

CC: S. E. Alvis) In
H. A. Brown) Turn
V.G. DeReus
H.H. Grace
H.J. Hackman
M. H. Smith
W. B. Walker
File:

April 11, 1947

TO: J. Hammond
FROM: C. B. Buonassisi
SUBJECT: M/721 30-06 ACCURACY TEST

The test results of the 8 M/721 rifles summarized in V.G. DeReus' letter of 4/1/47 have been analyzed and the following concluded:

1. The average M/721 required a 3.79" circle to encompass all 5 shots. This average should be about 2.5" to effectively pass the 3" specification.
2. 30% of test quality guns can be expected to pass the accuracy specification for 5 shot groups.

The plant inspection department has recommended that four out of five shots be required to fall in a 3" circle to be acceptable. This, undoubtedly, would result in passing most guns into the warehouse but would also serve to prostitute the original specifications by selectively throwing away the worst 20% of the accuracy data. The true accuracy of the arm would then be clouded in the veneer of an unknown statistic which would in no way materially improve the accuracy of 70% of the guns which inherently cannot pass the accuracy requirements.

It is recommended that a more realistic approach to the problem would be to improve the gun quality or loosen the accuracy specification.

In line with improving the gun quality, the eight test guns were reviewed by W.B. Walker and the writer for contributions to poor accuracy. The following was noted:-

1. Bore pit on all guns.
2. Long throat on all guns.
3. Guns #1 & #5 over max rifling die through last 5" of barrel.
4. Finish under F.B. Pump.

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