A. Purpose:

1. To test the amount of force required on the trigger to release the sear. One of the routine examinations conducted in casework is determining the trigger pull, or force, used to set the firing process in motion by pulling the trigger. Trigger pull is defined as the amount of force which must be applied to the trigger of a firearm to cause the sear to release. The trigger pull can be measured with the use of static weights by placing them on the trigger where the finger would naturally rest, and recording the total weight necessary to cause the sear to release.

B. Responsibility:

1. It is the examiner's responsibility to conduct this examination on all firearms where there is physical injury reported in the request for examination of the firearm.

C. Safety:

1. It is at the discretion of the examiner to use personal protective devices while conducting this examination.

D. Procedure:

1. Check to ensure that the firearm is unloaded.
2. Cock the action of the firearm.
3. Hold the firearm in a vertical position.
4. Rest the trigger hook of the static weight hanger on the trigger where the average finger would normally rest. Make sure that the static weight hanger is not touching any other part of the firearm and that the weights are hanging parallel to the bore of the firearm.
5. Use a steady motion to raise the firearm with the weights suspended from the trigger. Add additional weights on the hanger base until the trigger releases from the sear.
6. Record the lightest amount of weight necessary for the sear to release.
7. Repeat steps 1 through 6 three times, resetting the sear connection after each attempt.
8. If the firearm is capable of firing single and double action, measure the trigger pull of both actions according to this procedure.

9. It should be noted that measuring the trigger pull of a rimfire firearm must not be performed on an empty chamber. A "dummy" cartridge must be used. It is at the discretion of the examiner if he or she chooses to use a "dummy" cartridge in a centerfire firearm if he or she believes this testing could damage the firearm.

E. Interpretation of Results:

1. An average of the three figures will be recorded as the amount of force used to release the sear. Record the number of pounds of force to a plus or minus one half pound (+/- 8oz.).
2. The amount of force used to release the sear is an approximate measurement.
3. Record the trigger pull of the firearm in the notes of the examination.
4. Only include the trigger pull in the final report if specifically requested by the submitting agency.

F. Equipment:

1. Static weights and trigger pull assembly hook. The weights are graduated from one-quarter pound, one half pound, one pound, two pound, three pound, and five pound increments.

G. References:

1. Laboratory safety manual
2. AFTE procedures manual
3. Uncertainty papers / calculations

H. Appropriate Appendices:

1. Appendices 1 – Worksheets
2. Appendices 2 – Calibration Standards