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May 27th, 1946

TO: S. M. Alvis
FROM: R. H. Grace
SUBJECT: M/721 BROKEN BOLT HANDLE

On 5/24/46, a Bolt Handle on M/721 .300 Savage Cal. was broken at the brazed joint. It is my feeling that this breakage may come up for considerable discussion from time to time and this memo is issued in an effort to record the circumstances under which breakage occurred,

Examination of the parts shows that the Bolt Handle has been bent approximately 1/8". At least 25% of the available area was not properly brazed. This may not be unusual for this type of braze but the brazing was done as a one piece proposition that is, no trial pieces and no development work were proved before brazing this assembly. To the best of our knowledge, this gun had the following tests:

1944 -

4,500 rounds live fire
6,000 rounds Dry Fire With Dummies
18,000 rounds Dry Fire Without Dummies

1945 -

40,000 Dry Fire Without Dummies

1946 -

Indeterminate quantity of functional cycles in Design, Engineering and Planning.

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RHC:MC