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FROM:

*E.F. Barrett*  
E.F. BARRETT

SUBJECT: PRODUCT SAFETY MEETING - BOLT ACTION FIRE CONTROLS  
APRIL 23, 1975

"This meeting was held to develop plans to conduct a safety analysis of bolt action fire controls."

The following is a summary of the status reports given by each Department and their plans for further action.

#### RESEARCH

The investigation to date has been largely confined to the Model 600. An investigation has also been made of the M/788 and the M/580 series fire controls. Research has completed an analysis of the design of the M/600 fire control and has -

1. Changed part dimensioning to insure adequate lift of the sear by the safety cam.
2. Specified hardening the fire control housing to minimize wear between the detents.
3. Increased the length of the safety lever cam.

These modifications are being tested to evaluate their effectiveness and to insure there is no interaction with the other aspects of fire control performance.

Research has concluded that the present design for a 3-position safety is inadequate and plans to begin a study during the second half of 1975 to develop a new safety mechanism.

#### MARKETING

Approximately 600 Model 600 rifles are expected to be returned to the Plant as the result of the special quality audit.

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Product Safety Meeting  
Bolt Action Fire Controls  
April 23, 1975

Marketing will review the available information on bolt action rifles as it relates to the safety performance of bolt action fire controls. This will include gunsmith reports, arms repair data, parts usage, etc.

#### PRODUCTION

Inspection of 147 Model 600 rifles returned for the safety audit show the following.

1. Safety cannot be "tricked" - 103
2. Safety can be "tricked" but movement of safety lever to full "safe" position clears trigger connector and sear and gun will not fire when moved to "off" position - 40
3. Safety can be "tricked"; trigger connector remains disengaged from sear when moved to "safe" position and gun will fire when the lever is moved to "off" position - 4
4. Trigger can be set in unsafe condition when safety lever is in "safe" position - 0

Production is rejecting guns which fall in the #2, #3 and #4 categories. Indications are that this provides an ample safety factor that wear will not lead to the category #4 situation during the life of the gun.

A gauge is being developed that will permit checking for sear lift at assembly.

Production is analyzing variations in purchased and internally manufactured parts and reviewing quality control procedures and limits. A list of recommendations for improving quality performance will be developed and reviewed by the Product Safety Committee.

A follow-up meeting is scheduled for the week of May 19.

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