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Ilion, New York March 14, 1955

TO:

J. D. MITCHELL

FROM:

S. M. ALVIS

SUBJECT:

HODEL 722 - CALTER 244 REMINITON

at the Operations Committee Meeting of March I there was considerable discussion regarding proposal to use a heavier (magnum) style barrel for the rifle to accommodate this new cartridge. It was stated at the time that reason for considering such abchange was to gain the best possible accuracy picture, which in this longer range "super-varmint" cartridge would be of greater importance. We did not at the time give any figures as to the expected magnitude of accuracy improvement. In fact, at the present time we do not have complete data as it relates to testing with the Caliber 244 cartridge. This will have to come later, as soon as we have more ammunition and pilles. We do, however, have some information on M/722 rifles fitted with magnum style barrels and chambered for the 222 cartridge. I number of months ago approximately a dozen of these rifles were put up for such a test purpose. It seems that targets were fired in the range of 1.75" extreme spread in 5-shot groups with the standard barrels, and an improvement of approximately 306 was shown in comparative shooting with the heavier magnum style barrels.

Although further testing will be required to make similar comparisons for the 244 it would be expected that an improvement of this same magnitude would be realized for the proposed new caliber.

During the past summer there were a number of sticies regarding varaint rifles and shooting appearing in several of the sporting magazines. We noted that in many cases reference was made to our M/722 in 222 Caliber, and there were several instances where statement was made that better accuracy was being achieved by replacing our standard barrel with one that was heavier. As a matter of "how much weight", the proposed new barrel would weigh approximately 3/4 more than with the regular 722 style Caliber 222 barrel. The proposed 244 Caliber rifle would then weigh approximately 8%.

We trust that the above information will be of assistance in clearing up various questions which have been reised.

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S. M. Alvie, Manager Arms Research & Development Division