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J.W. Miller
D.E. Miller - H.J. Hackman

Ilion, New York September 13, 1961

G. M. CALHOUN BRIDGEPORT

## MODEL 700 - BARREL BRACKST

J.W. Miller has called to my attention that the designer (M.H. Walker) has established specifications for the N/700 Barrel Bracket to be a wrought steel and thus displacing the use of powder metallurgy in this part as has been in effect for the N/721 family a number of years.

I was aware that Mike had been contemplating this since there had been considerable difficulty over the years and for the AMU rifles he used steel exclusively for the barrel brackets. Also, with the advent of the big magnum calibers such as the 400 with the heavier recoil he was careful to avoid the powder metal bracket.

In addition to the salt bleedout problem which has never been adequately solved for the Plant, there have also been some cases of bending the bracket. As I recall, these were often traced to variations in the machining of the stock inletting, resulting in the contact between the barrel bracket and the shoulder of the stock not being adequate and/or proper. Likely there were cases of variations in hardness or ductility.

I have not overruled the designer's action in this case, feeling that it placed us in a rather untenable position and that the material or process must be sufficiently adequate in its performance to be accepted by the designer as well as the Plant if we are to expect responsibility as to results and quality. At the same time I don't believe this necessarily rules out the possibility of this barrel bracket being again made by powder metallurgy. And perhaps to a little different specifications than the one which was considered adequate at the time for the M/721 and 40X family of rifles.

In the event that you or any others receiving copies of this memo wish to suggest a change in policy, will expect to hear from you. Otherwise will proceed as above,

S. A. ALVIS

Ilian Research Division

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