

cc: S.M. Alvin
 J.E. Martin
 E.A. Williamson
 H.G. Jackson } In
 V.G. Dennis } Room
 B. Sapp
 W.E. Leach } In
 W.H. Walker } Room
 J.W. Miller

Illion, New York
 May 24, 1955

TO: S. A. EAST
 FROM: S. J. THORNTON
 SUBJECT: MODEL 722 - 284 CALIBER PILOT LINE TEST

At your request, ten (10) of the subject guns were selected from warehouse on 5-20-55 for pilot line test. Each gun was fired 30 rounds with no malfunctions occurring. An accuracy test of three 1-shot groups were fired through five guns with the following results:

GUN NO.	Group	AVERAGE
361256	1. 3.1"	2.4"
	2. 1.8"	
	3. 2.5"	
361572	1. 2.2"	2.2"
	2. 2.1"	
	3. 1.8"	
361562	1. 2.1"	2.4"
	2. 2.1"	
	3. 1.7"	
361177	1. 2.1"	2.5"
	2. 2.5"	
	3. 2.1"	
361210	1. 2.0"	2.1"
	2. 2.5"	
	3. 1.6"	

The above measurements were made from center to center which in turn are two tenths of an inch larger than measured in gallery test. However, three of these guns are over the two inch gallery specifications. The four guns marked with an asterisk have one extremely large group.

Investigating this accuracy with H. Walker he feels the fore and barrel tension is too great and should be reduced. This in turn will have a tendency to bend the barrel.

On the above basis it can be concluded that function-wise these guns performed satisfactorily. However, from an accuracy stand-point they are not up to specifications and are rejected. This investigation on improvement of accuracy will continue.

T