

11 February 1970

Dear Tom,

Many thanks for having sent me the AR with the Davidson article on shooting accuracy. I am flattered that you assumed that I could comprehend the mathematical intricacies of his formulae—I did not, nor have I ever been able even to balance my checking account or surmount the most elementary practical arithmetical problems.

However, I think that I do grasp the fundamental significance of the article and the light it throws on the ~~MM~~ testimony on the accuracy of the Carcano rifle: that with the dispersion factors for the rifle itself, the ammunition, and this most dubious of allegedly capable marksmen, it would have been virtually impossible to strike anywhere near the actual targets.

I have looked at some of the relevant testimony and exhibits—for example, Simmons 3H 446 discusses "the aiming error...associated with the rifle" and comes up 2,  $3\frac{1}{2}$ , and 4 inches corresponding to progressively more distant targets. He then refers (3H 447) to a "table showing the probability of a hit at a given target at given ranges by riflemen with given degrees of accuracy," which appears to be CE 586. But on 3H 448 Simmons is forced to admit that even with admitted mis-application of probability values for one target, which he applied to all three targets, for skilled riflemen only, there was only a 4-to-10 chance of hitting a target at 270 feet.

It would be interesting to know how Davidson would calculate the dispersion factors in the tests and probability projections for the tests which led Simmons to testify that the probability of a hit was very high. Davidson's conclusions from the same data might be radically different.

I am returning the magazine herewith, so as not to delay your review of the relevant testimony.

I look forward to seeing you soon and discussing the Davidson article as well as the Curry book and other matters.