentricity and alignment to the receiver similar to the above. M.H. Walker and a designer have also been working with PE&C on this item.

We will either have to change the Model 700 project to accommodate the process improvement work or arrange to provide a design and process improvement work order to cover the above. As I understand the work it would seem to fall into the latter category, therefore suggest that it be taken care of accordingly.

In the event that anyone has any other suggestions, they will please advise; otherwise we shall proceed as indicated.

SMA:B