

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

JOSEPH R. CAPEN and NATIONAL
ASSOCIATION FOR GUN RIGHTS,

Plaintiffs,

v.

ANDREA JOY CAMPBELL, in her
official capacity as Attorney General
of the Commonwealth of Massachusetts,

Defendant.

Civil Action No.
22-11431-FDS

**MEMORANDUM AND ORDER ON PLAINTIFFS’
MOTION FOR PRELIMINARY INJUNCTION**

SAYLOR, C.J.

This case involves a Second Amendment challenge to a Massachusetts statute prohibiting the possession, sale, and transfer of certain semiautomatic weapons, as well as magazines capable of holding more than ten rounds of ammunition. *See* Mass. Gen. Laws ch. 140, §§ 121, 131M. Plaintiff Joseph R. Capen alleges that, but for the ban, he would acquire the proscribed firearms and magazines for self-defense and other purposes. The National Association for Gun Rights is a non-profit association that alleges that its members are similarly situated to Capen.

Plaintiffs have moved for preliminary relief enjoining enforcement of the statute. For the reasons set forth below, the statute comports with the requirements of the Second Amendment, and therefore plaintiffs cannot demonstrate a likelihood of success on the merits of their claims. The motion will accordingly be denied.

I. Background

The Court relies on the memoranda submitted by the parties and four *amici curiae*, affidavits, and documentary evidence to decide the present motion.¹

A. Factual

1. The Parties

Joseph R. Capen is a resident of Massachusetts. (Compl. ¶ 2). According to the complaint, he is eligible to receive and possess firearms and magazines and, “but for the credible threat of prosecution under the challenged laws, would purchase the Banned Firearms and Banned Magazines to keep in his home for self-defense and other lawful purposes.” (*Id.*).

The National Association for Gun Rights (“NAGR”) is a non-profit association organized under 26 U.S.C. § 501(c)(4). (*Id.* ¶ 1). According to the complaint, “NAGR seeks to defend the right of all law-abiding individuals to keep and bear arms.” (*Id.*).

Andrea Campbell is the Attorney General of Massachusetts and the chief law-enforcement officer for the Commonwealth. (*Id.* ¶ 4).²

2. The Challenged Statutes

The Massachusetts statute at issue was modeled after the (now-expired) 1994 Public Safety and Recreational Firearms Use Protection Act, Pub. L. No. 103-322, §§ 110101-06, 108 Stat. 1796, 1996-2010 (1994) (the “federal statute”). That statute banned the manufacture, transfer, and possession of nineteen specific models of “semiautomatic assault weapons,” along

¹ The Brady Center to Prevent Gun Violence, March for Our Lives, Giffords Law Center to Prevent Gun Violence, and Everytown for Gun Safety Support Fund submitted *amicus curiae* briefs in support of defendant’s opposition to the motion for preliminary injunction.

² This suit was originally brought against Charles D. Baker, Jr. and Maura Healey, the Governor and Attorney General of the Commonwealth (respectively) at the time the suit was filed. The claim against Governor Baker was dismissed on November 1, 2022. Andrea Campbell is the current Attorney General.

with copies or duplicates of those firearms. *Id.* § 110102(b), 108 Stat. 1997-98.³ It also banned any semiautomatic rifle, pistol, or shotgun with two or more combat-oriented features as defined by the statute. *Id.* Those features included, for example, folding or telescoping stocks, protruding pistol grips, barrel shrouds, and threaded barrels designed to accept silencers or flash suppressors. *Id.*

Separately, the federal statute banned “large capacity ammunition feeding devices,” defined as “a magazine, belt, drum, feed strip, or similar device . . . that has a capacity of, or that can be readily restored or converted to accept, more than 10 rounds of ammunition.” *Id.* § 110103(b), 108 Stat. 1999.⁴

In adopting the statute, Congress acknowledged that the prohibited assault weapons had “a capability for lethality—more wounds, more serious, in more victims—far beyond that of other firearms in general, including other semiautomatic guns.” H.R. Rep. No. 103-489, at 19-20 (1994). By its terms, the federal statute expired in 2004. *See* Pub. L. No. 103-322, § 110105, 108 Stat. 2000 (1994).

The Massachusetts statute (“the Act”), which was passed in 1998 and made permanent after the federal statute expired, makes it a crime to sell, transfer, or possess assault weapons. Mass. Gen. Laws ch. 140, § 121. The proscribed firearms include both specific models, such as the Colt AR-15, and unenumerated weapons with two or more of the features identified in the

³ Plaintiffs contend that “assault weapon” is “a rhetorically charged political term meant to stir the emotions of the public.” (Pls. Mem. ¶ 1). They propose using the term “banned firearm” instead. Because the First Circuit used the term “assault weapon” to refer to the same statute in *Worman v. Healey*, 922 F.3d 26 (1st Cir. 2019), this memorandum and order will follow suit.

⁴ Again, plaintiffs contend that the term “large-capacity feeding device” is “politically charged rhetoric,” as magazines capable of holding more than ten rounds are “standard.” (Brown Decl. ¶ 4). They propose using the term “banned magazine” instead. (Pls. Mem. ¶ 2). Again, the First Circuit in *Worman* (and most other courts) have used the term “large-capacity magazines (LCMs),” and this memorandum and order will do the same. *See Worman*, 922 F.3d at 30.

federal ban. *Id.* The Act also prohibits the sale, transfer, and possession of “large capacity feeding devices” capable of holding more than ten rounds of ammunition or more than five shotgun shells. Mass. Gen. Laws ch. 140, § 131M.

B. Procedural Background

The complaint alleges that the Act violates plaintiffs’ Second Amendment rights to keep and bear arms by banning firearms and magazines “typically possessed by law-abiding citizens for lawful purposes.” (Compl. ¶¶ 34-37). Plaintiffs seek a declaratory judgment under 28 U.S.C. § 2201 that the Act is unconstitutional, a preliminary and permanent injunction enjoining defendant from enforcing the Act, remedies under 42 U.S.C. § 1983, and reasonable attorneys’ fees and costs under 42 U.S.C. § 1988. (*Id.* ¶¶ 38-40).

II. Legal Standard

A preliminary injunction is an “extraordinary and drastic remedy” that “is never awarded as of right.” *Munaf v. Geren*, 553 U.S. 674, 689-90 (2008) (quoting *Yakus v. United States*, 321 U.S. 414, 440 (1944)). A plaintiff seeking a preliminary injunction must establish that (1) he is likely to succeed on the merits; (2) he is likely to suffer irreparable harm in the absence of preliminary relief; (3) the balance of equities tips in his favor; and (4) an injunction serves the public interest. *Winter v. Nat. Res. Def. Council*, 555 U.S. 7, 20 (2008). A plaintiff’s likelihood of success on the merits “weighs most heavily” in the court’s determination; without it, the remaining factors “become matters of idle curiosity.” *Ryan v. U.S. Immigr. & Customs Enf’t*, 974 F.3d 9, 18 (1st Cir. 2020) (citing *New Comm Wireless Servs. v. SprintCom Inc.*, 287 F.3d 1, 9 (1st Cir. 2002)). “[A]n inquiring court need not conclusively determine the merits of the movant’s claim; it is enough for the court simply to evaluate the likelihood . . . that the movant ultimately will prevail on the merits.” *Id.* at 18.

III. Likelihood of Success on the Merits

A. Second Amendment Jurisprudence

The Second Amendment provides: “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.” U.S. Const. amend. II. The modern understanding of that amendment has been explored by the Supreme Court in three cases and a brief *per curiam* decision: *District of Columbia v. Heller*, 554 U.S. 570 (2008); *McDonald v. City of Chicago*, 561 U.S. 742 (2010); *Caetano v. Massachusetts*, 577 U.S. 411 (2016) (*per curiam*); and *New York State Rifle & Pistol Ass’n v. Bruen*, 597 U.S. 1 (2022).

1. Heller

The Supreme Court’s “first in-depth examination of the Second Amendment” came in 2008 with its decision in *Heller*, 554 U.S. at 635. There, the court struck down the District of Columbia’s “total ban on handguns, as well as its requirement that firearms in the home be kept nonfunctional even when necessary for self-defense.” *Id.* at 576. The court’s opinion directly addressed the question of what kinds of weapons are protected by the Second Amendment.

Heller interpreted the Second Amendment as having two constituent parts: a prefatory clause (“A well regulated militia, being necessary to the security of a free State”) and an operative clause (“the right of the people to keep and bear Arms, shall not be infringed”). *Id.* at 579, 595. Interpreting the latter, the court ruled that the term “arms” applied “to weapons that were not specifically designed for military use and were not employed in a military capacity.” *Id.* at 581. It also confirmed the holding in *Muscarello v. United States*, 524 U.S. 125 (1998), that to “bear arms” meant to “wear, bear, or carry . . . upon the person or in the clothing or in a pocket, for the purpose . . . of being armed and ready for offensive or defensive action in a case of conflict with another person.” *Id.* at 584.

The court concluded that the operative clause “guarantee[s] the individual right to possess and carry weapons in case of confrontation.” *Id.* at 592. But it also noted:

Of course the right [is] not unlimited, just as the First Amendment’s right of free speech was not. Thus, we do not read the Second Amendment to protect the right of citizens to carry arms for *any sort* of confrontation, just as we do not read the First Amendment to protect the right of citizens to speak for *any purpose*.

Id. at 595 (citation omitted).

The court specifically clarified that one of the limitations of the Second Amendment is that it “extends only to certain types of weapons.” *Id.* at 623. Among other things, the court discussed its decision in *United States v. Miller*, 307 U.S. 174 (1939), where the court “upheld against a Second Amendment challenge two men’s federal indictment for transporting an unregistered short-barreled shotgun in interstate commerce, in violation of the National Firearms Act.” *Heller*, 554 U.S. at 621-22. The court emphasized that the basis for the *Miller* decision was not that the defendants had been carrying the shotguns for “nonmilitary use,” but that “the *type of weapon at issue* was not eligible for Second Amendment protection” *Id.* at 622.

The court then observed:

We may as well consider at this point . . . *what* types of weapons *Miller* permits. Read in isolation, *Miller*’s phrase “part of ordinary military equipment” could mean that only those weapons useful in warfare are protected. That would be a startling reading of the opinion, since it would mean that the National Firearms Act’s restrictions on machineguns (not challenged in *Miller*) might be unconstitutional, machineguns being useful in warfare in 1939. We think that *Miller*’s “ordinary military equipment” language must be read in tandem with what comes after: “[O]rdinarily when called for [militia] service [able-bodied] men were expected to appear bearing arms supplied by themselves and of the kind in common use at the time.” The traditional militia was formed from a pool of men bringing arms “in common use at the time” for lawful purposes like self-defense. . . . We therefore read *Miller* to say only that the Second Amendment does not protect those weapons not typically possessed by law-abiding citizens for lawful purposes, such as short-barreled shotguns.

Id. at 624-25 (citations omitted).

Critically, the court then noted the following:

Like most rights, the right secured by the Second Amendment is not unlimited. From Blackstone through the 19th-century cases, commentators and courts routinely explained that the right was not a right to keep and carry any weapon whatsoever in any manner whatsoever and for whatever purpose. . . . Although we do not undertake an exhaustive historical analysis today of the full scope of the Second Amendment, nothing in our opinion should be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings, or laws imposing conditions and qualifications on the commercial sale of arms.

We also recognize another important limitation on the right to keep and carry arms. *Miller* said, as we have explained, that the sorts of weapons protected were those “in common use at the time.” We think that limitation is fairly supported by the historical tradition of prohibiting the carrying of “dangerous and unusual weapons.”

Id. at 626-27 (citation omitted). It went on to say:

[T]he inherent right of self-defense has been central to the Second Amendment right. The handgun ban amounts to a prohibition of an entire class of “arms” that is overwhelmingly chosen by American society for that lawful purpose. The prohibition extends, moreover, to the home, where the need for defense of self, family, and property is most acute. Under any of the standards of scrutiny that we have applied to enumerated constitutional rights, banning from the home “the most preferred firearm in the nation to ‘keep’ and use for protection of one’s home and family,” . . . would fail constitutional muster.

It is no answer to say . . . that it is permissible to ban the possession of handguns so long as the possession of other firearms (*i.e.*, long guns) is allowed. It is enough to note . . . that the American people have considered the handgun to be the quintessential self-defense weapon. There are many reasons that a citizen may prefer a handgun for home defense: It is easier to store in a location that is readily accessible in an emergency; it cannot easily be redirected or wrestled away by an attacker; it is easier to use for those without the upper-body strength to lift and aim a long gun; it can be pointed at a burglar with one hand while the other hand dials the police. Whatever the reason, handguns are the most popular weapon chosen by Americans for self-defense in the home, and a complete prohibition of their use is invalid.

Id. at 628-29.

Finally, the court concluded that, in substance, the Second Amendment “elevates above all other interests the right of law-abiding, responsible citizens to use arms in defense of hearth

and home.” *Id.* at 635. It acknowledged, however, that it did not seek “to clarify the entire field” of the Second Amendment, preferring to leave defining those contours for later cases. *Id.*

2. *McDonald and Caetano*

Two years later, in *McDonald*, the Supreme Court held that the Second Amendment applies to the states through the Fourteenth Amendment. 561 U.S. at 791. Among other things, it also reiterated “that individual self-defense is ‘the central component’ of the Second Amendment right.” *Id.* at 767 (quoting *Heller*, 554 U.S. at 599).

Next, in a *per curiam* opinion in *Caetano*, the court overturned a decision of the Massachusetts Supreme Judicial Court upholding a statute prohibiting the possession of stun guns. 577 U.S. at 411-12. The SJC had offered three explanations for its holding: first, that stun guns were not protected because they were not in common use at the time of the Second Amendment’s enactment; second, that stun guns were “unusual” (and thus unprotected) because they are “a thoroughly modern invention”; and third, that the record did not suggest that stun guns are “readily adaptable to use in the military.” *Id.* The Supreme Court noted that all three explanations expressly contradicted *Heller*, and accordingly vacated the judgment. *Id.*

3. *Bruen*

Most recently, in *New York Rifle & Pistol Ass’n v. Bruen*, the Supreme Court struck down a New York statute conditioning the issuance of a firearms license on an individualized showing of special need. 597 U.S. at 70.

The court’s analysis began by noting that “[i]n *Heller* and *McDonald*, we held that the Second and Fourteenth Amendments protect an individual right to keep and bear arms for self-defense.” *Id.* at 17. It then observed that “[i]n the years since, the Courts of Appeals have coalesced around a ‘two-step’ framework for analyzing Second Amendment challenges that combines history with means-end scrutiny.” *Id.* At the first step of that test, “the government

[would] justify its regulation by establishing that the challenged law regulates activity falling outside the scope of the right as originally understood.” *Id.* at 18 (quotation omitted). At the second step, the courts would apply strict scrutiny to the “core” Second Amendment right (generally defined as the right to self-defense in the home), and intermediate scrutiny to other aspects of the right, which required the government to show that the regulation was substantially related to achieving an important governmental interest. *Id.* at 18-19.

The Supreme Court expressly rejected that analytical framework. *Id.* at 19-24. Instead, it announced the following rule:

[W]hen the Second Amendment’s plain text covers an individual’s conduct, the Constitution presumptively protects that conduct. To justify its regulation, the government may not simply posit that the regulation promotes an important interest. Rather, the government must demonstrate that the regulation is consistent with this Nation’s historical tradition of firearm regulation. Only if a firearm regulation is consistent with this Nation’s historical tradition may a court conclude that the individual’s conduct falls outside the Second Amendment’s unqualified command.

Id. at 17 (quotation and citation omitted).

The court was clear that this “methodological approach” to the Second Amendment embraced the one taken in *Heller*, particularly its emphasis on interpreting the amendment in light of its text, history, and tradition. *Id.* at 19-20. During that discussion, it noted that in *Heller* it had concluded that “the right secured by the Second Amendment is not unlimited,” and that “the right was not a right to keep and carry any weapon whatsoever in any manner whatsoever and for whatever purpose.” *Id.* at 21. It added: “For example, [the court] found it ‘fairly supported by the historical tradition of prohibiting the carrying of dangerous and unusual weapons’ that the Second Amendment protects the possession and use of weapons that are ‘in common use at the time.’” *Id.* (quoting *Heller*, 554 U.S. at 627).

After explicating the role of history and tradition in interpreting the amendment, the court

reiterated its formulation of the applicable test. *Id.* at 22-27. After some discussion, it stated:

The test that we set forth in *Heller* and apply today requires courts to assess whether modern firearms regulations are consistent with the Second Amendment’s text and historical understanding. In some cases, that inquiry will be fairly straightforward. For instance, when a challenged regulation addresses a general societal problem that has persisted since the 18th century.

Id. at 26. But if the challenged laws address “unprecedented societal concerns or dramatic technological changes,” the historical analysis requires a “more nuanced approach.” *Id.* at 27.⁵

The court stated that reasoning by analogy from the historical record applies “the balance struck by the founding generation to modern circumstances.” *Id.* at 29 n.7. In particular, “determining whether a historical regulation is a proper analogue for a distinctly modern firearm regulation requires a determination of whether the two regulations are relevantly similar.” *Id.* at 28-29 (quotation omitted). Such an analogue must bear more than a remote resemblance, but a “government [need only] identify a well-established and representative historical analogue, not a historical *twin*.” *Id.* at 30. Among other things, it observed:

While we do not now provide an exhaustive survey of the features that render regulations relevantly similar under the Second Amendment, we do think that *Heller* and *McDonald* point toward at least two metrics: how and why the regulations burden a law-abiding citizen’s right to armed self-defense. As we stated in *Heller* and repeated in *McDonald*, “individual self-defense is ‘the central component’ of the Second Amendment right.” Therefore, whether modern and historical regulations impose a comparable burden on the right of armed self-defense and whether that burden is comparably justified are “central” considerations when engaging in an analogical inquiry.

Id. at 29 (citations omitted).

⁵ The court was clear, however, that the simple fact that a weapon was modern was not sufficient to amount to a “dramatic technological change”:

We . . . recognized in *Heller* at least one way in which the Second Amendment’s historically fixed meaning applies to new circumstances: Its reference to “arms” does not apply “only [to] those arms in existence in the 18th century.” . . . Thus, even though the Second Amendment’s definition of “arms” is fixed according to its historical understanding, that general definition covers modern instruments that facilitate armed self-defense.

Id. at 28 (citations omitted).

The court then applied that framework to the New York statute at issue, concluding that the “proper cause” requirement was unconstitutional. *Id.* at 70. Specifically, it decided that the statute “violate[d] the Fourteenth Amendment in that it prevent[ed] law-abiding citizens with ordinary self-defense needs from exercising their right to keep and bear arms.” *Id.* at 71.

Justice Alito, in a concurring opinion, stated that the majority did not “decide anything about the kinds of weapons that people may possess,” and noted that *Heller* and *McDonald* retain their significance. *Id.* at 72 (Alito, J., concurring). Similarly, Justice Kavanaugh, also concurring and joined by Chief Justice Roberts, reiterated that the opinion did not disturb the conclusions of *Heller* and *McDonald* that certain firearm regulations—including those prohibitions on carrying dangerous and unusual weapons—were permissible. *See id.* at 80-81 (Kavanaugh, J., concurring).⁶

B. The Analytic Framework

The present case involves a challenge to restrictions on particular types of weapons and magazines. Again, the basic analytical framework is set forth in *Bruen*: first, “when the Second Amendment’s plain text covers an individual’s conduct, the Constitution presumptively protects that conduct”; and second, if the presumption applies, “the government must demonstrate that the regulation is consistent with this Nation’s historical tradition of firearm regulation.” 597 U.S. at 17. While there are many aspects of that framework that are unresolved, it is useful to begin by identifying several guideposts that have been clearly established by the Supreme Court.

⁶ After *Heller* and *McDonald*, the First Circuit, along with nearly every other circuit court, had adopted a two-step interest-balancing framework for analyzing Second Amendment challenges. *Worman v. Healey*, 922 F.3d 26 (1st Cir. 2019). As noted, *Bruen* explicitly rejected that two-step framework. 597 U.S. at 19. In doing so, it cited *Worman* as one of the cases that improperly applied that test. *Id.* at 19 n.4.

Accordingly, while the First Circuit itself has not abrogated *Worman*, it is clear that the central holding, including the adoption of the two-step framework, is no longer good law. Nonetheless, to the extent that *Worman* contains analysis that is not inconsistent with *Bruen*, it may be considered as persuasive.

1. Basic Principles

First, “individual self-defense is the *central component* of the Second Amendment right.” *Bruen*, 597 U.S. at 29 (quoting *Heller*, 554 U.S. at 599).

Second, the regulation of certain types of weapons is permissible. *See Heller*, 554 U.S. at 623 (“*Miller* stands . . . for the proposition that the Second Amendment right, whatever its nature, extends only to certain types of weapons.”). Some firearms may be regulated either (1) because they are not in “common use”—that is, not “typically possessed by law-abiding citizens for lawful purposes,” like self-defense—and therefore fall outside the scope of the Second Amendment, or (2) because they are historically subject to regulation, such as “dangerous and unusual” weapons. *Heller*, 554 U.S. at 625-28. *Heller* made that clear, and nothing in *McDonald*, *Caetano*, or *Bruen* altered, or even cast doubt on, that basic proposition. *See, e.g., Bruen*, 597 U.S. at 21 (quoting *Heller*, 554 U.S. at 627) (reiterating that there are historical analogues for regulating “dangerous and unusual” weapons).

Third, the protection of the Second Amendment is not limited to arms that existed at the time of the founding. *Bruen*, 597 U.S. at 28; *Heller*, 554 U.S. at 582; *Caetano*, 577 U.S. at 412.

Fourth, the protection of the Second Amendment is not limited to arms that are useful for military purposes. *Heller*, 554 U.S. at 589; *Caetano*, 577 U.S. at 412.

Fifth, handguns are the “quintessential self-defense weapon.” *Heller*, 554 U.S. at 629. It seems likely, therefore, that legislatures have some greater degree of latitude when regulating firearms that are not handguns.

Sixth, it appears to be clear—although the Supreme Court has not directly addressed the issue in its recent cases—that the Second Amendment does not protect either short-barreled

shotguns or machine guns. *See Heller*, 554 U.S. at 622-24 (discussing *Miller*).⁷ Those firearms are therefore examples of the types of weapons that can be prohibited without violating the Second Amendment.

With those principles as a starting point, the Court will turn to two unresolved issues concerning the analytical framework.

2. “In Common Use”

Both *Heller* and *Bruen* stated, in multiple contexts, that the Second Amendment applies to firearms that are “in common use.” *See, e.g., Heller*, 554 U.S. at 627 (“*Miller* said, as we have explained, that the sorts of weapons protected were those ‘in common use at the time.’ We think that limitation is fairly supported by the historical tradition of prohibiting the carrying of ‘dangerous and unusual weapons.’”); *Bruen*, 597 U.S. at 32 (“Nor does any party dispute that handguns are weapons ‘in common use’ today for self-defense.”). That has led to considerable confusion among courts and commentators over the meaning and application of the phrase “in common use” and the interplay between the phrases “in common use” and “dangerous and unusual” weapons.⁸

Plaintiffs contend that if a weapon is popular—that is, if thousands or even millions of copies of that weapon have been sold—then, by definition, it is “in common use” and is protected by the Second Amendment. Put simply, in their view, if a firearm is currently in

⁷ The discussion in *Heller* concerning the *Miller* case contained no suggestion or hint that the regulation of short-barreled shotguns or machine guns might be constitutionally infirm. As to short-barreled shotguns, the court simply accepted the validity of the holding in *Miller*. *See Heller*, 554 U.S. at 625 (“We . . . read *Miller* to say . . . that the Second Amendment does not protect those weapons not typically possessed by law-abiding citizens for lawful purposes, such as short-barreled shotguns.”). As to machine guns, the court went even further; it said that it “would be a startling reading of [*Miller*]” to conclude that only military weapons were protected, “since it would mean that the National Firearms Act’s restrictions on machineguns . . . might be unconstitutional.” *Id.* at 624.

⁸ The First Circuit noted this difficulty in *Worman*, but simply assumed that the proscribed weapons fell “somewhere within the compass of the Second Amendment” before proceeding to examine the Act under the intermediate scrutiny standard, employing the now-defunct interest-balancing approach. 922 F.3d at 35-36.

“common use,” its sale and possession are protected and no further analysis is required.

Whatever the meaning of “common use,” that contention cannot be correct. Such a rule would lead to a host of absurd results. Among other things, the constitutionality of the regulation of different firearms would ebb and flow with their sales receipts. Weapons that unquestionably would have been considered within the ambit of the Second Amendment at the time of ratification (such as a smooth-bore, muzzle-loading musket) would lose their protection because of their relative rarity today. Conversely, an entirely novel weapon that achieved rapid popularity could be rendered beyond the reach of regulation if innovation and sales outstripped legislation. *See Kolbe v. Hogan*, 849 F.3d 114, 141 (4th Cir. 2017) (under the “popularity” approach, any “new weapon would need only be flooded on the market prior to any governmental prohibition in order to ensure it constitutional protection”).

Moreover, the constitutional analysis would be trapped in an infinite circularity: a weapon may be banned because it is not in common use, and it is not in common use because it is banned. *See Worman*, 922 F.3d at 35 n.5 (citing *Friedman v. City of Highland Park*, 784 F.3d 406, 409 (7th Cir. 2015) (acknowledging that assessing the constitutionality of firearms legislation based on “how common a weapon is at the time of litigation would be circular”)).

Finally, that proposed application of a “common use” standard would effectively ignore an important underpinning of *Bruen*: that the meaning of the Second Amendment should be grounded in text, history, and tradition, not shifting modern attitudes, and that its protection should be categorical. *See Bruen*, 597 U.S. at 79 (Kavanaugh, J., concurring).

In any event, there are at least two possible approaches to considering the issue of “common use.” One approach—which is perhaps the most in keeping with the language and reasoning of *Heller* and *Bruen*—is to ask first whether the firearm is the *general* type of weapon

that is in common use by ordinary citizens for lawful purposes such as self-defense. If the answer is yes, the Second Amendment presumptively applies. However, certain *specific* types of such weapons may still be subject to regulation if they are “dangerous and unusual,” consistent with text, history, and tradition. Put another way, the first step (that is, what is presumptively protected by the Second Amendment) addresses broad categories, and the second step (that is, what may be regulated) applies to specific types of weapons (or, in appropriate cases, specific persons who cannot possess weapons or specific places where weapons cannot be carried).

Under that framework, handguns, rifles, and shotguns are the general types of firearms that are in common use by ordinary citizens for lawful purposes. Machine guns are not. Nor, for that matter, are mortars, rocket launchers, or shoulder-fired missile systems. Even so, some types of handguns, rifles, or shotguns might be subject to government regulation if that restriction is consistent with the historical tradition of governing “dangerous and unusual” weapons. Thus, for example, while shotguns as a general class of firearms might warrant presumptive protection, *short-barreled* shotguns are “dangerous and unusual,” and therefore may be regulated. *See Heller*, 554 U.S. at 625.

Alternatively, because the terms “common use” and “unusual” are essentially opposites, it is possible that the analysis may involve only a single question: whether the challenged regulation comports with the tradition of regulating “dangerous and unusual” weapons.

Under either approach, the result here is the same. Both sides agree that the weapons at issue are presumptively protected by the Second Amendment, therefore the Court does not need to resolve the meaning of “in common use.” The question thus becomes whether “the regulation is consistent with this Nation’s historical tradition of firearm regulation.” *Bruen*, 597 U.S. at 17.

3. “Dangerous and Unusual”

Although the Supreme Court has made clear that there is a historical tradition of regulating “dangerous and unusual weapons,” it has not yet had occasion to address the contours of that principle.⁹

At minimum, however, it seems evident that the “dangerous and unusual” exception must be considered not only in light of history and tradition, but also the fundamental purpose of the Second Amendment—that is, protecting the right to “armed self-defense.” *See Bruen*, 597 U.S. at 29 (“whether modern and historical regulations impose a comparable burden *on the right of armed self-defense* and whether that burden is comparably justified are central considerations when engaging in an analogical inquiry” (quotation omitted) (emphasis added)). Indeed, if the meaning of the term “dangerous and unusual” is not considered in light of that purpose, it is difficult to give it any coherent analytic significance.

First, all firearms, by intention and design, are “dangerous.” All are designed to kill or inflict serious injury. Accordingly, for the term “dangerous” to have any meaning at all, it must be refined in some way, or it will simply apply to every type of firearm. *See Caetano*, 577 U.S. at 418 (Alito, J., concurring) (noting that if the standard for defining “dangerous” included all weapons that were designed and constructed to produce death or great bodily harm, “virtually every covered arm would qualify as ‘dangerous.’”).

⁹ In *Heller*, the Supreme Court alluded to William Blackstone’s statement that “[t]he offense of riding or going armed, with dangerous or unusual weapons, is a crime against the public peace, by terrifying the good people of the land.” 4 WILLIAM BLACKSTONE, COMMENTARIES *148-49 (emphasis added). Although the original note described “dangerous or unusual” weapons, the Supreme Court has expressly stated in *Heller* and *Bruen* that the relevant tradition is one of regulating “dangerous and unusual weapons.” *See Heller*, 554 U.S. at 627; *Bruen*, 597 U.S. at 47; *see also Caetano*, 577 U.S. at 417 (Alito, J., concurring) (“[T]his is a conjunctive test: A weapon may not be banned unless it is *both dangerous and unusual*.”); *Delaware State Sportsmen’s Ass’n, v. Delaware Dep’t of Safety & Homeland Sec.*, 2023 WL 2655150, at *7 (D. Del. Mar. 27, 2023).

Furthermore, because all firearms are “dangerous,” all firearms are potentially useful for self-defense. Again, unless the term applies to every firearm, there must be a feature of a weapon that makes it *unreasonably* dangerous for self-defense and other lawful purposes. A light machine gun, for example, can fire many hundreds of rounds per minute, which is a useful characteristic on a battlefield. But a private home bristling with machine guns at every corner—although it might be considered well-defended—obviously poses a danger to others that goes far beyond the reasonable requirements of self-defense.¹⁰

Finally, and as discussed, it would add nothing to the analytic framework if an “unusual” weapon were simply deemed to be one not “in common use.” Assuming the term “unusual” has an independent meaning, it must likewise derive at least in part from the essential purpose of the Second Amendment.

The language of *Heller* is instructive. There, the court stated that “the American people have considered the handgun to be the quintessential self-defense weapon,” and outlined several reasons why:

[It is] easier to store in a location that is readily accessible in an emergency; it cannot easily be redirected or wrestled away by an attacker; it is easier to use for those without the upper-body strength to lift and aim a long gun; [and] it can be pointed at a burglar with one hand while the other hand dials the police.

554 U.S. at 629. If a handgun has features that make it *more* suitable for self-defense, it follows that other firearms may have features—including not only capabilities, but also size, length, and weight—that make them *less* suitable for that purpose. Thus, for example, while a machine gun certainly could have self-defense uses, it would be a highly unusual weapon to carry on a city sidewalk or to keep at a bedside in case of an intruder, even if it were legal to possess one.

¹⁰ Again, it seems clear that machine guns are not protected by the Second Amendment. *See Heller*, 554 U.S. at 624-26.

In short, the tradition that permits the regulation of “dangerous and unusual” weapons must be interpreted in light of the essential purpose of the Second Amendment. For a weapon to fit within that exception, and therefore be subject to regulation, a weapon must be *unreasonably* dangerous and unusual for ordinary citizens to use for lawful purposes, particularly self-defense.

With that prelude, the Court will turn to the constitutionality of the Act at issue here.

C. **The Challenged Statute – the Prohibited Firearms**

The first set of issues concerns the prohibition on certain types of assault weapons.

1. **The Nature of the Restriction**

The Act prohibits two classes of weapons: nineteen specific models (or their duplicates), and any weapons using two or more prohibited features. Mass. Gen. Laws ch. 140, § 121. The prohibited weapons all use a semiautomatic action and include various types of rifles, shotguns, and pistols.

It is important to make clear what the Act does not do. Plaintiffs appear to conflate the Act’s prohibition on specific assault weapons with a prohibition on all semiautomatic weapons as a class. (Pl. Reply at 3-4). That is incorrect. The Act does not prohibit weapons based on their semiautomatic function; it only bans *some* semiautomatic weapons, based either on their specific make and model, or through an enumerated list of features, not their firing mechanism.¹¹ Indeed, as then-Judge Kavanaugh noted in *Heller II*, it would be incoherent to prohibit a class of firearms based on their semiautomatic function when semiautomatic handguns are afforded constitutional protection. *See Heller v. District of Columbia (Heller II)*, 670 F.3d 1244, 1275 (D.C. Cir. 2011) (Kavanaugh, J., dissenting). Still, the fact that some semiautomatic weapons

¹¹ Plaintiffs appear to concede as much, as they state in their complaint that the Act applies only to “certain semi-automatic firearms.” (Compl. ¶ 13). Similarly, and as discussed below, plaintiffs claim that a ban on large-capacity magazines is equivalent to a ban on all magazines, which is also clearly inaccurate. (*See* Section III.D.1).

are entitled to a level of constitutional protection does not require the conclusion that all semiautomatic weapons must be entitled to the same. *See Worman*, 922 F.3d at 32 n.2 (discussing the circularity of characterizing the “assault weapons” as a class of arms).

Plaintiffs have focused almost exclusively on the Act’s prohibition of a particular model of semiautomatic rifle—specifically, the Colt AR-15. This memorandum and order will accordingly follow suit.¹²

2. **Step One: Whether the Conduct is Within the Scope of the Second Amendment**

As discussed, the Court will assume, without deciding, that the weapons proscribed by the Act are bearable arms that fall “somewhere within the compass of the Second Amendment.” *Worman*, 922 F.3d at 36.

3. **Step Two: Whether the Regulation is Consistent with Historical Tradition**

The next step is to determine whether the Act “is consistent with the Nation’s historical tradition of firearm regulation.” *Bruen*, 597 U.S. at 24.

a. **“Dramatic Technological Changes” and “Unprecedented Societal Concerns”**

The initial question is the role of historical analogues in the analytic framework. The *Bruen* court directed that when “a challenged regulation addresses a general societal problem that has persisted since the 18th century, the lack of a distinctly similar historical regulation addressing that problem is relevant evidence that the challenged regulation is inconsistent with the Second Amendment.” *Bruen*, 597 U.S. at 26. However, where there have been “unprecedented societal concerns or dramatic technological changes,” a “more nuanced

¹² If there are relevant differences between the AR-15 and any other prohibited weapons that require different treatment for purposes of addressing the constitutionality of the Act, plaintiffs have not called them to the attention of the Court.

approach” may be required. *Id.* at 27. Under that approach, courts are directed to “[r]eason[] by analogy” to determine whether the modern regulation is “relevantly similar” to historical regulations. *Id.* at 29.

The parties disagree as to whether the advent of assault weapons constitutes a “dramatic technological change” for those purposes. *Bruen*, 597 U.S. at 27-29. Similarly, they disagree as to whether the modern increase in mass shootings is an “unprecedented societal concern.” *Id.*

Plaintiffs contend that this is a straightforward case involving an outright ban on a class of weapons that (they claim) existed prior to the founding and were in common use by the time the Second Amendment was adopted. They contend that the first firearm able to fire more than ten rounds without reloading was invented in 1580, and that firearms capable of shooting 18 or 24 shots before reloading, such as the “pepperbox-style” pistol, were available before the ratification of the Fourteenth Amendment. (Pls. Mem. at 19). Repeating rifles, like the Winchester 66 and 73, could shoot more than 10 rounds from a cartridge and sold more than a million copies between 1873 and 1941. (*Id.*). According to plaintiffs, the apparent prevalence of such weapons means that there has been no dramatic technological change, and, along with a lack of laws restricting them at the time of the adoption of the Second or Fourteenth Amendments, is evidence that the Act is unconstitutional.

Defendant, on the other hand, contends that development of modern assault weapons marks a dramatic technological shift that, in turn, has created unprecedented social problems, particularly the risk of mass shootings. According to defendant’s experts, guns during the colonial and founding eras were mainly muskets and fowling pieces that could fire single shots

and had to be manually reloaded. (Roth ¶ 15-16).¹³ Firearms capable of firing more than ten rounds did technically exist, but they were “anything but common, ordinary, or found in general circulation.” (Spitzer ¶¶ 38-53). It was not until after World War I that automatic and semiautomatic weapons became commercially available. (Spitzer ¶ 48; Roth ¶¶ 28, 31-33). Assault weapons, such as the AR-15, did not become popular with civilians until the present century. (Donahue ¶¶ 103-06; Roth ¶ 49; Busse ¶¶ 23-25).

Moreover, defendant contends that “[t]he spread of assault weapons . . . has created a modern phenomenon of mass shootings that would have been unimaginable to prior generations.” (Def. Opp’n at 29). Homicide rates during the founding era were low, guns were not frequently used in homicides, and as a practical matter individuals could not go on killing sprees. (Roth ¶¶ 14-17, 41; Cornell ¶¶ 19-21). High-fatality homicide events committed by individuals only became possible after the development of assault weapons. (Spitzer ¶¶ 13-22; Roth ¶¶ 44-46). According to defendant, because modern-day assault weapons represent a dramatic shift from the technology that existed in the founding era, the absence of historical regulations banning such weapons is not determinative of the Act’s constitutionality.

It seems clear—indeed beyond reasonable dispute—that there has been a “dramatic technological change” from a pepperbox-style pistol to a modern AR-15. The features of modern assault weapons—particularly the AR-15’s radical increases in muzzle velocity, range, accuracy, and functionality—along with the types of injuries they can inflict are so different from colonial firearms that the two are not reasonably comparable. Even without considering the threats posed by mass shooting events, the Court is satisfied at this stage that defendant has met

¹³ Unless otherwise noted, citations to defendant’s experts and their exhibits refer to the affidavits attached to her opposition to plaintiffs’ motion. (ECF No. 21).

her burden of showing that there has been a “dramatic technological change” that, in turn, requires reasoning by analogy from the historical record. *See Bruen*, 597 U.S. at 27-29.

The next step is to determine whether there are “relevantly similar” historical precedents to the challenged regulation. *Id.*

b. The Regulatory Tradition

As discussed, the Supreme Court has already determined that there is a history and tradition of regulating “dangerous and unusual” weapons. That finding somewhat simplifies the task of considering appropriate historical analogues, because the existence of the categorical principle, if not its specific outline, has already been made clear.

Defendant points to “an established tradition throughout American history of targeting specific unusually dangerous weapons and accessories when they have contributed to rising homicide and other crime without a corresponding utility for self-defense.” (Def. Opp’n at 31). Her experts have submitted evidence that from the founding era, states have regulated fighting knives, concealable pistols, Bowie knives, and multi-shot revolvers, all of which were widely used in unlawful behavior and contributed to rising crime rates. (Roth ¶¶ 26-28; Spitzer ¶¶ 50, 64-73; Rivas ¶¶ 20-28; *see also* Spitzer Ex. E, “Dangerous Weapons Laws”). Bowie knives, in particular, were “extensive and ubiquitous,” and were subject to regulation by 49 states because of the dangers they posed to ordinary citizens. (Spitzer ¶¶ 71-73).

Regulation of automatic and semiautomatic weapons began to occur in the early 20th century, when their “uniquely destructive capabilities” became apparent as they found their way into civilian life. (Spitzer ¶¶ 16-30; Roth ¶ 47; *see also* Spitzer Ex. D, “Machine Gun and Semi-Automatic Firearms Laws”).

Plaintiffs contest some of the proffered analogues.¹⁴ But their effort to distinguish the proffered analogues from the Act is, in substance, the same argument they make throughout: that restrictions on “dangerous and unusual weapons” cannot apply to the proscribed firearms because they are “in common use” today.¹⁵

In any event, although certain regulations offered by defendant may be closer to the Act than others, she need only identify “a well-established and representative historical analogue, not a historical *twin*.” *Bruen*, 597 U.S. at 30. The relevant history affirms the principle that in 1791, as now, there was a tradition of regulating “dangerous and unusual” weapons—specifically, those that are not reasonably necessary for self-defense.

Furthermore, it is surely true that where technological changes have been extreme, precise historical analogues become less useful except at a high (or categorical) level. Here, there is a recognized categorical principle—the “dangerous and unusual” exception. The Court must bear in mind that the purpose of the exercise is not to perform a technical comparison for its own sake, but to determine whether the challenged regulation comports with the fundamental purpose of the Second Amendment—that is, protecting the right to “armed self-defense.” *See Bruen*, 597 U.S. at 29 (“whether modern and historical regulations impose a comparable burden *on the right of armed self-defense* and whether that burden is comparably justified are central considerations when engaging in an analogical inquiry” (quotation omitted) (emphasis added)).

¹⁴ For example, defendant points to a series of laws regulating the proper storage of gunpowder in the late-18th century. (Def. Opp’n 31-32). Plaintiffs respond that the Supreme Court in *Heller*, in response to the dissent’s invocation of the same historical laws, noted that they “do not remotely burden the right of self-defense as much as an absolute ban on handguns.” *Heller*, 554 U.S. at 632. Clearly, however, the Act is not an absolute ban on any class of weapons, let alone a “quintessential” self-defense weapon.

¹⁵ Plaintiffs also contend that some of the historical statutes prohibited public or concealed carry, rather than possession, and are therefore inapplicable. That distinction is irrelevant when considering the types of weapons being regulated, rather than the manner they are carried.

Here, the historical tradition of regulating “dangerous and unusual” weapons is “relevantly similar” to the Act because both the historical analogues and the Act pose a similar burden on the right to bear arms and are comparably justified. *See Bruen*, 597 U.S. at 29.

First, both the proffered analogues and the Act impose a minimal burden on the right of self-defense. Both narrowly target a specific group of dangerous weapons rather than an entire class. As set forth in greater detail below, the proscribed weapons are not reasonably suitable for self-defense under normal circumstances, nor are they normally used for that purpose. *See Worman*, 922 F.3d at 37; *New York State Rifle & Pistol Ass’n v. Cuomo*, 804 F.3d 242, 260 (2d Cir. 2015) (assault weapons ban was “substantially less burdensome” than complete handgun ban because it regulated only “a limited subset of semiautomatic firearms”); *Heller II*, 670 F.3d at 1262 (assault weapons ban “d[id] not effectively disarm individuals or substantially affect their ability to defend themselves”); *Kolbe*, 849 F.3d at 138 (same); *Assoc. of New Jersey Rifle & Pistol Clubs (ANJRPC) v. Attorney Gen. of New Jersey*, 910 F.3d 106, 117-18 (3d Cir. 2018) (same).¹⁶ Ordinary citizens remain free, in both cases, to possess weapons for self-defense that are reasonably suited for that purpose—most notably, handguns (the “quintessential” weapon of self-defense). *See Worman*, 922 F.3d at 37.

Second, the Act and its historical analogues are “comparably justified” as efforts to respond to threats to public safety. While the historical weapons at issue were less lethal than modern-day assault weapons, both historical and modern regulations addressing dangerous and unusual weapons were adopted in response to rising crime, public violence, and disorder. Unlike

¹⁶ The cited cases, which predate *Bruen*, analyzed the burden imposed by the challenged regulations on the Second Amendment right to determine what level of scrutiny applied. While *Bruen* made clear that means-end scrutiny is not appropriate in Second Amendment cases, it also directed that courts compare the burden imposed by relevant historical analogues to that imposed by modern regulations. Therefore, the Court considers these cases to be persuasive authority on the subject of how to assess that comparative burden.

handguns, assault weapons are uniquely dangerous to law enforcement because their features allow shooters to engage targets from far greater distances, to do so more accurately, and to penetrate body armor. (Donohue ¶ 44; Yurgealitis ¶ 92). As a result, assault weapons are disproportionately used to kill police officers. (Donohue ¶ 44). And, as set forth below, they pose a unique danger to the public, among other reasons due to their destructive power. Those concerns—the protection of law enforcement and the public—have animated the states to pass regulations on dangerous weapons throughout the nation’s history.

In short, the Act and the analogous historical regulations impose comparable burdens on the right to armed self-defense, and those burdens are comparably justified.¹⁷

c. “Dangerous and Unusual”

The final question is whether the proscribed arms qualify as “dangerous and unusual” within the context of that historical tradition—that is, whether they are unreasonably dangerous and unusual for ordinary citizens to use for lawful purposes, particularly self-defense.

To begin, there can be little serious question that assault weapons, such as the AR-15, have characteristics that give them capabilities far beyond those of a typical handgun. *See Worman*, 922 F.3d at 37 (considering that question under the Act and noting that “wielding the proscribed weapons for self-defense within the home is tantamount to using a sledgehammer to crack open the shell of a peanut”). For example, the AR-15 has substantially greater range and muzzle velocity than a 9mm handgun. (Roth ¶¶ 49-50). Assault rifles were developed for modern military combat, not self-defense. (*Id.* ¶¶ 49, 92-95). Indeed, the AR-15 is functionally identical to its military counterparts, the M16 and its carbine version, the M4, which have the

¹⁷ Other district courts have reached similar conclusions when faced with the same task of identifying historical analogues to modern assault-weapons regulations. *See Delaware State Sportsmen’s Ass’n*, 2023 WL 2655150, at *9-13; *Bevis v. City of Naperville*, 2023 WL 2077392, at *10-16 (N.D. Ill. Feb. 17, 2023); *Grant v. Lamont*, 2023 WL 5533522, at *6-8 (D. Conn. Aug. 28, 2023).

same basic structure, operation, near-equivalent muzzle velocities (3300 feet per second), and rates of effective fire (45 rounds per minute). (*Id.* ¶¶ 49, 85).

The primary difference between the AR-15 and the M16/M4 is that the latter originally had a fully automatic function. That is a feature that the U.S. Marine Corps discarded in favor of a maximum setting of a three-round burst—a decision made to *enhance* lethality by slowing the rate of fire, conserving ammunition, and improving accuracy. (*Id.* ¶ 49). The U.S. Army Manual on Advanced Rifle Marksmanship for the M16/M4 series weapons likewise notes that “[a]utomatic or burst fire is inherently less accurate than semiautomatic fire.” (Gohlke Ex. 10).

In short, the AR-15 is a weapon with the same basic characteristics, functionality, capabilities, and potential for injury as the standard-issue rifle for infantry troops. It can be fired in the same way that military forces recommend that it be used for maximum effectiveness. Without question, it is a “weapon[] . . . most useful in military service” rather than in self-defense. *Heller*, 554 U.S. at 627; *see also Kolbe*, 849 F.3d at 135 (determining that because the banned assault weapons were “like M-16 rifles . . . they are among those arms that the Second Amendment does not shield”).

Of course, the fact that the AR-15 was developed as a military weapon does not alone render it “dangerous and unusual.” *Heller*, 554 U.S. at 624-25. Rather, it is the fact that the design and features of an AR-15, compared to a typical handgun, makes it an unreasonably dangerous and unusual weapon for ordinary self-defense purposes.

First, the intrinsic characteristics of assault weapons make them poor self-defense weapons. AR-15s are physically unsuited to typical self-defense scenarios. They are significantly heavier and longer than typical handguns, making them less concealable, more difficult to use, and less readily accessible, particularly for an inexperienced user. (*See*

Yurgealitis ¶ 82-91 (discussing several disadvantages of assault weapons in a self-defense context)). They are not generally useful or appropriate weapons for ordinary citizens to keep at their bedsides, or to carry on city streets as they go about their daily business.

The firepower of an AR-15 also contributes to making it generally unsuitable for self-defense. The muzzle velocity of rounds fired by an AR-15 is 3200-3300 feet per second, nearly double that of an ordinary 9mm handgun. (Yurgealitis ¶ 83; Roth ¶ 49). That muzzle velocity means that its fired rounds can cause more damage due to their higher speed. (Gohlke Ex. 24 at 855-56). They pose a serious risk of “over-penetration”—that is, passing through their intended target and impacting a point beyond it. Rounds from an AR-15 can pass through most construction materials, even at ranges of 350 yards. (Yurgealitis ¶¶ 83-84). The danger of over-penetration increases the risk, even if the weapons are employed properly, to bystanders, family members, or other innocent persons well outside the intended target area. (*Id.* ¶ 84; Donohue ¶ 155); *see also Worman*, 922 F.3d at 37 (noting that assault weapons “can fire through walls, risking the lives of those in nearby apartments or on the street”).

Although most center-fire rifles have muzzle velocities that are at least comparable to the AR-15 (although typically lower), AR-15s pair that high muzzle velocity with a comparatively low level of kinetic energy per round due to its relatively small bullet. (Gohlke Ex. 25). Indeed, a round fired from an AR-15 distributes less than half of the kinetic energy of one fired from a hunting rifle. (*Id.*). In other weapons, the higher kinetic energy is distributed, in part, to the shooter as recoil, which necessarily disrupts follow-on shots. (*Id.*; Gohlke Ex. 24 at 864). In an AR-15, however, the lower kinetic energy means that rounds fired with a high muzzle velocity can also be fired in rapid succession on a precise target, even while standing or moving, because a shooter’s position is relatively unaffected by the recoil of each shot. (Gohlke Ex. 24 at 865 and

Ex. 25). Less recoil translates into “more rounds on target,” and thus greater lethality. (Gohlke Ex. 24 at 865). That combination of high muzzle velocity and low kinetic energy contributes to making the AR-15 uniquely dangerous.

Beyond their intrinsic characteristics, the injuries inflicted by assault weapons can be catastrophic, again far surpassing the destructive power of typical semiautomatic handguns. *See Worman*, 922 F.3d at 39-40 (listing accounts of injuries caused by assault weapons); Gohlke Exs. 19-22 (containing articles written by doctors recounting their experiences treating victims shot by assault weapons). The ballistic effects of high-velocity rounds on a human body are severe. (Gohlke Exs. 23-24). Unlike lower-velocity rounds, bullets from assault rifles create “cavitation” in the penetrated tissues, inflicting catastrophic bleeding, breaking bones, and causing irreversible tissue damage. (Gohlke Ex. 23). “For example, a typical 9mm wound to the liver will produce a pathway of tissue destruction in the order of [one inch] to [two inches]. In comparison, an AR 15 will literally pulverize the liver, perhaps best described as dropping a watermelon onto concrete.” (Gohlke Ex. 25). These injuries—inflicted with precision from hundreds of yards away—go far beyond the reasonable requirements of self-defense.¹⁸

Plaintiffs do not seriously challenge the proposition that AR-15s are not useful for ordinary self-defense purposes. Their only responses are to reiterate that the banned weapons are in “common use” within the United States; that the “common use” determination should be based on sales numbers; and to argue that there are potentially some self-defense applications for the proscribed weapons. Again, as to the first two objections, it is insufficient that a weapon merely be “common” for regulation to be impermissible. As to the third, while it may be true

¹⁸ To be clear, the issue is not whether there is a single particular characteristic of the proscribed weapons that renders them “dangerous and unusual,” but their features considered in combination.

that an AR-15 *could* be useful in *some* self-defense scenarios, so too could an open-bolt machine gun or an automatic grenade launcher, or indeed any firearm of any size, shape, or description. The mere *possibility* that a firearm could be used for self-defense therefore has no real significance in the constitutional analysis.

In short, the weapons proscribed by the Act are not suitable for ordinary self-defense purposes, and pose substantial dangers far beyond those inherent in the design of ordinary firearms. Under the circumstances, the weapons qualify as “dangerous and unusual” within the meaning of the analytical framework of the Second Amendment.

d. Conclusion

For the foregoing reasons, the Court finds that the prohibitions on certain assault weapons in the Act comports with the nation’s historical tradition of weapons regulation. The banned weapons are “dangerous,” because they are unreasonably dangerous for ordinary purposes of self-defense due to their extreme lethality and high potential for collateral harm, and they are “unusual,” because it would be unusual for an ordinary citizen to carry such a weapon on his person on the street for self-defense, or to use it in the home to confront invaders or to protect against personal violence. Plaintiffs have therefore failed to establish a likelihood of success on the merits of their Second Amendment claim as to the proscribed firearms.

D. The Challenged Statute – the Prohibited Magazines

The second set of issues concerns the prohibition on large-capacity magazines (“LCMs”).

1. The Nature of the Restriction

Along with the ban on assault weapons, the Act also prohibits the sale, transfer, or possession of any “large capacity feeding device,” which is defined as “a fixed or detachable magazine, box, drum, feed strip or similar device capable of accepting, or that can be readily converted to accept, more than ten rounds of ammunition or more than five shotgun shells.”

Mass. Gen. L. ch. 140 §§ 121, 131M. That ten-round limit applies to all magazines, including those used in semiautomatic handguns. The Act does not prohibit the use of magazines capable of holding fewer than ten rounds.

2. Step One: Whether the Conduct Is Within the Scope of the Second Amendment

The first step in the constitutional analysis is to determine whether LCMs are “arms” within the meaning of the Second Amendment.¹⁹ An object may be a bearable “arm” within the textual meaning of the amendment if it is a “[w]eapon[] of offence, or armour of defence,” or “any thing that a man wears for his defence, or takes into his hands, or useth in wrath to cast at or strike another.” *Heller*, 554 U.S. at 581 (citations omitted).

a. Whether Magazines Are “Arms”

No magazine, regardless of capacity, is itself an “arm” within the plain meaning of that term. A magazine is a mechanical device that enables the functioning of a semiautomatic weapon by feeding a round into the weapon’s chamber after each preceding round is fired. (Busse ¶ 14). It has no use independent of its attachment to a firearm. *See Ocean State Tactical v. Rhode Island*, 646 F. Supp. 3d 368, 387 (D.R.I. Dec. 14, 2022).

The historical record likewise suggests that a magazine is not an “arm.” According to defendant’s expert, there was a clear distinction between “arms” and “accoutrements” during the founding and reconstruction eras. (Baron ¶ 30). The term “arms” referred generally to weapons, while “accoutrements” referred to accessories such as ammunition, ammunition containers, flints, scabbards, holsters, armor, and shields. (*Id.* ¶ 9, 31-32). The closest founding-era

¹⁹ The issue of whether LCMs are “arms” was raised by *amici* in *Worman*, and for that reason the court “assumed without deciding” that LCMs were “arms” for Second Amendment purposes. *Worman*, 922 F.3d at 33 n.3, 30; *see also New York State Rifle & Pistol Ass’n*, 804 F.3d at 263 n.127.

analogues to modern-day magazines were “cartridge boxes” or “cartouch boxes,” which were almost always mentioned in lists of accoutrements and not known as weapons. (*Id.* ¶ 32-34). Based on that evidence, magazines would not fall within the founding-era definition of a bearable “arm.” See *Ocean State Tactical*, 646 F. Supp. 3d at 386-87 (“LCMs, like other accessories to weapons, are not used in a way that ‘cast[s] at or strike[s] another.’” (quoting *Heller*, 554 U.S. at 582)); *Duncan v. Bonta*, 19 F.4th 1087, 1104-05 (9th Cir. 2021) (en banc) (“On its own, a magazine is practically harmless and poses no threat to life or limb”). Plaintiffs do not offer a competing historical narrative.

Under the circumstances, it seems clear that LCMs are not “arms” within the textual meaning of the Second Amendment. See *Oregon Firearms Fed’n v. Brown*, 644 F. Supp. 3d 782, 798-802 (D. Or. 2022); *Ocean State Tactical*, 646 F. Supp. 3d at 384-88. But even if they are not, that does not end the inquiry. A firearm by itself is useless; it can only function with certain additional external components or accessories, most notably ammunition. That raises the issue of how the Second Amendment applies to those items.

b. Firearm Components and Accessories

There is no question that because some kinds of firearms are constitutionally protected, the components and accessories of protected firearms that are integral to their function must also be protected.

Ammunition is the most obvious example. See, e.g., *Jackson v. City & Cnty. of San Francisco*, 746 F.3d 953, 967 (9th Cir. 2014) (“A regulation eliminating a person’s ability to obtain or use ammunition could thereby make it impossible to use firearms for their core purpose.”); *Miller*, 307 U.S. at 180 (“The possession of arms also implied the possession of ammunition, and the authorities paid quite as much attention to the latter as to the former.”); *cf. Heller*, 554 U.S. at 630 (invalidating a regulation that required firearms be “rendered and kept

inoperable at all times” in the home because it “ma[de] it impossible for citizens to use them for the core lawful purpose of self-defense.”).

On the other hand, some accessories, such as silencers, do not affect the essential operation of a weapon and so do not fall within the scope of the Second Amendment’s protection. *See United States v. Hasson*, 2019 WL 4573424, at *4-5 (D. Md. Sept. 20, 2019), *aff’d*, 26 F.4th 610 (4th Cir. 2022); *United States v. Cox*, 906 F.3d 1170, 1186 (10th Cir. 2018) (“A silencer is a firearm accessory; it’s not a weapon in itself (nor is it ‘armour of defence’).”).

Magazines occupy something of a middle ground. For a semiautomatic weapon to function as designed, ammunition must generally be fed into it by a magazine. (Busse ¶ 14). In that sense, a magazine is an essential part of the weapon, and some courts have therefore determined that the Second Amendment’s protections extend to them. *See Fyock v. Sunnyvale*, 779 F.3d 991, 998 (9th Cir. 2015) (“[T]o the extent that certain firearms capable of use with a magazine . . . are commonly possessed by law-abiding citizens for lawful purposes, our case law supports the conclusion that there must also be some corollary, albeit not unfettered, right to possess the magazines necessary to render those firearms operable.”); *ANJRPC*, 910 F.3d at 116 (“Because magazines feed ammunition into certain guns, and ammunition is necessary for such a gun to function as intended, magazines are ‘arms’ within the meaning of the Second Amendment.”); *Duncan v. Becerra*, 970 F.3d 1133, 1146 (9th Cir. 2020) (“Without a magazine, many weapons would be useless, including ‘quintessential’ self-defense weapons like the handgun.”); *Hanson v. District of Columbia*, 2023 WL 3019777, at *7 (D.D.C. Apr. 20, 2023).

But while magazines as a general class might be owed constitutional protection, LCMs as a specific subset of that class are never necessary for a firearm to function. *See Oregon Firearms Fed’n v. Kotek Oregon All. for Gun Safety*, 2023 WL 4541027, at *26 (D. Or. July 14, 2023). As

defendant points out, and plaintiffs do not contest, any semiautomatic weapon using a detachable magazine can accept one that holds ten rounds or fewer. (*See* Busse ¶ 14; Yurgealitis ¶ 61).

It seems clear, then, that a total ban on magazines would almost surely fall afoul of the Second Amendment. But it is entirely unclear why that principle—that *some* magazines should be accorded constitutional protection—requires protection of *all* magazines, regardless of capacity. If there is a reason why that should be so, plaintiffs have not supplied it.

On balance, the Court is persuaded that plaintiffs have not demonstrated that all magazines, regardless of capacity, fall within the protection of the Second Amendment. It is uncertain what precise analytic framework should be employed to consider the issue of the constitutionality of *limits* on magazine capacity. Without more specific guidance from the Supreme Court or the First Circuit, the Court will consider, as it would with a restriction on a weapon, whether the Act’s prohibition of LCMs aligns with the nation’s historical tradition.

3. **Step Two: Whether the Regulation Is Consistent with Historical Tradition**

a. **“Dramatic Technological Changes” and “Unprecedented Societal Concerns”**

The parties dispute whether the advent of LCMs represents a “dramatic technological change” and whether the modern increase in mass shootings is an “unprecedented societal concern.” *Bruen*, 597 U.S. at 27. Plaintiffs assert that magazines with the capacity for more than ten rounds “have been available for centuries,” but they offer no historical support for that conclusion. (Def. Mot. at 21). They also contend that “multi-shot firearms” have existed since the time of the founding, pointing to weapons such as the pepperbox-style pistol and—leaping to 1866—the Winchester 66, a cartridge-fed repeating rifle. (*Id.* at 19).

As a technological matter, plaintiffs’ examples are inapposite. None of the “multi-shot” weapons they allude to were semiautomatic; that capability was not developed until the late 19th

century. The pepperbox-style pistol, for example, could fire multiple shots only because it included several bundled individual barrels, not because it was fed ammunition from any magazine. (Spitzer ¶ 45). Similarly, the Winchester Repeaters were lever-action rifles, which had to be manually reloaded after each shot, rather than automatically fed by a magazine. (Spitzer ¶ 48; Vorenberg ¶ 21). Neither of those technologies is analogous to the modern semiautomatic action, which loads automatically from a magazine every time a shot is fired.²⁰ LCMs therefore represent a dramatic change in firearm technology.

Defendant has also presented evidence that mass shootings are an “unprecedented societal concern,” and that LCMs play a pivotal role in those events because they allow perpetrators to fire more rounds before pausing to reload—an interval that might allow victims to escape and law enforcement or others to intervene. *See Worman*, 922 F.3d at 39 (citing *Heller II*, 670 F.3d at 1264) (discussing the use of LCMs in mass shootings).

There were, of course, homicides in 1791. No doubt, some portion of those homicides were perpetrated by people using firearms. But there is no evidence that there were *any* single-event, single-perpetrator mass homicides, much less homicides of that nature on a regular basis. Again, while the Court need not reach the issue of whether such homicides are an “unprecedented societal concern,” the truth of that proposition nonetheless seems obvious.

In any event, because defendant has met her burden of showing that there has been a “dramatic technological change,” the Court may reason by analogy to evaluate historical analogues to the Act.

²⁰ Automatic weapons will continue to fire as long as the trigger is depressed, while a semiautomatic weapon will fire a single shot for every press of the trigger. Both types of weapons *load* automatically because of their design.

b. The Regulatory Tradition

To a substantial extent, the same regulatory history that applies to assault weapons also applies to LCMs, given that LCMs are not arms themselves but are a component of such weapons. However, defendant has also submitted evidence of other analogues that bear discussion.

Gunpowder, for example, was regulated extensively very early in the nation’s history, despite being essential to the function of early firearms. (Cornell ¶¶ 29-30). A 1783 Massachusetts law forbade any person to “take into any Dwelling-House, Stable, Barn, Outhouse, Warehouse, Store, Shop, or other Building, within the Town of Boston, any . . . Fire-Arm, loaded with, or having Gun-Powder,” and permitted the seizure of any loaded firearm that “shall be found” there. 1782 Mass. Acts 119, ch. 46 (Gohlke Ex. 12).

Defendant also cites to regulations passed in the early 20th century that addressed magazine capacities or limits on the number of rounds a weapon could fire before reloading. (Spitzer ¶¶ 24-31). Twenty-three states passed such laws between 1917 and 1934. (Spitzer Table 1). Massachusetts, for example, passed a law that prohibited any firearm that reloaded automatically after a single shot. 1927 Mass. Acts 413, 416 (Spitzer Ex. D at 13) (designating such weapons as “machine guns”).

Plaintiffs contest the consideration of this more modern history on the ground that it does not offer any insight into the meaning of the Second Amendment in either 1791 or 1868. While there is an “ongoing scholarly debate” over precisely which era should inform the historical analysis, the Court need not reach that issue here. *Bruen*, 597 U.S. at 37. None of the statutes offered by defendant “contradicts earlier evidence.” *Id.* at 66. And while it would be unreasonable to expect identical laws to have existed before LCMs were even invented, the more modern laws did not conflict with any existing laws at the time they were passed. *Id.*

Thus, for example, machine guns did not exist until the late 19th century, at which point laws were passed to regulate them. While there was, understandably, a lack of machine gun regulation prior to their invention, that absence did not “contradict” the new laws, and thus had no impact on the government’s ability to regulate machine guns. *See Heller*, 554 U.S. at 624.

Furthermore, defendant’s offered historical regulations are “relevantly similar” to the Act because they pose a similar burden and are comparably justified. *See Bruen*, 597 U.S. at 29.

First, the Act poses a minimal burden on self-defense. It does not prohibit all magazines, only those that can hold more than ten rounds. Again, any semiautomatic weapon using a detachable magazine can accept one that holds ten rounds or fewer. And there is no restriction on the number of magazines that an individual may own or carry.

If there is a reason why an eleven-round magazine, rather than a ten-round magazine, is reasonably necessary for purposes of self-defense, it is not apparent from the record. Ordinary citizens undertaking lawful activities do not typically engage in extended firefights. To the contrary, defendant has provided substantial evidence that, in typical self-defense scenarios, a defender will only fire two or three shots. (Allen ¶¶ 10, 18). To the extent that the ten-round limit burdens the use of a semiautomatic firearm at all, it is because a brief pause to reload a new magazine would be required before the next round can be fired. Indeed, plaintiffs have not pointed to a single case where the ability to fire more than ten rounds without reloading has been essential to self-defense.

Plaintiffs again simply fall back on their assertion that magazines capable of holding more than ten rounds are “in common use,” and therefore deserve protection. They have not, however, provided any evidence at this stage that a magazine that can hold more than ten rounds is necessary, useful, or even desirable for self-defense purposes. Based on the record, therefore,

the burden of the Act on the reasonable requirements of ordinary citizens for self-defense is minimal at best.

Second, the prohibition on LCMs is comparably justified to respond to threats to public safety, particularly mass shootings. In mass shooting events, the average number of shots fired is upward of 99 rounds. (Allen ¶ 38). Out of 115 such events, where the type of magazine was known, 73 involved the use of an LCM. (Allen ¶ 35). In the same dataset, there was an average of 25 casualties when an LCM was involved, versus 9 without one. (*Id.*). That data supports the government's proffered reasoning that the regulation of LCMs is justified based on their role in these incidents.

In short, and in simple terms, the limit on magazine capacity imposes virtually no burden on self-defense, and is comparably justified to historical regulations.

c. Conclusion

In summary, the Court finds that the prohibition on LCMs in the Act comports with the nation's historical tradition of weapons regulations. Even if they may be considered "arms" within the meaning of the Second Amendment, the historical record demonstrates that the Act's restrictions pose a minimal burden on the right to self-defense and are comparably justified to historical regulation. Plaintiffs have therefore failed to establish a likelihood of success on the merits of their Second Amendment claim as to the prohibited magazines.

IV. Other Requirements for Preliminary Relief

When a plaintiff fails to meet his burden to show a likelihood of success on the merits, "failure to do so is itself preclusive of the requested relief." *Bayley's Campground Inc. v. Mills*, 985 F.3d 153, 158 (1st Cir. 2021). The Court, therefore, will not address the remaining requirements for obtaining preliminary injunctive relief.

V. Conclusion

For the foregoing reasons, plaintiffs have not shown a likelihood of success on the merits of their claims. Accordingly, plaintiffs' motion for a preliminary injunction is DENIED.

So Ordered.

/s/ F. Dennis Saylor IV
F. Dennis Saylor IV
Chief Judge, United States District Court

Dated: December 21, 2023