

cc: G.M. Calhoun  
L. Fox - V.G. De Reus  
W.E. Leek - File

Ilion, New York  
July 8, 1969

F. E. MORGAN  
Bridgeport

MODEL 788 - CHANGE TO BOLT

During your visit on July 7th you were shown a sample rifle fitted with a proposed change to the bolt. This is to provide an additional longitudinal cut milled as a slot in the bolt at a location of approximately 180 degrees from the guide slot now used to fit the stud in the receiver. The purpose is to provide a better balance in geometry of the bolt, which the metallurgists and engineers have found necessary to eliminate what has been a rather serious problem caused by distortion or warpage of the bolt during the heat treating operation. This condition causes hard opening of the bolt.

A section of this new slot will be exposed through the receiver ejection port, but the opinion here is that the appearance is not objectionable and in fact may not be noticed. However, it is possible that someone in the field may have an inquiry and we believe it well they know of the engineering improvement.

V.G. De Reus has arranged to have sample rifle sent to Bridgeport and he had earlier placed on the Operations Committee Agenda. We expect that you and Dr. Calham will conclude it may not be necessary to request any Committee action for this minor change.

SMA:T

S. M. Alvis, Manager  
Ilion Research Division