

FIREARMS MODIFICATION LIST



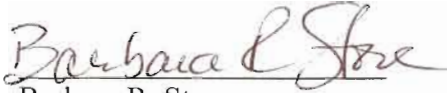
**U.S. DEPARTMENT OF ENERGY
Office of Health, Safety and Security**

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CERTIFICATION

This document contains the currently-approved protective force “Firearms Modification List” referred to in DOE M 470.4-3A, *Contractor Protective Force*, and DOE M 470.4-8, *Federal Protective Force*.



Barbara R. Stone
Director
Office of Security Policy

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Date

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DOE FIREARMS MODIFICATION LIST

1. PURPOSE. This U.S. Department of Energy (DOE) Firearms Modification List (FML) contains those modifications that have been approved for use on live-fire duty and engagement simulation systems (ESS) firearms authorized for use by DOE Protective Forces (PF). This document supersedes DOE M 470.4-3 Section B, Appendix B-6 and will be approved and maintained by the Office of Security Policy and Office of Health, Safety and Security (HSS) as a stand-alone document on the HSS website.

2. GENERAL.
 - a. Modifications on the DOE FML, as approved by the Office of Security Policy, HSS may be conducted after the DOE cognizant security authority has granted approval.
 - b. Requests for modifications that are not on the FML must be submitted in writing to the Office of Security Policy in accordance with DOE M 470.4-3A.
 - c. A modification is any alteration of a firearm or firearm component other than those necessary to maintain factory-required tolerances; or the addition of any part not made to the manufacturer or military specifications for a specific firearm.
 - d. Repair and replacement parts manufactured by vendors other than the original firearm manufacturer may be used if those parts meet the firearms manufacturer and military specifications requirements.
 - e. Refinishing a firearm to maintain serviceability is authorized.
 - f. Modifications that alter the safety, reliability and proper functioning of a firearm will not be approved. Modifications that impact the functioning of weapons converted to ESS configurations are excepted.
 - g. If a part or modification is provided by the firearms manufacturer as an optional or available part or modification and this same part/modification is not on the FML, it is an approved modification and does not require a modification approval letter.
 - h. Modifications approved for live-fire weapons (e.g., adding a Picatinny Rail to an M-16 variant weapon) are approved for the same type and variant of ESS weapons except when the modifications interfere with or negate ESS safety modifications.

3. LIVE-FIRE FIREARMS.
 - a. Smith & Wesson Revolvers.
 - (1) Replacement grips (e.g., Pachmayr, Hogue), provided the grip or grip screw does not interfere with the functioning of the firearm.

- (2) Front sight insert replacement.
- (3) Tritium sight installation.
- (4) Grip modifications and alterations to facilitate the use of speed loaders.
- (5) Recess cylinder charge holes to facilitate the use of speed loaders.
- (6) Wide or target style triggers.
- (7) Light mounts including mounts, lights, and laser-aiming devices.

b. Semi-Automatic Pistols.

- (1) Replacement grips (e.g., Pachmayr or Hogue, including slip-on styles), provided the grip or grip screw does not interfere with the functioning of the firearm.
- (2) Glock grip modifications involving filling the void in the backstrap, reconfiguring the angle of the grip to better fit smaller hand users, installing slip-on Hogue or Pachmayr grips, or applying grip tape.
- (3) Sight changes to include colored inserts, tritium sights, bars, dots and variations.
- (4) Bevel magazine well to facilitate magazine insertion.
- (5) Cut cocking serrations on slide.
- (6) Checker front and back straps.
- (7) Install extended slide stop lever as available from a reliable manufacturer.
- (8) Install extended magazine release button as available from a reliable manufacturer.
- (9) Light mounts including mounts, lights, and laser-aiming devices.
- (10) Remove trigger serrations.

c. Shotguns.

- (1) Cut stocks for recoil pad installation or length of pull changes.
- (2) Sling swivels.
- (3) Fiberglass or composite stocks.
- (4) Butt cuffs.
- (5) Side saddles.

- (6) Extended magazine tubes.
- (7) Cut long forcing cones in barrel.
- (8) Pistol grips and pistol grip stocks used in tactical breaching guns.
- (9) Cut and thread barrel for choke tubes and tactical breaching devices.
- (10) Barrel changes (i.e., length, choking, ribs).
- (11) Big head safety buttons.
- (12) Flex-tab conversion.
- (13) Change followers with high-visibility colors.
- (14) Drill out butt stock for installation of recoil reducer.
- (15) Sight changes (e.g., to include colored inserts, tritium sights, ghost ring sights, etc.).
- (16) Drill and tap for installation of scopes or laser aim devices.
- (17) Light mounts including mounts, lights, and laser-aiming devices and fore-end light units.
- (18) Stand-off devices for tactical breaching.

d. Heckler and Koch (H&K) MP-5 Submachine Gun (SMG) Series.

- (1) Folding or collapsible stocks.
- (2) Fore end light units.
- (3) Light mount including mounts, lights, and laser-aiming devices and fore-end light units.
- (4) Metal block to inhibit trigger travel to eliminate full-automatic fire capabilities.
- (5) Sight changes to include colored inserts, tritium sights, bars, dots, and variations.

e. Colt M-16 Family and Variants (all calibers).

- (1) Replace standard upper receiver with flat top design to facilitate the use of scopes or other aiming devices.
- (2) Barrel changes (e.g., caliber, length, weight, etc.).
- (3) Collapsible stocks.

- (4) Floating handguards.
 - (5) Convert full-automatic to semi-automatic fire by changing the selector lever to semi-automatic type and removing automatic sear.
 - (6) Light mounts including mounts, lights, and laser-aiming devices.
 - (7) Scope mounts.
 - (8) M-16 conversion to carbine (CAR) configuration.
 - (9) Replace standard flash suppressor/hider with more effective types, (e.g., Vortex, etc.).
 - (10) Sight changes (e.g., colored inserts, tritium sights, etc.).
 - (11) Installation of rubber "slip pad" on butt stocks.
 - (12) Accessories for various-type slings to include single, double, or triple attachment points.
 - (13) Rail and alternate sighting (RAS) system to include vertical grips.
 - (14) Noise suppressors.
 - (15) Replacement grips.
 - (16) Gas block systems.
- f. Heckler and Koch (H&K) Rifles. Remove carrying handle and factory sights and replace with RAS.
- g. Bolt Action Precision Rifles.
- (1) Glass bedding and glass/pillar bedding.
 - (2) Sling swivel installation.
 - (3) Cut stocks for recoil pad installation or length of pull changes.
 - (4) Bi-pod installation.
 - (5) Scope mounts.
 - (6) Light mounts including mounts, lights, and laser-aiming devices.
 - (7) Fiberglass or composite stock installation/replacement.
 - (8) Recoil reducers and flash suppressors/hiders.
 - (9) Barrel changes (e.g., fluted, stainless, heavy contour, match, or target styles).

- (10) Cut and re-crown barrels to enhance accuracy.
- (11) Change factory recoil lug to heavy-duty type.
- (12) Convert floor plate style magazine to magazine fed (e.g., Kwik-Klip or M-14 magazine conversions).
- (13) Cryogenic treatment of barrel and action to extend barrel life and improve accuracy.
- (14) Replacement of factory trigger guard screws with Allen or torx style headed screws.
- (15) Installation of match style triggers adjusted to not less than 3.5 pounds trigger pull.
- (16) Noise suppressors.

h. Colt M-203 Grenade Launcher/Rifle.

- (1) Mounting M-203 independent of the M-16 by affixing it to its own stock assembly.
- (2) Sighting devices.
- (3) Snap on attachments (quick detachable modification).
- (4) Vertical handgrip.

i. Machine Guns.

- (1) Flash compensators, noise reducers, or muzzle breaks.
- (2) Light mounts including mounts, lights, laser-aiming devices, and optics.
- (3) Vertical grips.
- (4) Replace/add bipod.

4. ESS FIREARMS.

a. Colt M-16 Family and Variants (all calibers).

- (1) Blank fire adaptor.
- (2) Live round inhibitor.
- (3) Modified blank only magazine first, second, and third generations.
- (4) Magazine well block.

- (5) Chamber porting procedure.
- (6) Chamber porting sleeve.
- (7) Selector lever limit plate.
- b. Remington Model 870 Shotgun.
 - (1) Live round inhibitor.
 - (2) Blast deflector.
- c. Smith & Wesson Revolver.
 - (1) Live round inhibitor.
 - (2) Laser tube in barrel.
- d. Bolt Action Rifles.
 - (1) Live round inhibitor.
 - (2) Blast deflector.
 - (3) Live round magazine block.
 - (4) Single-shot only conversion.
 - (5) Honeywell-designed bolt stop.
 - (6) Magazine excluder.
- e. M-14 Rifle.
 - (1) Blank fire adaptor.
 - (2) Live round inhibitor.
 - (3) Live magazine excluder.
 - (4) Blast deflector.

- f. M82 Barrett.
 - (1) Barrel modifications (cut, thread, and weld).
 - (2) Gas plug installation and threaded sleeve.
 - (3) Gas piston installation.
 - (4) Live round inhibitor.
 - (5) Tap lower receiver for magazine modification.
 - (6) Magazine modifications (shorten follower, install spacer & magazine screw lock).
 - (7) Gas escape holes (drill upper receiver M82 [old model]).

- g. Machine Guns.
 - (1) Blank fire adaptor.
 - (2) Live round inhibitor.
 - (3) Blank only feed tray.
 - (4) Blast deflector.
 - (5) Chamber porting procedure.
 - (6) Modified feed tray.
 - (7) Magazine well block.
 - (8) Modified feeder/de-linker.

- h. Heckler and Koch (H&K) MP-5 Submachine Gun (SMG) Series.
 - (1) Blank fire adaptor.
 - (2) Magazine well blocking pin.
 - (3) Modified Magazine.
 - (4) Chamber insert, Allied Signal barrel.
 - (5) Modified suppressor.

- i. Heckler and Koch (H&K) Rifles.
 - (1) Blank fire adaptor.

(2) Live round magazine block.

(3) Chamber porting procedure.

j. Single-Shot Grenade Launcher.

(1) Live round inhibitor.

(2) Dedicated barrel.

k. Pistols.

(1) Barrel and rail mounted MILES transmitters.

(2) Manufacturer-engineered barrel incorporating live round inhibiting modifications.