

Testimony of David T. Hardy

before the

Senate Committee on the Judiciary

Regarding

The Assault Weapons Ban of 2013

S. 150

Summary

“Assault Rifles” The very term “semiautomatic assault rifle” is internally contradictory. In World War II, rifles of standard military power could not be made full automatic, because the recoil (“kick”) was too powerful. The “assault rifle” concept involved cutting the cartridge’s power, and thus its recoil, in half, so that it could be controlled in full automatic fire. An assault rifle redesigned to be semiautomatic is simply a semiautomatic firing cartridges with half the traditional military power.

Definition by trade name. Since “semiautomatic assault rifle” is contradictory and meaningless, legislation supposedly directed at such firearms must define the term arbitrarily. S. 150 lists rifles by their trade name and declares them “semiautomatic assault rifle,” even though many fire cartridges of full military power, or are already tightly regulated, or do not exist in the United States. It bans guns that are functionally identical to those it exempts from being banned – shooting the same cartridge from the same magazines, the main difference being that the exempted rifle has a wooden stock. In short, S. 150

- Arbitrarily bans guns that have almost nothing in common, and
- Arbitrarily bans some guns and exempts other that are functionally identical.

Definition by features. S. 150 also bans firearms that have certain features. The features have nothing to do with crime, and are sometimes based on myth. One banned feature is the “pistol grip” – but almost all modern rifles and shotguns have a pistol grip. If “separate pistol grip” is meant, such a grip is an artifact of re-designing the rifle stock so as to reduce tendency of the barrel to flip up during recoil. Another banned feature is the folding stock – but the AR-15 folding stock

only shortens the rifle by three inches, hardly making it concealable. A third is the presence of a grenade launcher on the barrel – but functional rifle grenades have long been outlawed and are unobtainable, so there is nothing it can launch. It cannot be said that any of these measures will affect criminal use.

The same may be said of banning new manufacture of large capacity magazines. In a mass slaying, police response time averages around twenty minutes. The criminal has plenty of time to reload. Moreover, the great majority of mass killers have planned carefully and carried two, three, or more guns.

It is sometimes claimed that these are “weapons of war” that “belong on a battlefield.” With the exception of full automatic fire (fire like that of a machine gun, of which semi-automatics are by definition not capable),¹ there has historically been little distinction between military and civilian arms. In the 1920s, the Director of Civilian Marksmanship sold Krag military rifles to the public, and after WWII it sold Springfield 1903s and M-1 rifles and carbines. Books were published (I have one in my library) showing how to convert these into deer rifles and target firearms. Manufacturers created civilian rifles based on military designs. At many points, civilian arms were more advanced than military ones. Americans for a century used rifles while their military stuck to smoothbores. Our civilians used repeating rifles for twenty years while the military stayed with single-shot ones. Civilians were hunting with semiautomatics (the Remington Model 8) a quarter century before the military went semiautomatic with the M-1. Other than full automatic fire, there simply is no line between military and civilian arms.

Nature of the “Semiautomatic Assault Weapon” Concept

“Assault rifle” is a rough translation of the German “sturmgewehr,” or “storm-rifle.” The concept underlying this class of firearms dates to World War II. Most of the nations involved in that conflict entered it with semiautomatic or bolt action rifles firing cartridges that were remarkably similar, developing somewhat over 2,000 foot-pounds of energy, and designed to be effective out to 600-800 yards. The United States, for example, entered the war with the M-1 Garand, firing the .30-06 cartridge in semiautomatic mode, *i.e.*, one shot per trigger pull.

¹ I include under full automatic firearms which can be set to fire three round bursts. Full automatic means, in essence, that a firearm shoots more than one shot per trigger pull. Since most modern firearms of this type can also fire semi-automatic, they are sometimes called “select fire.”

These cartridges were too powerful for full automatic fire from a standard weight rifle: no soldier could stand the recoil or control the rifle at full automatic, with the rifle slamming his shoulder ten times a second or more.

During the War, however, German engineers realized that infantry battles occurred at 200-300 yards, not at 600-800 yards. The existing military rifles were greatly over-powered at the closer ranges.

The engineers reasoned that if the military cartridge's power were cut by about half, it could be fired at full automatic, and still suffice for conflicts at a realistic 200-300 yards. This gave rise to the first sturmgewehr, the MP 43/44, firing *a smaller and less powerful* rifle cartridge at full automatic.

Thus *any true "assault rifle" is capable of full automatic fire; that is its core purpose. A "semiautomatic assault rifle" is simply a semiautomatic rifle with half the power of a standard WWII semiautomatic.* To give a concrete example, we can compare two semiautomatic rifles, the M-1 of World War II, and the modern AR-15:

Rifle	Cartridge	Bullet Muzzle Energy
M-1	.30-06	2,400 foot-pounds
AR-15	.223	1,250 foot-pounds

So we must ask what is the origin of the idea that there is such a thing as a "semiautomatic assault rifle," and that it is somewhere especially dangerous? In 2011, 323 homicides were committed using rifles of *any* type.

This is 2.5% of U.S. homicides; over twice as many were committed with bare hands. Of that 2.5%, "semiautomatic assault rifles" are a fraction, and likely a small one. Why is this unknown, but tiny, fraction of homicides the focus of so much concern and effort?

We can precisely pin down the origin of the idea that "semiautomatic assault weapons" should be a legislative focus.

In the late 1980s, the Violence Policy Center proposed it as a way to give new life to the quest for gun control, noting "It will be a new topic in what has become to the press and public an 'old debate,'" and that "Efforts to restrict assault weapons are more likely to succeed than those to restrict handguns." It explained that these rifles'

menacing looks, coupled with the public's confusion over fully automatic machine guns versus semi-automatic assault weapons—anything that looks

like a machine gun is assumed to be a machine gun—can only increase the chance of public support for restrictions on these weapons.”²

The idea caught on. Organizations advocating gun control quickly dropped “handgun” from their name and inserted “gun” to reflect an agenda increasingly aimed at rifles. The organization long known as “Handgun Control Inc.” became “The Brady Campaign to Stop Gun Violence.” “National Coalition to Ban Handguns” became the “Coalition to Stop Gun Violence.”

The Scope of the Second Amendment: “Firearms in General Use”

Heller v. District of Columbia noted that “*Miller* said, as we have explained, that the sorts of weapons protected were those ‘in common use at the time.’” 128 S.Ct. at 2817. I have elsewhere noted my difficulties with this test,³ but it is clear that the AR-15 platform has become the epitome of a firearm “in common use.”

I refer to it as a platform, since the AR-15 is “modular”; its receiver has two parts: an upper receiver into which the barrel mounts, and a lower receiver, which holds the firing assembly, and mounts the buttstock and lower grip. The two can be disconnected in about a minute. By mounting another upper receiver and barrel, an AR-15 can be enabled to fire a wide range of rifle and handgun cartridges, and the length and weight of the barrel can be changed to suit the owner’s needs. A single rifle can thus suffice for target matches, law enforcement, and hunting small and large game. While other firearms can be re-barreled to a new caliber or cartridge, this is generally work that can only be done by a gunsmith with specialized tools. An AR-15 owner can, however, switch in a minute between .223 or .22-250 for small game and target competition, 6.8 mm for deer hunting, and .50 Beowulf for home protection or larger game.

The AR-15 is probably the semiautomatic rifle in *most* common use by Americans today. Assessing this is not a simple task, because rifle manufacturers are required to report to the government only the total number of rifles made, not break that number down by design. I base this conclusion on the following:

1. A friend and fellow researcher, Mark Overstreet, has compiled a breakdown of rifle manufacturers who produce *only* AR-15 type rifles. In 2008, the

² <http://www.vpc.org/studies/awaconc.htm>

³ Among other things, it tends to be circular. In context, it also tends to be militia-centric, whereas *Heller* focuses upon personal self-defense.

most recent year for which data was available, these manufacturers produced 22% of American civilian rifle production.

2. There are also many manufacturers who make AR-15s together with other firearms, and this number is rising. For example, the handgun manufacturer Smith and Wesson recently brought out two rifles, both of them AR-15 types. Ruger Arms, which manufactured the AR-15's main competition, the Ruger Mini-14, has now brought out its own AR-15 platform rifle.
3. In 2010, the National Shooting Sports Foundation surveyed over 8,000 shooters. The results indicated that about 8.9 million Americans went target shooting with AR-15 type rifles in the previous year.⁴
4. A 2012 survey by the National Shooting Sports Foundation found that 26.3% of shooters owned an AR-15-type firearm, up from 18.1% the previous year. In addition, 21% of shooters who did not already own one planned to acquire one in the next year.⁵

Based on these data, it is clear that the AR-15 platform qualifies as a firearm “in common use.” The same would be true of the AR-15's standard magazines, which hold 20 or 30 rounds. The number of these in use (many of them sold as surplus by the government itself) is certainly in the tens, and perhaps in the hundreds, of millions.

Of course, the AR-15 is only one firearm that would be banned under proposals such as S. 150. To gain an estimate of how many would be banned, I consulted the 2012 Gun Digest, a 562-page book giving an extensive list of firearms in current production. Since the banned features are cosmetic, I examined those semiautomatic rifles that had images shown. S. 150 would ban 51 of the 57, or 89%, of the semiautomatic rifles so listed. S. 150 clearly restricts rifles “in common use,” and which are thus constitutionally protected.

Permissible Restrictions

Of course, constitutionally-protected activity is subject to *some* restrictions. Freedom of speech does not protect blackmail threats, and freedom of religious belief does not generally protect illicit action based on that belief. The *Heller* decision indicates that arms restrictions must pass some level of heightened

⁴ <http://www.nssf.org/NewsRoom/releases/show.cfm?PR=041910.cfm&path=2010>.

⁵ http://www.nssf.org/PDF/research/0412SurveyTrackerSupplement_MSR.pdf.

scrutiny – either strict scrutiny or intermediate review – which alike require proof of some relationship to genuinely (*i.e.*, not in theory or speculation) achieving an important legislative goal, while minimizing unnecessary impact on the protected activities. There are two considerations here, relating to the persons affected and to the arms regulated.

1. Persons Affected

Police and “civilians” own firearms for the same reason: self-defense against criminal activity. It is difficult to justify any legislation that would bind one but not the other, when both have the same purpose and need. Law enforcement officials today commonly carry handguns with large capacity magazines, and the AR-15 is a popular squad car gun.

The Department of Homeland Security recently sought bids for 7,000 rifles in .223 caliber, with pistol grips and folding stocks, each with two 30 round magazines.⁶ They were not to be called “assault rifles,” let alone “weapons of war,” but rather “personal defense weapons.” I would submit that private citizens also need “personal defense weapons.”

Even less explicable are laws which (like S. 150) exempt not only serving LEOs, but also retired ones. Retirement includes disability retirement, which includes disability due to mental issues. A measure which imposes restrictions on private citizens that are not imposed on government retirees found to suffer from mental disorders is plainly arbitrary and cannot be justified under the Second Amendment.

2. Scope of Regulation

As noted above, “semiautomatic assault rifle” is internally contradictory and thus meaningless. A “semiautomatic assault rifle” is simply a semiautomatic rifle of about half standard military power. Drafters of legislation are thus forced to define what they would restrict in ways that are arbitrary and irrational.

One approach is to ban rifles by name; this is *exceptionally* arbitrary, since it can ban one firearm while allowing others with exactly the same capabilities to be made and sold. S.150 bans the AR-15 platform but not the Ruger Mini-14 (indeed, the Mini-14 is expressly exempted from any ban), even though both firearms are functionally identical. Here is a simple comparison of the two firearms:

⁶ <http://radioviceonline.com/department-of-homeland-security-sport-rifle-ar-15-suitable-for-personal-defense/>

	Cartridge	Standard Magazine	Length	Weight
AR-15	.223	20-30 rounds	35.5”	6.3 – 6.9 lbs
Mini-14	.223	20-30 rounds	37”	6.7 – 7 lbs

The two rifles are functionally identical. The main difference is that the Mini-14 has a conventional wooden stock and looks “traditional.” Restrictions upon a constitutional right cannot be based on whether an arm has a wooden or plastic stock.

The other approach is to ban rifles with certain features, cosmetic in nature, affecting appearance but not function. To take some examples, from S.150:

Grenade launcher on end of barrel. Any real, functional, rifle grenade is so tightly regulated as to be impossible to obtain. A launcher for one is a matter of appearance, not of function. S.150 strangely includes “rocket launchers.” To the best of my knowledge, no one has ever developed a rifle-mounted rocket launcher, probably because its exhaust would set the user on fire.

Flash suppressors/threaded barrels. The flash suppressor is a small structure at the end of the barrel, designed to minimize the firearm’s flash at night. With modern ammunition, fired at semi-automatic rates, it is nearly impossible to see the flash, even without such a suppressor. I have verified this by firing an AR-15 with and without the suppressor in a completely dark rifle range. This may explain why some firearms (*e.g.*, the AK-47) have no suppressor. Again, this is not something that has any effect on function or on criminal use.

There is another structure that can be put on the end of the barrel, known as a muzzle brake. This diverts gasses sideways, thereby reducing recoil. Under the 1994 ban—



This is a flash suppressor, and forbidden.



This is a muzzle brake, and allowed.

The main difference is that the flash suppressor has its slits parallel to the barrel, and the muzzle brake has them running at right angles to it. Changing the angle of

the slits cannot have any effect on crime. This is arbitrary and thus unconstitutional.

S. 150 attempts to sidestep the issue by banning any firearm with a barrel threaded to take any device. In that event, flash suppressors and muzzle brakes alike will simply be silver-soldered in place, rather than held by threads. S. 150 is directed at cosmetic features, but in this case will not affect even those.

“Pistol grips.” S. 150 lists this as a banned feature. I put this in quotations since *almost all* modern rifles and shotguns have a pistol grip.



The rifle above (a 1903 Springfield) has no pistol grip; the rifle below (a modern Remington deer gun) has one. Such a grip simply provides a more comfortable position for the rifleman’s hand.

Indeed, S. 150 defines the term broadly, to include almost anything and any rifle: “The term ‘pistol grip’ means a grip, a thumbhole stock, or any other characteristic that can function as a grip.” By that definition, even the 1903 Springfield (and for that matter, a 17th century musket) has a “pistol grip.” They have parts of the stock that are designed to be “gripped,” which suffices under S. 150.

What was intended, I presume, is a pistol grip *separate from the buttstock*, the portion of the stock that leads back to the rifleman’s shoulder. This is the definition used in the 1994 ban, but it is absent from S. 150. An example:



Here, the pistol grip is separate from and below the buttstock. The separate pistol grip is a byproduct of designs that raised the buttstock, in order to reduce “muzzle flip.” When a rifle fires, the recoil (or “kick”) comes back along the line of the barrel. Traditionally, the line of the barrel would pass well above the center of the shooter’s shoulder. (visualize, on the above three images, the line of the barrel and the center of the shooter’s shoulder). This causes the rifle to flip up in recoil. This was undesirable in full automatic fire, since only the first shot would go where it was aimed, the following shots would tend to go high.

The solution was to move the shoulder stock higher, closer to the line of the barrel, thus making the recoil push the shooter straight back, without the barrel flipping upward. But if the pistol grip remained integral with the buttstock, the hand holding the grip would be twisted into an unnatural position. The solution was to make the pistol grip separate from the buttstock. *This result was an artifact of the engineering decision to raise the buttstock.*

With semiautomatic rifles, the problem of the rifle climbing during firing a burst does not exist. The separate pistol grip is a matter of appearance, not of function. Again, this has no effect upon criminal use, and thus is arbitrary and impermissible as regulation of a constitutional right.

Folding or Telescoping Stocks. These were originally designed for paratroopers, who had to jump through a narrow hatch. They remain in use because some like their looks, and they make it a little easier to exit from a vehicle. I emphasize “a little.” Collapsing the AR-15’s folding stock shortens the rifle an entire three and half inches, from 35.5” to 32” in length. It hardly makes it “concealable.” Again, an arbitrary restriction is imposed.

Barrel shroud. It is sometimes stated that the barrel shroud is intended to protect the shooter’s hand from a hot barrel, and S. 150 makes exactly this statement. While this cannot be ruled out, I seriously doubt it. American rifles have been fitted with its equivalent – a wooden upper handguard – since the Krag rifle of 1892, which was a rather slow-to-reload bolt action rifle.

Further, on many rifles (1903 Springfield, the 1898 Mauser) the “handguard” doesn’t cover the area above where the shooter’s hand would rest, while on others (the Krag, the 1903 Springfield, the British Enfield), it extends almost to the end of the barrel, where the shooter’s hand cannot reach.

A more likely explanation was that these devices were meant to protect the barrel from damage during rough handling. On the AR-15, this would certainly be the case. The AR-15’s shroud protects the gas tube, a small and easily bent or crushed aluminum tube atop the barrel that carries powder gasses back to work the action. What such a barrel shroud would have to do with criminal use is beyond me.

To sum up: the term “assault rifle” has a specific meaning, but requires that the firearm in question be capable of full automatic fire; that is the reason for halving its power. If made into a semi-automatic, it is simply a semi-auto with half full military power.

Because “semi-automatic assault rifle” is a contradiction in terms, legislation aimed at this fiction must arbitrarily focus upon considerations such as a firearm’s trade name or its appearance (down to a bayonet lug or where the grip is located). S150 takes both approaches.

I have outlined above why the list of cosmetic features is meaningless and arbitrary. S. 150’s attempt to ban guns by name fares no better. The listed guns include:

The FN-FAL, a full-size semiautomatic rifle in .308 Winchester, comparable to WWII full power military cartridges, and not an “assault rifle” by any possible definition.

The HK91, CETME Sporter, AR-10, L1A1 Sporter, and the SAR-48, which are the same, and shoot the same cartridge.

The Thompson M1SB, which shoots a pistol cartridge and is covered by the National Firearms Act (meaning the purchaser must register with ATF and go through an FBI fingerprint check).

The Daewoo K1 and K2, which are full automatic and require the same registration (I can find no indication that there even *are* any of these in the U.S.).

The Steyr AUG, which is a collector’s item costing \$2,000 - \$5,000.

In short, the named firearms appear to be chosen in a completely arbitrary manner, including full size rifles of full military power, rifles that shoot low-power pistol cartridges, firearms already required to be registered, rifles that apparently do not exist in the U.S., and expensive collector pieces. Such arbitrary restrictions cannot be justified as limits on a constitutional right.

“Semiautomatic Assault Rifles” and the Question of Self-Defense.

As noted above, the Department of Homeland Security is even now soliciting bids for 7,000 “Personal Defense Weapons,” meeting the definition of “Semiautomatic Assault Weapons,” each to be delivered with two 30 round magazines. Americans who are not government employees have similar needs for “Personal Defense Weapons.”

Here in the southwest, no sane person approaches the border without the ability to defend themselves: the odds are running across drug or people smugglers who resent your presence and are prepared to give a pointed display of their displeasure are simply too high. I am informed by ranchers (and by local criminal defense attorneys) that marihuana smugglers commonly carry pistols, but cocaine smugglers (who carry less of a load) favor rifles.

A worse risk is encountering a “rip crew,” such as the one that murdered BP Agent Brian Terry: the only thing more dangerous than running into a members of a drug cartel is running into people who make their living robbing drug cartels.

Among these ranchers, the AR-platform is a favorite. It is lightweight and can easily be carried, accurate far beyond pistol ranges, and gives the ability to protect against gangs of drug smugglers.

Outlawing Private Firearm Sales (*i.e.* those that do not Go through a Federally Licensed Dealer).

This is not a portion of S. 150, but deserves some comment. Three reflections are appropriate here.

First, claims have been made that about 40% of firearms are acquired through private sales. The only evidence here is a 1994 survey that involved only 251 respondents. The conclusion was that 17% had acquired from a member of the family, 12% from a friend, and 4% at a gun show.⁷ The legislative proposals that I

⁷ Nat'l Institute of Justice, *Guns in America* (May 1997) at 6. Online at <https://www.ncjrs.gov/pdffiles/165476.pdf>. I say “at most” because licensed dealers can also sell

have seen would exempt transfers between family members, and so (if this small sampling is accurate, and it may not be)⁸ we are at most talking about 16% of acquisitions, not 40%.

Second, claims have been made that gun shows are a source of criminal guns. Gun shows probably have an exceptionally high percentage of off-duty police in attendance, and thus are unlikely to attract criminals. The Bureau of Criminal Justice Statistics has done two surveys, each of thousands of incarcerated criminals. Those who possessed a gun were asked for its source. Both surveys found that under one percent named gun shows as their source: 0.6% in one survey, 0.7% in the other.⁹

Third, a ban on private sales will be unenforceable until far in the future. BATF reports on tracing indicate that the average time between a traced gun's first retail sale, and its tracing (which reflects when it came to the attention of police, for whatever reason), is over eleven years. So for a great many years into the future, the average firearm will have been circulating before the ban, and thus could have acquired in a private sale.

Fourth, even decades into the future, it will be difficult to prove a case of illegal private sale, unless the suspect helpfully confesses. Suppose a person with a firearm comes to the attention of law enforcement, and tracing shows the firearm was first sold at retail, to someone else, after the effective date of the ban on private sales.

The government still doesn't have a case. It still must be shown, beyond a reasonable doubt, that the transfer to the present possessor did not involve passing it, used, through a licensed dealer, and to prove that BATF must examine the records of every licensed dealer in his State. This is an impossible burden in a simple firearms possession case.

These legal problem could be solved in one of two ways, either of which, I submit, is constitutionally unacceptable, or practically impossible. Congress could, in addition to the private sales ban, either

at gun shows, so asking people whether they bought from a dealer or at a gun show divides those responses.

⁸ It also found that 68% of handguns and 60% of long guns were acquired as new rather than used. Under the Gun Control Act of 1968, it is impossible to acquire a new gun except through a licensed dealer. These numbers appear inconsistent with 40% claiming that they obtained the firearms through a non-dealer, even if we assume that every single used firearm was bought privately, which is quite unlikely.

⁹ BCJS, Firearm Use by Offenders (Nov. 2001). Online at: <http://bjs.ojp.usdoj.gov/content/pub/pdf/fuo.pdf>. I have heard the figure of 1.7% mentioned, but I have no idea of its origin. The actual figures given were a fraction of that.

1) Impose national firearm registration, covering all firearms in private possession,¹⁰ or

2) It could make *all* firearm possession illegal, period, providing for a defense if the gun owner can prove they bought the gun before the effective date of the ban, or bought it from a licensed dealer after the ban. Then anyone who possesses a firearm could be arrested and indicted on that possession alone, and be made bear the burden of proving the legality of their acquisition of of the firearm at trial.

Absent (1) or (2), a private sales ban could not be enforced. (1) would require greater precision than appears possible at this time,¹¹ and (2) would be, I submit, clearly unconstitutional, since it treats exercise of a constitutional right as presumptively a crime.

Large Capacity Magazines

S. 150 would “grandfather in” existing magazines. As I note above, the number of AR-15 magazines alone in private possession numbers in the tens and perhaps hundreds of millions. Add in large capacity magazine for all other firearms and we are certainly over a hundred million. S. 150 accordingly cannot be expected to have any effect on criminal misuse.

Even if all magazines of this sort could be made to vanish, S. 150 could have little if any effect on mass slayings. Most of those killers prepare in advance, and so commit their crimes while carrying more than one firearm. The Columbine killers carried two shotguns, two pistols, and a carbine. At Virginia Tech, Cho carried two pistols. The Aurora, Colorado killer began with a shotgun, then

¹⁰ Requiring dealers to report, and an agency to register, all future sales would be insufficient, since a result of “no record of sale through a dealer could be found” would not exclude the possibility that the present firearm possessor acquired the firearm prior to the effective date of the ban on private sales. As noted above, the average time between first retail sale and tracing is eleven years, so the possibility of an initial lawful transfer will likely continue through our lifetimes.

¹¹ Present databases on firearms are notoriously unreliable. The problems with the National Firearms Act database have been repeatedly documented over the past four decades. My experience with the database on stolen firearms suggests it has even greater problems. I represented a dealer whose inventory was illegally seized. When I secured its return, ATF said it could not return six firearms, since they were stolen. We demonstrated that five of the six entries were wrong – most involved reports of the firearms being stolen, far away, at dates when they were already in the ATF evidence locker. The sixth had a different serial number from the report, so the data was erroneous in six out of six cases.

switched to a rifle (which jammed) and to a handgun. The killer at Newtown apparently had a rifle and two handguns, plus a shotgun in his car. Under those conditions, the size of the magazines in the criminal's guns determines nothing.

It is also noteworthy that S.150 classifies as an assault weapon any shotgun whose magazine can hold more than five rounds of ammunition: "a fixed magazine with the capacity to accept more than 5 rounds." This would encompass almost all semiautomatic shotguns. A shotgun's magazine capacity is traditionally expressed in terms how many 2 ¾ inch or 3 inch shells it can hold.¹²

In recent years, however, ammunition manufacturers have produced low-recoil ammunition that is appreciably shorter than this – 2 inch, and even 1 ¾ inch shells. A shotgun whose magazine holds five 2 ¾ inch shells can easily hold six 2 inch ones; a shotgun that can hold five 3 inch shells can hold seven 2 inch ones. *S.150's definition might thus restrict the majority of semiautomatic sporting shotguns.*

In sum, there is no reason to believe that a limit on magazine size will reduce mass killings. Almost all such killers carry multiple guns, often three or four, and with police response time averaging about twenty minutes, have plenty of time to shoot and reload. What *does* prevent mass killings is a defender, out of uniform and thus not known to the killer, who can deliver immediate and accurate counter-fire. Thus:

- In San Antonio, an off-duty officer shot the attacker down, and limited losses to two persons wounded.¹³
- In the New Destiny Center shooting in Aurora, Colorado, the gunman was brought down by Jeanne Assam, a church-goer with a concealed weapons permit; the death toll was two.¹⁴
- The shooting at Pearl High School in 1997 ended when the vice-principal drew a .45 and confronted the shooter. The death toll was three.

A study, made by a non-academic but using a thoroughly scientific approach, plotted the average number of deaths in mass slayings stopped by police and in those stopped by private individuals (whether armed or unarmed).¹⁵ The results were:

¹² Or 3 ½ inch shells, in the case of magnum chamberings.

¹³ <http://pjmedia.com/tatler/2013/01/02/armed-defenders-do-stop-mass-murders/>

¹⁴ <http://freedomoutpost.com/2012/07/the-aurora-shooting-you-didnt-hear-about-in-the-media/>

¹⁵ <http://dailyanarchist.com/2012/07/31/auditing-shooting-rampage-statistics/>

Average deaths in mass slayings stopped by police arrival:	14.3
Average deaths in mass slayings stopped by private citizens:	2.3
Average deaths in mass slayings stopped by armed citizens:	1.8

This reflects the difference between a response time of twenty minutes, and one of ten seconds.

Conclusion

To pass constitutional muster under any applicable standard of review, a law must bear a *provable*, not speculative, relationship to an important social goal, and not unnecessarily impact other exercises of a constitutional right. S. 150 fails under this standard. It has no provable relationship to reducing crime or mass slayings. It places considerable burdens on lawful exercise of a constitutional right. There was only one Adam Lanza, one Seung-Hui Cho, but S. 150 attempts to deal with them by regulating the other 300 million Americans' exercise of a constitutional right. S. 150's arbitrary standards fail any test for constitutionality and, for that matter, wise policy.

- S. 150 arbitrarily bans guns by name, including firearms that have little in common, some which do not even exist in the U.S..
- It arbitrarily bans firearms by features, where the features have no relationship to criminal use.
- It would ban all semiautomatic rifles or shotguns with a "pistol grip" – and virtually all semiautomatic rifles and shotguns have these, so it effectively bans *all* semiautomatic long guns.
- It arbitrarily applies restrictions to peaceful private citizens, while exempting LEOs who had to be retired due to mental disorders.