A. Purpose:

To test the amount of force (measured in pounds) required on the trigger of a firearm to release the sear. Static weights or a spring gage may be used to test trigger pull.

B. Responsibility:

Forensic Science Examiners and other laboratory personnel assigned to the Firearms Unit.

C. Safety:

All basic firearms safety rules will be followed during trigger pull testing. Personal protective equipment (PPE) may be used at the analyst's discretion, depending on the condition of the firearm.

D. Procedure:

It should be noted that testing the trigger pull of a rimfire weapon must not be performed on an empty chamber. An inert cartridge must be used. An inert cartridge may be used in a centerfire weapon at the discretion of the analyst, if they believe trigger pull testing may cause damage.

1. Static weights
    a. Check the firearm to ensure it is unloaded.
    b. Cock the action of the firearm.
    c. Hold the firearm in a vertical position, with the muzzle pointing towards the ceiling.
    d. 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.
    e. Use a steady motion to raise the firearm a few inches off a flat surface with the weights suspended from the trigger. Add additional weights until the sear is released.
    f. Record the lightest amount of weight necessary for the sear to release consistently.
    g. Repeat steps b through e three (3) times, resetting the sear connection after each attempt.
    h. If the firearm is capable of firing single and double action, measure the trigger pull of both actions.
2. Spring gage
    a. Check the firearm to ensure it is unloaded.

b. Cock the action of the firearm.

c. Use a vise to hold the firearm on a flat surface, with the barrel parallel to the surface.

d. Zero out the dial on the spring gage.

e. Rest the trigger hook of the spring gage on the trigger where the average finger would normally rest, ensuring that no other part of the firearm is touching it. The spring gage should be roughly parallel to the bore of the firearm.

f. Apply steady rearward pressure to the spring gage until the sear is released. Record the results.

g. Repeat steps b through f three (3) times, resetting the sear connection on the firearm and zeroing the indicator on the spring gage after each attempt.

h. If the firearm is capable of firing single and double action, measure the trigger pull of both actions.

E. Equipment:

1. NRA static weights (set 1 and/or set 2)
2. Long trigger pull arm (for long guns)
3. Amtek spring gage

F. References:

1. GL 2 Safety Manual
2. FA SOP-02 General Firearms Safety