TEST AND MEASUREMENT LAB - TEST REPORT

REQUESTER: J.R. Snedeker WRITTEN BY: D.R. Thomas 1/7/91
WORK ORDER: 481152 REPORT NO.: 903391
TEST TYPE: function
FIREARM STAT'S: MODEL: 700 CAL: .338 Win. Mag.

REASON FOR TEST:
Production found that they had some trigger pull springs that had on one end a slightly increased diameter, ranging from .0005" to a maximum of .003". When assembled these springs could be held in position by the screw threads in the trigger spring hole. This test was done to see that if the adjusting screw was unsealed and adjusted out, and the spring end stayed in position on the thread, what the effect on the trigger pull would be .

EQUIPMENT REQUIRED:
Two Fire Controls (assembled with springs with displaced coils)
Two Model 700 rifles
800 rounds

TEST PROCEDURE:
The adjustment screw was backed out as far as possible to still allow assembly to the Stock (approx. .040 in.)
The trigger pull was then measured.
200 rounds were then fired on the gun.
The trigger pull was remeasured and the position of the screw was observed.
This procedure was repeated for two fire controls, then the Stock was filed to allow the screw to be backed out farther and the test was repeated.

TEST RESULTS:

FIRE CONTROL	TRIGGER PULL (lbs.) BEFORE	AFTER	COMMENT
			STANDARD STOCK
12KI	5.5	5.0	Screw backed out into wood
14EI	4.0	3.8	Screw protrudes .042 before / .055 after
			STOCK FILED
12KI	4.9	4.4	Screw protrudes .175 before/ .200 after
14EI	3.0	3.0	Screw protrudes .170 before/ .122 after

Under normal conditions the screw could not adjusted out far enough to cause the complete loss of trigger pull.
Even when additional clearance was added to allow the adjusting screw to be backed out farther the trigger pull did not drop below 3 lbs.