

No. 23-863

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In The  
**Supreme Court of the United States**

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DOMINIC BIANCHI, *et al.*,

*Petitioners,*

v.

ANTHONY G. BROWN, *et al.*,

*Respondents.*

—◆—  
**On Petition For A Writ Of Certiorari  
Before Judgment To The  
United States Court Of Appeals  
For The Fourth Circuit**

—◆—  
**BRIEF OF AMICI CURIAE  
INTERNATIONAL LAW ENFORCEMENT  
EDUCATORS & TRAINERS ASSOCIATION, JOHN  
LOCKE FOUNDATION, AND INDEPENDENCE  
INSTITUTE IN SUPPORT OF PETITIONERS**

—◆—  
E. GREGORY WALLACE  
CAMPBELL UNIVERSITY  
SCHOOL OF LAW  
225 Hillsborough Street  
Raleigh, NC 27603  
(919) 696-3057  
wallaceg@campbell.edu

DAVID B. KOPEL  
INDEPENDENCE INSTITUTE  
727 East 16th Avenue  
Denver, CO 80203  
(303) 279-6536  
david@i2i.org  
*Counsel of Record*

JONATHAN D. GUZE  
JOHN LOCKE FOUNDATION  
4800 Six Forks Rd., Ste. 220  
Raleigh, NC 27609  
(919) 828-3876  
jguze@lockehq.org

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**INTEREST OF AMICI CURIAE<sup>1</sup>**

The **International Law Enforcement Educators and Trainers Association** (ILEETA) comprises 4,000 professional law enforcement instructors, committed to reducing risk and saving lives of law enforcement officers and citizens. ILEETA members train officers in proper use of firearms and other force, and many other topics, including control and safety. ILEETA provides training for trainers at its annual conference, and through the *ILEETA Journal*, quarterly *ILEETA Digest*, *ILEETA E-Bulletin*, and ILEETA Learning Lab. ILEETA's amicus briefs were cited by Justice Breyer in *Heller* and by Justices Alito and Stevens in *McDonald*.

The **John Locke Foundation** was founded in 1990 as a nonprofit think tank in North Carolina. It employs research, journalism, and outreach to promote liberty and limited constitutional government as the cornerstones of a society in which individuals, families, and institutions can freely shape their own destinies.

The **Independence Institute** is a public policy research organization based in Denver, Colorado, founded in 1985 on the eternal truths of the Declaration of Independence. The briefs and scholarship of Research Director David Kopel have been cited in seven opinions from this Court. The Institute's Senior Fellow

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<sup>1</sup> No party's counsel authored this brief. No one other than *amici*, their members, or their counsel contributed money to it. All counsel of record received notice of intent to file this brief at least 10 days prior to the deadline.



in Constitutional Studies, law professor Robert Natelson, has been cited in a dozen such opinions.

All *amici* strongly support the Constitution, including the Second Amendment, and wish to describe to this Court how the Maryland statute endangers law-abiding citizens and law enforcement officers.

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### SUMMARY OF ARGUMENT

The rifles banned by Maryland are excellent arms for lawful defense of self and others. Because the banned rifles fire ammunition that is *less* powerful than most other rifle ammunition, the recoil is lower. Hence, accuracy and comfort are greater. For accuracy, ergonomics, and other safety-related reasons, the banned arms are often chosen by law enforcement officers and by law-abiding citizens for lawful defense of self and others.

The rifles are not machine guns; they fire at the same rate as common handguns. They are less powerful than most other rifles. The wounds they cause are generally less severe than wounds from other long guns.

By mischaracterizing these firearms, the Fourth Circuit implicitly disparaged law enforcement officers. In America, the ordinary arms of civil peace officers are not weapons of war, and peace officers not an army of occupation.

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## ARGUMENT

The *en banc* Fourth Circuit in *Kolbe v. Hogan* called the AR-15 and other banned semiautomatic rifles “exceptionally lethal weapons of war,” unsuitable for self-defense, and with “a capability for lethality – more wounds, more serious, in more victims – far beyond that of other firearms in general, including other semiautomatic guns.” *Kolbe v. Hogan*, 849 F.3d 114, 125, 137 (4th Cir. 2017) (*en banc*).

After *Bruen*, lower courts that had previously upheld gun bans under other rationales have shifted to the *Kolbe* theory. For example, the Seventh Circuit declared the rifles are not “arms” protected by the Second Amendment because they are “almost the same” as machine guns “exclusively or predominantly useful in military service” or “reserved to the military.” *Bevis v. City of Naperville*, 85 F.4th 1175, 1194-97 (7th Cir. 2023).

If the claims were true, and the rifles were actually super-guns useful only for mass slaughter, typical American peace officers would not choose them, nor could they be allowed to.

### **I. Law enforcement officers choose rifles like those at issue because those rifles are often best for defense of self and others.**

Most law enforcement patrol cars carry a rifle, a shotgun, or both. The patrol rifle usually is a semiautomatic AR-type, or another type that Maryland also

bans. *Kolbe* labels them “exceptionally lethal weapons of war.” 849 F.3d at 124.

The “AR-15” was invented in 1956 by ArmaLite Corp., a pioneer in lighter-weight materials in arms manufacture. The rifle was ArmaLite’s 15th gun model.

ArmaLite built the ArmaLite Rifle-15 as an automatic weapon (in federal statutory terms, “machine-gun”), and sold the patent to Colt’s Manufacturing Co., which won a military contract early in the Vietnam War. The gun’s name was changed to M16, and it has been partly succeeded by the smaller M4 carbine.

In 1965, Colt’s introduced a civilian semiautomatic model (only one shot per trigger pull, in contrast to an automatic). Because the patent has expired, many manufacturers now make guns on the AR platform. But none of them are called “AR-15,” because Colt’s still owns the trade name. This brief uses the term “AR,” except where a source said “AR-15.”

*Kolbe* found “scant evidence” that the banned rifles “are possessed, or even suitable, for self-protection.” 849 F.3d at 138. To the contrary, ARs have exceptional utility for lawful defense of self and others, as demonstrated by the routine choices of law enforcement officers. One typical use is close-quarters operations inside buildings, a similar situation to that faced by many citizen defenders.

Prudently, American citizens have always looked to law enforcement for guidance in choosing defensive

firearms, because law enforcement firearms are selected with care. Officers choose their duty arms for one purpose: lawful defense of self and others.

The most important reason why citizens often do and should copy law enforcement officers' firearms selections is to ensure that citizens will have reliable firearms for defense. Officers' arms are well-suited for defense against violent criminals; and they are appropriate for use in civil society.<sup>2</sup>

Buford Boone, one of plaintiffs' firearms and ballistics experts in *Kolbe*, explained why AR platform rifles are particularly suitable for defensive purposes. See Boone Decl. at J.A. 2176-2183, in *Kolbe v. Hogan*, 849 F.3d 114 (4th Cir. 2017).<sup>3</sup>

Effective self-defense requires incapacitating the attacker as quickly as possible – delivering a “threat-stopping hit.” Such a hit requires two things: first, the defender's shot must hit the attacker. Second, the shot must be powerful enough to knock the attacker down. *Id.* at 2176-77.

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<sup>2</sup> In a typical law enforcement agency, only a small number of officers possess genuinely military arms, such as machine guns or stun grenades. These arms are deployed only for unusual situations, such as hostage scenarios or high-risk warrant service. These are certainly not the arms that a citizen would see an officer carrying during standard patrol. Most law enforcement leaders, and the public, would not tolerate such military equipment for routine law enforcement.

<sup>3</sup> Boone directed the FBI Ballistic Research Facility for 15 years.

There is an inherent tension between the two. The less powerful the gun, the easier it is to shoot accurately. The more powerful the gun, the better the chance that a hit will stop the attacker. For many defensive users, including law enforcement, the AR platform is an excellent compromise.

Like all centerfire rifles, ARs are more powerful than any handgun.<sup>4</sup> Among rifles, ARs are among the least powerful. Because ARs are rifles, they are large, and so are better at absorbing recoil than are handguns. Because AR ammunition is low power compared to other rifles, recoil is also lower.

Less recoil makes a gun easier to shoot accurately. So does the lesser weight of the AR. All the more so for persons who do not have great upper body strength.

Additionally, the AR platform is built for best ergonomics. The telescoping stock can adjust for a precise fit to the user's size. The customizable forward grip provides stability. Surrounding the barrel are rails (sometimes called the handguard or forend) that make it easy to add optics, such as scopes, red dots, and/or flashlights – all for greater accuracy. *Id.* at 2182.

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<sup>4</sup> The very small .22 caliber rimfire cartridge, which is used in both rifles and handguns, is less powerful than other ammunition. In a “rimfire” cartridge, such as the .22LR, the primer is contained in the rim of the cartridge base. Except in .22 caliber or smaller, rimfire ammunition is rarely used today. In a centerfire cartridge, the gunpowder explosion is initiated by the gun's firing pin striking the primer in the center of the cartridge base. References in this brief to “rifles” are to centerfire rifles, except as otherwise noted.

The AR's superior accuracy over handguns means that there will be fewer missed shots, thus posing less danger to bystanders. As discussed in Part III.E, for defense in the home, the most common AR ammunition calibers (.223 inches or 5.56mm) are less likely to penetrate walls than are handguns, other rifles, or shotguns.

An AR rifle is superb for putting a bullet on target. The trade-off is that the AR is inferior to most other rifles in being able to stop an attacker with one hit.

Law enforcement officers do not rely solely on the AR, nor do many law-abiding citizens. Handguns are superior in portability and maneuverability, and can be fired one-handed. But they require a higher degree of skill to shoot accurately.

A 12-gauge shotgun (the largest very common size) is most likely to deliver a threat-stopping hit at close range. But it has much greater recoil, making it more difficult to control. It is harder to reload, especially under the life-or-death conditions of self-defense.

There is no "best" type of gun for self- or home-defense. Different guns are best in different situations for different defenders. That is why law enforcement officers usually have a handgun in a holster and different arms in the patrol car. Many citizens also have more than one type of firearm. The Second Amendment guarantees citizens the individual right to choose any common arm.

**II. The rifles at issue fire at the same rate as most common handguns.**

Most AR platform citizen semiautomatic rifles have an appearance similar to the automatic, military M16. As this Court has explained, a semiautomatic firearm fires one bullet (or “round”) for each pull of the trigger, while an automatic weapon (machine gun) fires continuously so long as the shooter presses and holds the trigger. *Staples v. United States*, 511 U.S. 600, 602 n.1 (1994). “The AR-15 is the civilian version of the military’s M-16 rifle, and is . . . a semiautomatic weapon. The M-16, in contrast, is a selective fire rifle that allows the operator, by rotating a selector switch, to choose semiautomatic or automatic fire.” *Id.* at 603. That is why semiautomatics, specifically including the AR, “traditionally have been widely accepted as lawful possessions,” whereas machine guns have not. *Id.* at 612.

**A. Because semiautomatic rifles cannot fire automatically, they are not used by any military.**

Because the AR-15 lacks automatic-fire capability, the U.S. military does not use it. *See* Gregory Wallace, “Assault Weapon” *Myths*, 43 S. Ill. U.L.J. 193, 207-11 (2018). No military force in the world uses a service rifle that is semiautomatic only. Harold Johnson Decl.,

in *Heller v. District of Columbia*, 698 F. Supp. 2d 179 (D.D.C. Sept. 14, 2009).<sup>5</sup>

As one of plaintiffs' experts in *Kolbe* explained:

The defining characteristic of military weapons designed for combat – the characteristic that separates military weapons from civilian firearms – is the functional ability to fire in fully automatic mode, 3-round burst mode [a type of automatic fire], or select fire mode [the user can switch between automatic and semi-automatic]. The significance of this functional difference . . . [is] civilian firearms like the AR-15 cannot fire in fully automatic mode and therefore cannot be considered military weapons. The ability to fire in fully automatic mode is a military function.

Guy Rossi Decl. at J.A. 2129, in *Kolbe v. Hogan*.<sup>6</sup>

Thus, this Court in *Staples* used a descriptor that accurately differentiates the AR-15: it is the *civilian* version of the M16 rifle. *Staples*, 511 U.S. at 603. The semiautomatic AR-15 is not a military weapon and never has been.

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<sup>5</sup> Johnson is author of the Defense Intelligence Agency's SMALL ARMS IDENTIFICATION AND OPERATION GUIDE – EURASIAN COMMUNIST COUNTRIES (editions in 1969, 1970, 1973, 1976, 1983).

<sup>6</sup> Rossi is a former law enforcement officer who specialized in field training and defensive tactics instruction. He is a nationally recognized law enforcement trainer (including at ILEETA's annual training conference) and expert witness on use of force, defensive tactics, and firearms.



Although *Kolbe* called the semiautomatic AR-15 “most useful” in military service, 849 F.3d at 137, in reality it is *never* used in military service.

Relying on *Kolbe*, the Seventh Circuit labeled ARs “almost the same” as machine guns and other weapons “exclusively or predominantly useful in military service” or “reserved to the military.” *Bevis*, 85 F.4th at 1194-97. According to the Seventh Circuit, the AR-15 is “indistinguishable” from the M16. *Id.* at 1197. But the Seventh Circuit overlooked that one rifle fires much faster than the other, and so the slower one is never adopted by any military.

**B. Semiautomatic rifles fire at the same rate as common handguns, much slower than automatic rifles.**

The U.S. military’s M16/M4 rifles have a cyclic rate-of-fire of 700-to-900 rounds-per-minute in automatic mode. U.S. Dep’t of the Army, FIELD MANUAL 3-22.9, RIFLE MARKSMANSHIP: M16/M4-SERIES WEAPONS, Table 2-1 (2008).<sup>7</sup> That is a rate of 12-to-15 rounds per second.

*Kolbe* asserted the semiautomatic-only AR-15 rate-of-fire is “nearly identical.” 849 F.3d at 136. The cited authority was a 1994 congressional report stating that “[s]emiautomatic weapons can be fired at rates of 300 to 500 rounds per minute, making them virtually

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<sup>7</sup> [https://www.moore.army.mil/infantry/DoctrineSupplement/ATP3-21.8/PDFs/fm3\\_22x9.pdf](https://www.moore.army.mil/infantry/DoctrineSupplement/ATP3-21.8/PDFs/fm3_22x9.pdf).

indistinguishable in practical effect from machine guns.” *Id.* at 125 (quoting H.R. Rep. No. 103-489, at 18 (1994) (internal quotations omitted)). *Bevis* claimed ARs can fire 300 rounds-per-minute. 85 F.4th at 1196-97. It found no relevant difference between that rate and the 700 rounds-per-minute automatic rate-of-fire for the military M16/M4. *Id.* See also *Viramontes v. Cook County*, 2024 WL 897455, at \*8 (N.D. Ill., Mar. 1, 2024) (following *Bevis* and calling the difference in automatic and semiautomatic rates-of-fire “truly a distinction without a difference”).

The above claims are impossible. Because any semiautomatic fires only one round for each trigger pull, the user would have to pull the trigger five-to-eight times *per second* for an entire minute. That would take a superhuman trigger finger, especially when pulling against the several pounds of force required to press a trigger. The 300-to-500-rounds-per-minute pseudo-fact came from an unsourced claim by a gun-control advocate in 1991. See Wallace, *Myths* at 214-22.

All semiautomatics fire at about the same rate. The rate of fire of an AR or other semiautomatic rifle is like the rate of fire of common semiautomatic handguns, such as those made by Glock, Smith & Wesson, or Sig Sauer.

Louis Klarevas, one of the government experts in current “assault weapon” litigation, sets the average shooter’s rates-of-fire for semiautomatic handguns and semiautomatic “assault rifles” at an identical two

rounds per second; an expert shooter can fire both weapons at three rounds per second. Louis Klarevas, RAMPAGE NATION: SECURING AMERICA FROM MASS SHOOTINGS 212 (2016); *see also* Gregory Wallace, “Assault Weapon” Lethality, 88 Tenn. L. Rev. 1, 18-27 (2020) (rate-of-fire comparisons for AR-15, M16/M4, and handguns).

*Kolbe* asserted there is only a “slight” difference between automatic and semiautomatic fire. 849 F.3d at 125. *Bevis* adopts this claim. 85 F.4th at 1196. However, the rate of automatic fire is 700-to-900 rounds per minute, whereas the rate of semiautomatic fire is 120-to-180. The semiautomatic rate is about *five times slower* than the automatic rate.<sup>8</sup>

This difference is significant, not “slight.” An average shooter firing a military M16 in automatic mode can fire 100 rounds in the same or less time than it would take the same shooter firing a semiautomatic AR-15 to fire 20 rounds. If the shooter fires indiscriminately into a crowded bar, church, or classroom, the fully automatic M16 would launch some 80 more bullets into the crowd.

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<sup>8</sup> The Seventh Circuit asserted that even if the AR-15 is not a machine gun, modifications like bump stocks and auto sears can transform it into one. 85 F.4th at 1196. An “auto sear” is a type of machine gun conversion kit. By federal law, it is treated the same as a machine gun. 27 C.F.R. §179.11. Bump stocks do substantially increase a rifle’s rate of fire. Thus, some legislatures have chosen to regulate them similarly to machine gun conversion kits.

**III. The rifles at issue are more powerful than handguns and less powerful than most other rifles.**

The Fourth Circuit thrice asserted in *Kolbe* that the banned firearms have “a capability for lethality – more wounds, more serious, in more victims – far beyond that of other firearms in general, including other semiautomatic guns.” 849 F.3d at 125, 137, 144. This is false.

**A. Because AR bullets are small, their terminal performance is inferior to many other long guns.**

The wounding power of a bullet comes mainly from the *kinetic energy* it imparts to the target. The formula is:  $KE = \frac{1}{2} \times M \times V^2$ . In words: one-half of the Mass, times the square of the Velocity. In other words, wounding power depends on a combination of bullet weight and bullet speed.

Consider the wounding effects (“terminal performance”) of three common rounds of ammunition. The diminutive .22LR rifle fires bullets weighing up to 40 grains; it is a favorite for plinking at cans. The .44 magnum revolver is a powerful defensive handgun, carried by fictional Detective “Dirty Harry” Callahan. Its bullets weigh around 200 grains. *See* Todd Woodward (ed.), *CARTRIDGES OF THE WORLD* 473, 638 (17th ed. 2022). The 12-gauge 00-buckshot shotgun cartridge is so named because it is popular for deer hunting. It fires nine pellets all at once, each weighing 54 grains.

Each of the nine shotgun pellets weighs more than the single small .22 rifle bullet. Cumulatively, the shotgun rounds weigh 486 grains. So at short range, they will cause much more tissue disruption than the 200 grain big handgun bullet; the big handgun bullet will cause far more disruption than the tiny rifle bullet. See Martin Fackler, *Civilian Gunshot Wounds and Ballistics: Dispelling the Myths*, 16 Emerg. Med. Clin. North Am. 17, 23 (1998). Dr. Fackler, military trauma surgeon, served as director of the Army's Ballistic Research Laboratory for 10 years. He was one of the world's foremost wound ballistics experts.

The following table compares the typical weight, velocity, and kinetic energy of some modern handgun, rifle, and shotgun projectiles, measured at the firearm's muzzle and at a distance of 100 yards.

Table 1. Ballistics Data

<b>Caliber</b>	<b>Bullet Weight (Grains)</b>	<b>Velocity @Muzzle ft/s</b>	<b>Velocity @100 yds ft/s</b>	<b>Energy @Muzzle ft lbs</b>	<b>Energy @100 yds ft lbs</b>
<b>Handguns</b>					
9 mm	115	1140	954	332	232
.357 Magnum	125	1500	1147	624	365
.40 S&W	175	1010	899	396	314
10mm	180	1275	1052	650	443
.44 Magnum	200	1500	1196	999	635
.45 ACP +P	230	950	872	461	385
<b>Long guns</b>					
.22LR Rimfire	40	1070	908	102	73
<b>.223/5.56</b>	<b>55</b>	<b>3240</b>	<b>2854</b>	<b>1282</b>	<b>995</b>

.243 Winchester	90	3150	2911	1983	1693
6.5 Creedmoor	143	2700	2557	2315	2076
.30-30	160	2400	2151	2046	1643
.308/7.62	165	2700	2496	2670	2282
.30-06	178	2750	2582	2989	2635
.300 Win. Mag	180	2960	2766	3502	3058
.338 Lapua Mag	270	2800	2680	4699	4304
.50 BMG	750	2820	2728	13241	12388
12-ga shotgun slug <sup>9</sup>	438	1610	1139	2521	1262

Gregory Wallace, “Assault Weapon” *Lethality*, 88 Tenn. L. Rev. 1, 44-45 (2020).

As the Table shows, rifles of all sorts (other than .22 caliber) have more kinetic energy than handguns, so they have more wounding power. AR rifles are more powerful than handguns, and so are all other rifles above .22 caliber.

Compared to other rifles, the .223/5.56 ammunition for AR rifles has slightly higher velocity, but uses a smaller bullet. As a result, this AR ammunition imparts *much less* kinetic energy to the target than do most other rifles. Compare the .223/5.56 to three

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<sup>9</sup> While shotguns most often use cartridges that fire multiple small pellets, a “shotgun slug” is a single large lead projectile.

classic American hunting rifle cartridges, the .308, .30-30, and .30-06. The AR has much less kinetic energy.

The AR's bullets also strike with less energy than a shotgun slug, which is often used for hunting deer and similar game.

Throughout American history, the standard military cartridge has always been commonly used for hunting and self-defense. This has also been true for the .223, except that in some states, it is illegal to hunt deer or larger game with the .223 because it is considered too *underpowered* to reliably cause immediate, humane kills. *See, e.g.*, 2 Code of Colo. Reg. §406-2-I-203(A)(1); 4 Va. Admin. Code §15-270-10; Wash. Admin. Code §220-414-020(1)(c). Dr. Fackler calls the .223 round “a ‘varmint’ cartridge, used effectively for shooting woodchucks, crows, and coyotes.” Martin Fackler, *Literature Review*, 5 *Wound Ballistics Rev.* 39, 41 (Fall 2001).

### **B. The ARs' wounding power is no more severe than non-banned long guns.**

In addition to calculating the kinetic energy of various types of ammunition, another method of studying wound effects is to examine ammunition penetration of various targets; these include wounds in human subjects, and test-firing projectiles into media such as ballistic gelatin.

The Army Ballistic Research Laboratory examines all aspects of firearms wounds, including permanent

and temporary cavities in the target, penetration depth, and deformation and fragmentation of bullets. Compared to .223 and 5.56mm bullets, wound profiles of bullets from very common rifle hunting calibers, such as 308, .30-30, and .30-06, are at least as extensive and typically more so. Martin Fackler, *Wound Profiles*, 5 *Wound Ballistics Rev.* 25, 29-31, 33-34 (Fall 2001). See Wallace, *Lethality* at 43-56 (in-depth analysis of wound ballistics).

As one of the plaintiffs' ballistic experts in *Kolbe* explained:

AR15's firing relatively weak .223/5.56 mm ammunition . . . pale in destructive capacity when compared to common civilian hunting rifles firing calibers like .260 Rem, .270 Win, 7 mm Mag, .30-06, .300 Mag, .338 Mag, .375 H&H, 416 Rigby, .458 Lott, and .500 Nitro. Even hunting rifles in older calibers from the 1800's, like .30-30 and .45-70, penetrate much deeper and are far more damaging than the .223/5.56 mm ammunition fired by the AR15.

Gary Roberts Decl. at J.A. 2095, in *Kolbe v. Hogan*.<sup>10</sup>

Most gun crimes, including mass shootings, take place at close range. So do most defensive gun uses. Dr. Fackler observes that at close range "the 12 gauge shotgun (using either buckshot or a rifled slug) is far

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<sup>10</sup> Roberts served on the Joint Service Wound Ballistic Integrated Product Team and was a consultant to the Joint FBI-USMC munitions testing program. He has performed military, law enforcement, and privately funded wound ballistic testing and analysis.



more likely to incapacitate than is a .223 rifle. The 12 gauge shotgun is simply a far more powerful weapon.” Martin Fackler, *Questions and Comments*, 5 *Wound Ballistics Rev.* 5 (Fall 2001).<sup>11</sup>

P.K. Stefanopoulos, trauma surgeon and former career military officer who has written extensively on wound ballistics, states that at distances of less than 10 feet “the shotgun produces the most devastating injuries of all small arms.” P.K. Stefanopoulos, et al., *Wound Ballistics of Firearm-Related Injuries – Part 1: Missile Characteristics and Mechanisms of Soft Tissue Wounding*, 43 *Int. J. Oral Maxillofac. Surg.* 1445, 1453 (2014).

**C. There are longstanding complaints within the military about the relatively weak stopping power of AR bullets.**

The Fourth Circuit’s comparisons between the civilian semiautomatic AR-15 and the military’s automatic M16/M4 assume that the military rifles themselves are exceptionally lethal. That assumption is wrong.

The automatic military M16/M4 and the civilian semiautomatic AR-15 fire similar cartridges. The military uses the 5.56mm NATO round; civilians use that round, and also the slightly smaller .223 (inches)

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<sup>11</sup> Because shotgun pellets are spheres, whereas bullets are conoidal, pellets lose relatively more energy over distance, from air friction.

caliber round. (Caliber is a measure of the bullet's diameter.)

Both the .223 and the 5.56 rounds are smaller and lighter, and hence less powerful, than the standard rounds of previous standard American combat rifles. The standard U.S. Army round in the Korean War for the M14 automatic rifle was the 7.62mm (.308 inches). During the first half of the twentieth century, the standard was the .30-06 (.30 inches, adopted in 1906). It was used in the semiautomatic M1 Garand of WWII, and in bolt-action rifles before that.

The Army's 1960s shift to smaller and lighter ammunition enabled soldiers to carry more. Additionally, the smaller bullets need less gunpowder, so recoil is reduced. Less recoil means more accuracy.

The disadvantage of the newer, smaller ammunition compared to its predecessors is less stopping power. Major General Robert Scales testified to the Senate that the 5.56mm cartridge "is simply too small for modern combat. . . . The civilian version of the 5.56-mm bullet was designed as a 'varmint killer' and six states prohibit its use for deer hunting because it is not lethal enough to ensure a quick kill." Senate Comm. on Armed Services, Subcomm. on Airland, Hearing on United States Military Small Arms Requirements, Cong. S. Hrg. 115-425, at 12 (May 17, 2017).

Soldiers have complained that the small 5.56mm round lacks sufficient effectiveness in incapacitating the enemy. According to combat veteran and small

arms expert Jim Schatz, “The disturbing failure of the 5.56x45mm caliber to consistently offer adequate incapacitation has been known for nearly 20 years.” Jim Schatz, *Do We Need a New Service Rifle Cartridge? End User Perspective and Lessons Learned*, Small Arms Def. J. 119 (Spring 2011).<sup>12</sup>

Schatz describes one Special Forces (SF) mission in Afghanistan when an insurgent was shot seven or eight times in the torso, got back up, climbed over a wall, and reengaged other SF soldiers, killing a SF medic. The insurgent then was shot another six-to-eight times from about 20-30 yards before finally being killed by a SF soldier with an M1911 handgun. Schatz at 125. *See also* Glenn Dean & David LaFontaine, *Small Caliber Lethality: 5.56mm Performance in Close Quarters Battle*, WSTIAC Q., Jan. 2008, at 3 (describing multiple reports from soldiers in Afghanistan using 5.56mm rounds “experiencing multiple ‘through-and-through’ hits on an enemy combatant where the target continued to fight”).<sup>13</sup>

Mark Bowden’s bestselling book *Black Hawk Down* vividly recounts the less-than-lethal performance of the Army’s 5.56mm bullet in the Battle of Mogadishu in 1993. One Delta operator’s rounds “were passing right through his targets. . . . The bullet made a small, clean hole, and unless it happened to hit the heart or spine, it wasn’t enough to stop a man in his

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<sup>12</sup> <https://www.yumpu.com/en/document/read/37272962/do-we-need-a-new-service-rifle-cartridge-hkprocom>.

<sup>13</sup> <https://perma.cc/682N-7E6S>.

tracks. [The operator] felt like he had to hit a guy five or six times just to get his attention.” Mark Bowden, *BLACK HAWK DOWN: A STORY OF MODERN WAR* 208 (1999).

Partly because of the above complaints, the U.S. military has recently decided to adopt the larger-caliber 6.8mm rifle round. *See* C. Todd Lopez, *Army Announces 2 New Rifles for Close-Combat Soldiers*, U.S. Dep’t of Defense (Apr. 22, 2022).<sup>14</sup>

**D. Reports of the AR-15’s massive wounding power in Vietnam were proven false by subsequent testing.**

The Fourth Circuit’s *Kolbe* quotes a field test report from Vietnam describing the then-automatic AR-15 as a “very lethal combat weapon” firing “very high velocity” projectiles causing “[a]mputations of limbs, massive body wounds, and decapitations.” *Id.* at 124. This testing subsequently was shown to be irreproducible, and likely fabricated.

The 1962 military field testing in Vietnam was part of Project AGILE, a research program of the Defense Department’s Advanced Research Projects Agency (DARPA). At the time, the military was considering whether to replace the older M14 with the select-fire AR-15 as its primary combat rifle. Project AGILE supplied rifles to South Vietnamese troops for field trials.

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<sup>14</sup> <https://perma.cc/34NR-AGRW>.

DARPA's report claimed massive injuries from the AR-15, including two amputations and a decapitation. DARPA, *Test of Armalite Rifle, AR-15*, Annex A, at 5, 7 (July 31, 1962).<sup>15</sup> Supposedly, the AR-15 inflicted "catastrophic wounds," including one round that "took [the head] completely off" an enemy soldier, while another round "in the right arm, took it completely off, too." Wounds to the torso caused "the abdominal cavity to explode" and all wounds were fatal, including "extremity hits."

Later, these gruesome anecdotes were exposed as gross exaggerations designed to convince the military to adopt the rifle. The Army's Ballistic Research Laboratory tested the rifle in gelatin, animals, and cadavers but could not duplicate the "theatrically grotesque wounds" reported by Project AGILE. See C.J. Chivers, *THE GUN* 283, 284-88 (2010); Blake Stevens & Edward Ezell, *THE BLACK RIFLE: M16 RETROSPECTIVE* 110-16 (1994).

Attempting to reproduce the extreme results that purportedly occurred in Vietnam, the Army Laboratory even tried hollow-point rounds. While not used by the military, hollow-points are very widely used by American law enforcement and citizens. Hollow-points generally produce more destructive wounds. Yet "even the hollow-points failed to duplicate anything like the spectacular effects recorded by the Vietnamese unit commanders and their American advisors, which had subsequently been taken as fact and much used in the

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<sup>15</sup> <https://apps.dtic.mil/sti/pdfs/AD0343778.pdf>.

. . . campaign to sell the AR-15.” Stevens & Ezell at 116.<sup>16</sup>

C.J. Chivers, a Pulitzer Prize-winning *New York Times* journalist, extensively researched the testing for his book *The Gun*. “No matter what they did, they were unable to reproduce the effects that the participants in Project AGILE claimed to have seen.” Chivers at 288.

The Ballistic Research Laboratory’s study was kept secret for over four decades. As a result, “at the most important time, during the early and mid-1960s, the Project AGILE report, with its suspicious observations and false conclusions, remained uncontested. The AR-15 continued to rise, boosted by a reputation for lethality and reliability that it did not deserve.” *Id.* at 289.

Dr. Fackler recounted how other claims in the 1960s and 1970s about the M16’s bullets causing “massive” and “devastating” injuries were disproven or contradicted by other reports. Martin Fackler, *Gunshot Wound Review*, 28 *Annals of Emergency Medicine* 194, 194-95 (Aug. 1996). Delegates to war surgery conferences in the early 1970s “reported no unusual problems associated with ‘high-velocity’ bullet wounds in Vietnam. There were no reports of rifle bullet wounds causing traumatic amputations of an extremity.” *Id.* According to Dr. Fackler, “In my experience and

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<sup>16</sup> Ezell served as Curator of the National Firearms Collection at the National Museum of American History, part of the Smithsonian Institution. He founded the Institute for Research on Small Arms in International Security.

research, at least as many M16 users in Vietnam concluded that [the M16 round] produced unacceptably minimal, rather than ‘massive,’ wounds.” Martin Fackler, *Literature Review* at 40.

**E. AR ammunition is safer than other types because it is less likely to penetrate a wall.**

Some gun ban advocates assert that AR rounds are more likely to penetrate the walls within a building. To the contrary, AR bullets generally penetrate *less* through building materials than do common handgun rounds. That is one reason law enforcement officers often use ARs for raiding buildings and barricaded hostage situations. *See* Boone Decl. at J.A. 2168-69, in *Kolbe v. Hogan*. A Massachusetts Municipal Police training manual states that AR-15s are less dangerous to bystanders because “the most popular patrol rifle round, the 5.56mm NATO (.223 Remington) will penetrate fewer walls than service pistol rounds or 12 gauge slugs.” Massachusetts Municipal Police Training Committee, BASIC FIREARMS INSTRUCTOR COURSE: PATROL RIFLE 3 (Sept. 2007).<sup>17</sup>

A founder and senior instructor of the Los Angeles Police Department’s Tactical Rifle Team explains that “concerns about overpenetration and the danger to the populace presented by missed rounds have been greatly exaggerated. . . . [T]he 5.56mm/.223 is relatively safer than pistol bullets for everyone in

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<sup>17</sup> <https://perma.cc/M8VW-DUXR>.

close-quarter-battle (CQB) application.” Gabriel Suarez, *THE TACTICAL RIFLE: THE PRECISION TOOL FOR URBAN POLICE OPERATIONS* 38 (1999).

AR rifle bullets do penetrate soft body armor, which is designed only to stop handgun bullets. The same is true for all other rifles, other than the tiny .22 rimfire. *See* U.S. Dep’t of Justice, National Inst. of Justice, *Guide: Body Armor* 12-13 (2014).<sup>18</sup>

#### **IV. The deadliest firearms in mass shootings are handguns.**

*Kolbe* claimed that attacks with the banned semi-automatic rifles result in more deaths, more injuries, and more severe injuries than attacks involving other firearms. 849 F.3d at 125, 137, 144. Recent research on mass shootings contradicts this claim.

Researchers led by Dr. Babak Sarani, founder and chief of the Center for Trauma and Critical Care at George Washington University Hospital, examined the relationship between the type of firearm used, wounding characteristics, and probability of death in mass shootings. Babak Sarani, et al., *Wounding Patterns Based on Firearm Type in Civilian Public Mass Shootings in the United States*, 228 *J. Amer. College Surgeons* 228 (Mar. 2019). They studied firearm types and autopsy reports for 232 victims from 23 mass shootings, including high-casualty shootings with “assault weapons” at Orlando and Las Vegas.

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<sup>18</sup> <https://www.ojp.gov/pdffiles1/nij/247281.pdf>.



Surprisingly, the researchers found that mass shootings with handguns are more lethal than those with rifles because handguns result in more wounds per victim and more injuries to vital organs. *Id.* at 228-29, 232-33. “All of us were shocked,” Dr. Sarani said. “We came to the table with our bias that an assault weapon would be worse.” Carolyn Crist, *Handguns More Lethal Than Rifles in Mass Shootings*, Reuters (Dec. 31, 2018).<sup>19</sup>

Victims shot with a handgun were almost four times more likely to have three or more wounds compared to those shot with a rifle. Thus “the probability of death is higher for events involving a handgun than a rifle.” Sarani at 232. Twenty-six percent of victims shot with handguns and 16% shot with shotguns had multiple fatal organ injuries; only 2% of those shot by a rifle had two or more fatal organ injuries. *Id.* Wounds to the brain and heart, which have the highest fatality rates, were most likely when handguns were used. *Id.* at 233. Victims shot with rifles were twice as likely to have a preventable death (if medical care were rendered in time) than those shot with other firearms. *Id.* at 231.

The handgun is the most common weapon used to commit mass shootings. Criminals with handguns perpetrated high-casualty shootings at Virginia Tech (58), Ft. Lauderdale (48), Killeen, Texas (45), Ft. Hood (45), and Thousand Oaks (33), where the total casualties approximated or exceeded mass shootings with “assault

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<sup>19</sup> <https://perma.cc/N9VY-CVUX>.

weapons” at Highland Park (53), El Paso (49), Sutherland Springs (45), Uvalde (38), and Parkland (34). See The Violence Project, *Mass Shooter Database* (vers. 8.0 January 2024).<sup>20</sup> Overall, “assault weapons” have been used in only 28% of mass shootings. *Id.*

**V. Maryland’s ban implicitly disparages law enforcement officers and harms community relations.**

Suppose the arguments about the AR’s “unusual dangerousness” were accurate: the banned weapons are useless for self-defense and instead are made solely for mass homicide; every characteristic these arms possess is designed for killing large numbers of people. The rifles are so hideous – so useless for anything except carnage – that no one may have them. Except government law enforcement personnel.

*Amici* reject the libel that ordinary arms of American peace officers are weapons of mass killers. Consider the following descriptions:

- “Officer Smith shot the suspect with a common rifle, well-suited for lawful defense of self and others.”
- “Officer Smith shot the suspect with a weapon of war whose only purpose is mass killing.”

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<sup>20</sup> <https://www.theviolenceproject.org/mass-shooter-database/>.

The first statement is accurate. The second is the Respondents' view, and it inflames anger and hatred against law-abiding law enforcement officers.

If Maryland prevails because AR rifles are held to be mass murder weapons, police use of patrol rifles may trigger complaints of excessive use of deadly force. Although law enforcement officers are exempted from the ban, they are not excused from the consequences of using excessive force.

Law enforcement officers are not soldiers wielding weapons of war, and their interactions with citizens are not governed by rules of engagement for the battlefield. The challenged statute implicitly denigrates peace officers by treating them like an occupying army. Such negative attitudes make the public less willing to cooperate with law enforcement and damage community relations.



## CONCLUSION

ARs and other banned semiautomatic rifles are superb for lawful defense of self and others. The assertions against them are implausible. The petition for certiorari should be granted.

Respectfully submitted,

DAVID B. KOPEL  
INDEPENDENCE INSTITUTE  
727 East 16th Avenue  
Denver, CO 80203  
(303) 279-6536  
david@i2i.org  
*Counsel of Record*

E. GREGORY WALLACE  
CAMPBELL UNIVERSITY  
SCHOOL OF LAW  
225 Hillsborough Street  
Raleigh, NC 27603  
(919) 696-3057  
wallaceg@campbell.edu

JONATHAN D. GUZE  
JOHN LOCKE FOUNDATION  
4800 Six Forks Rd., Ste. 220  
Raleigh, NC 27609  
(919) 828-3876  
jguze@lockehq.org