



South Carolina Law Enforcement Division

P.O. Box 21398
Columbia, South Carolina
29221-1398

Henry D. McMaster, Governor

Mark A. Keel, Chief

Tel: (803) 737-9000

TEST FIRE INSTRUCTIONS FOR FIREARMS NEEDING IBIS ENTRY

The following is an example protocol for test firing firearms with the focus on cartridge case recovery. This is primarily oriented around special considerations due to testing of a firearm and creating samples to be entered into the Integrated Ballistics Identification System (IBIS). Information provided should not be considered all-inclusive and should be used in conjunction with standard firearm safety practices and all firearm safety protocols mandated by your Agency.

- **MAKE SURE THE FIREARM IS UNLOADED AND ALWAYS KEEP THE FIREARM POINTED IN A SAFE DIRECTION (no ammunition in the chamber and the magazine unloaded – verify both by sight and feel) – SAFETY FIRST!!!**
- Examine the firearm for any defects or barrel obstructions (plugs of mud, lodged bullet, damage, etc.) that may make it unsafe to test fire.
- Check to see if the firearm is capable of fully automatic fire (full auto from the factory OR modified sometime thereafter).
- Range preparation and cartridge case collection suggestions
 - Clean the area of all old cartridge cases and debris.
 - You can place a paper bag (grocery bag) on its side on a stand next to the firearm to catch cartridge cases as they are ejected.
 - You can lay down a sheet or a tarp to catch fired cartridge cases.
 - You can hang a vertical sheet or a tarp immediately to the right of the shooter to deflect ejected cartridge cases.
 - You can rotate the firearm so that the ejection port is pointed toward the ground to keep the cartridge cases close to you. (Shooting left handed works best for this technique)
 - You can pre-mark each cartridge case with a Sharpie (felt tip marker) before firing.
 - If you have two people, one person can shoot while the other locates and collects the ejected cartridge cases.
- It is extremely important to locate each ejected cartridge case as soon as it is fired. (Hint: The cartridge case should be warm to the touch from firing.) If you have any doubt that the cartridge case you picked up is the one you just fired, throw it out and test fire again.

- Do *not* load more than 2 or 3 cartridges in the magazine at a time for testing (in case of *unanticipated* full auto fire).
- Test fire the firearm into a suitable back stop. (Do Not collect the bullets.)
- Collect the fired cartridge cases and place them into an envelope labeled with the firearm's make, model, caliber, serial number, etc. *before* you move on to the next firearm. (A sample envelope can be provided to you upon request).

Recommendations for providing high quality specimens for IBIS entry:

- Submit at least two (2) test fired cartridge cases per firearm.
- Only submit fired cartridge cases from semiautomatic pistols and rifles (no revolvers, shotguns, or single shot firearms).
- Use commercially manufactured brass or nickel case ammunition (*NO STEEL*) with nickel primers. Recommended brands: American Eagle (Federal's promotional line), Federal, USA (Winchester's promotional line), Winchester, UMC (Remington's promotional line), Remington.
- Try to avoid ammunition with pre-marked primers, such as symbols on some Magtech/CBC brand ammunition or primers with pre-marked parallel lines.
- Do not submit sub-caliber ammunition fired in a larger caliber firearm as test fires, such as 380 Auto caliber cartridges fired in a 9mm Luger caliber firearm.
- The following calibers are the **ONLY** calibers currently being accepted for IBIS entry:
 - 25 Auto / 6.35mm Auto / 25 ACP
 - 32 Auto / 7.65 x 17mm Auto / 32 ACP
 - 357 Sig
 - 380 Auto / 9 x 17mm / 9mm Kurtz / 9mm Browning Court / 380 ACP
 - 9mm Makarov / 9mm Mak / 9 x 18mm
 - 9mm Luger / 9 x 19mm / 9mm Parabellum / 9mm NATO
 - 40 S&W / 40 Auto
 - 10mm Auto
 - 45 Auto / 45 ACP
 - 45 G.A.P.
 - .223 Remington / 5.56 x 45mm NATO
 - 7.62 x 39mm Russian

Complete the SLED IBIS ENTRY BY APPOINTMENT FORM and contact the Firearms Department for an IBIS entry appointment.

Questions? Please call the Firearms Department at (803) 896-7399 or (803) 896-7411.