

Cooke, et al., v. Hickenlooper
United States District Court for the District of Colorado

Report and Opinions
Concerning Colorado HB 13-1224 and 13-1229

August 1, 2013

Michael Shain



Michael Shain

I. Printed or Electronic Materials Consulted

The following materials and information support my opinions and conclusions reflected in this report. Additional information discovered or revealed during the course of this case may result in supplemental opinions and conclusions.

Complaint

Motion for Temporary Restraining Order and Preliminary Injunction

Plaintiffs' Reply in Support of Motion for Preliminary Injunction

Governor's Brief In Opposition to Plaintiffs' Motion For Temporary Restraining Order and Preliminary Injunction

Supplemental Brief Regarding Plaintiffs' Standing and Other Issues Raised by The Court

May 16, 2013 Technical Guidance on the Interpretation and Application of House Bill 13-1224, Large Capacity Magazine Ban, State of Colorado Office of the Attorney General

July 10, 2013 Additional Technical Guidance on the Interpretation and Application of House Bill 13-1224, Large Capacity Magazine Ban, State of Colorado Office of the Attorney General

Colorado Legislature House Bill 13-1224

Colorado Revised Statutes 18-12-301 & 12-18-302

United States Center for Disease Control (CDC), Evaluating the Effectiveness of Strategies for Preventing Violence: Firearms Laws (11/3/2003)

National Research Council, Priorities for Research to Reduce the Threat of Firearm-Related Violence (4/2013)

United States Department of Justice, Bureau of Justice Statistics Special Report: Firearm Violence, 1993-2011 (5/2013)

National Criminal Justice Reference Service Publication Abstract: Armed and Considered Dangerous; A Survey of Felons and Their Firearms. (Wright & Rossi)

United State Department of Justice, Federal Bureau of Investigation, Handgun Wounding Factors and Effectiveness (7/1989)

National Institute of Justice, Research Brief, Guns in America: National Survey on Private Ownership and Use of Firearms. (5/1997)

Department of Justice, Federal Bureau of Investigation, Defensive Systems Unit Ballistic Research Facility; Officer Involved Shooting: Pennsylvania Police Department. (11/2006)

United States Department of Justice, Bureau of Justice Statistics Report: Crime Against Persons with Disabilities, 2009-2011 (12/2012)

New York City Police Department Annual Firearms Discharge Report 2011

Cato Institute “Guns and Self Defense” interactive incident map, <http://www.cato.org/guns-and-self-defense>

Federal Firearms Licensee Plaintiffs Survey of Practices

Colorado Springs man invokes Make My Day Law after break-in.
Man shoots two intruders.
Lindsay Watts, Target 13 Reporter, KRDO television
POSTED: 01:33 PM MST Jan 30, 2013

II. Case Summary

On March 20, 2013 Colorado Governor John Hickenlooper signed into law House Bill 13-1224.

The bill creates a prohibition against the sale, transfer or possession of “large-capacity magazines.”

“Large-capacity magazines,” as described and included in the Bill 1224 and as the focus for the purposes of this report, are those detachable box style magazines commonly associated with modern semi-automatic pistols and rifles commonly manufactured, imported, sold, owned and used in the State of Colorado and throughout the United States of America.

The capacity determined to be “large” are those magazines that accept more than 15 individual rounds of ammunition.

By HB 1224’s definition, detachable magazines that will accept more than 15 individual rounds of ammunition became unlawful on July 1, 2013, unless said magazine(s) were owned on or before July 1, 2013 and the owner maintains continuous possession of the “large-capacity magazine”(s).

III. My Experience and Expertise

Based on my early experience as a competition shooter on the UCLA Match Pistol Team in the mid-1970s; and extensive law enforcement experience testing, evaluating and training on law enforcement semi-automatic pistols, rifles and sub-machine guns, all designed to use detachable box magazines; and my subsequent 20-plus years of private sector firearm use, examination, evaluation, testing, and training; together with the experience of designing and manufacturing firearms modifications and accessories, I have had in-depth opportunities to study and observe the development of modern firearms and their magazines.

In addition, as a Federally Licensed Firearms Dealer and Manufacturer, I have extensive exposure to and experience with manufacturing, wholesale, and dealer operations within the firearms industry, and also with products and accessories common to the industry.

Working as an expert witness in firearms product liability cases for more than 15 years, I have learned to follow standard industry procedures for examining and documenting firearms components, including making exact dimensional measurements, creating working drawings, using stereo microscopy and optical comparators, and creating advanced technical drawings and technically accurate animations.

The national industry standards for testing have magazine specifications or feeding reliability requirements, and/or testing protocols for magazines. National standards are set by organizations such as the Sporting Arms and Ammunitions Manufacturers Institute, (SAAMI); the U.S. Department of Justice, National Institute of Justice's performance standards for auto-loading pistols; the Federal Bureau of Investigation's RFP and testing procedure for pistols; and the California Department of Justice standards for handgun certification.

As a manufacturer of firearm accessories and components and as a factory trained warranty technician and armorer instructor, I have developed experience and expertise in the areas of dimensional tolerances as they relate to the fit, finish and function of firearms and firearms components. I have also developed expertise in the processes involved in firearms and firearms component manufacturing, including machine tools, extrusions, injection molding, finishing, and quality control.

Through the standard process of visually and physically examining, disassembling, reassembling, and comparing components and designs, in addition to using, maintaining and repairing firearm magazines, I have developed an intimate understanding of how magazines are used, how they function, how they are configured and how they are manufactured.

The following analysis is based on a detailed review of the materials described above, as well as past and current magazine design, construction, use, and applications, applying the standards described above.

I am charging a fee for \$200 per hour for my expert report on this case.

IV. Opinions

Background on detachable box magazines: Detachable box magazines have been an integral design characteristic associated with highly portable hand-held or shoulder-fired semi-automatic firearms since their inception. The separate ammunition magazine component is a critical element in the function of this style of firearm.

The concept of a detachable, removable, replaceable ammunition source for a portable firearm is often considered one of the pinnacles of modern firearms design ingenuity.

The semi-automatic firearm with the detachable box magazine design characteristic has become so ubiquitous that many earlier designs (e.g., revolvers, lever and pump actions with fixed tubular magazines) are sometimes perceived as “old school,” old technology and less effective as defensive tools.

The common and overwhelming current popularity of semi-automatic firearms with detachable magazines is the natural progression of a technology that has greater design flexibility and provides far superior capabilities for defensive use.

Box magazine capacity has always varied based on the size and use of the firearm. Box magazines’ early evolution produced the staggered or double stack magazine as a design characteristic that enabled a user to essentially double the capacity of the firearm without doubling the amount of space necessary for the magazine itself. The larger capacity magazine design is part and parcel of the modern semi-automatic pistol design.

A. Virtually all modern detachable magazines share design characteristics that will allow them to be altered, but may not have been originally “designed to be readily converted to accept more than 15 rounds of ammunition.”

Commonly available modern detachable box magazines manufactured from plastic/polymers evolved from early stamped and folded sheet metal magazines. The improvement in magazine design stemmed from a need to produce a magazine that could withstand impacts and abuse and continue to provide reliable function.

The earliest sheet metal pistol and rifle magazines were prone to damage from dropping onto hard surfaces; the resulting improvement was the addition of a rubber base pad attached to the metal base plate. This early iteration gave way to a newer one piece plastic base plate that could withstand the abuse, but necessitated a design change in the way it attached to the body of the magazine. The change was an external flange that provided enough strength to the new style assembly and also allowed for “tool less” disassembly for maintenance and repair.

As technology advanced, magazine design advanced and manufacturing technology incorporated newer polymer blends that allowed the entire magazine body to be made

from an injection molding process. As a result, magazines had decreased weight, increased strength and improved reliability.

The lion's share of currently manufactured modern detachable box magazines, whether for pistols or rifles, have adopted this design characteristic: the outside flange on the magazine body mating with the grooves in the removable base plate. This design allows the magazine body to be injection molded in one piece; and for the likewise injection molded base plate to be robust enough to protect the magazine flanges and also provide the strength necessary to prevent failure from impact damage.

Only an extremely limited number of current box magazines utilize a fixed or sealed base in today's market. One is a relatively primitive 1911 magazine design made from sheet metal with a welded steel base plate. (The magazine is for the Colt pistol that was invented in 1911; the Colt also accepts modern magazines.) The others are inexpensive .22 caliber clear plastic magazines that are manufactured from two halves and joined together in a clamshell fashion, permanently capturing the spring and follower.

The welded base plate 1911 magazine has a capacity of 7 rounds and is generally considered of low quality and less than optimal design; the plastic .22 caliber magazines are considered a recreational product

The suggestion in the Governor's Brief in Opposition to Plaintiffs' Motion for Temporary Restraining Order and Preliminary Injunction that "*not all magazines have removable baseplates that would possibly allow conversion to higher capacities*" (page 17 footnote 5) and "*But magazines can be and are made that do not have removable baseplates*" (page 21 footnote 7), is misleading because the industry standard for modern detachable box magazines is the design that incorporates a separate base plate component that can be removed. The exception, and a very small one, is the fixed base magazine, and I know of no modern polymer magazines that utilize permanently fixed base plates.

The design characteristics of these modern and most common magazines are predicated on simplicity of design and cost and efficiency of manufacturing, reliability of performance, ease of maintenance, interchangeability of components when repairs are necessary, and to some extent aesthetic appeal.

The modern detachable box magazine design has been universally adopted by virtually every major firearms manufacturer and a removable base plate is considered an industry standard feature. This is because as semi-automatic firearms have evolved and become a mainstay of defensive firearms users, the reliability of the magazine was recognized as a critical factor in the overall reliability of the firearm. The need to design and manufacture magazines that were simple and easy for the ordinary user to disassemble facilitates and encourages the maintenance process and thus provides ongoing reliability for the user.

This is especially true of modern polymer magazines that are designed to be robust enough to withstand many thousands of cycles of use as well as exposure to extreme temperatures, ultraviolet light, solvents, abusive handling and dirt and debris and still retain their serviceability. These modern removable base plate magazines have a reliable

use lifespan of many generations due in large part to the design characteristics that allow them to be easily disassembled.

In fact, certain semi-automatic firearms incorporate the existing design and specifications of these types of magazines into the development of their new firearms designs so that the new firearm will be backwards compatible with an existing magazine product that is already successfully being manufactured and used.

This style of magazine design predates the aftermarket, third party “pink extensions” and capacity extensions that have been designed to be “retrofitted” to other manufacturers’ “factory magazine”; but because of the demand for larger capacity pistol magazines and popularity of “pink extensions” many pistol manufactures have taken advantage of this common modern magazine design and now offer extensions for their “factory” pistol magazines.

Although the capacity intent of the design of magazines, specifically semi-automatic rifle magazines, that are manufactured to hold a specific number of rounds of ammunition, is clearly communicated by their original capacity limits, pistol magazine extensions have become commonplace. “Pink extensions” are now available in types that allow additional ammunition capacity. Not all pink extensions add ammunition capacity; some simply provide a longer surface for the hand to fit on the grip of the handgun. When pink extensions are installed, the ones that add capacity may appear identical to those that do not.

The development of a standard modern detachable magazine design that utilizes the external flange feature has provided the opportunity for accessory designs that were not possible with earlier sheet metal magazines with internal flanges. This design characteristic does in fact allow for the addition of an extension. The phrase “designed to be readily converted” as used in HB13-1224 can be construed to mean that standard magazines are in fact designed in such a way that they can be readily converted, regardless of the original designer’s intent.

The common features or design characteristics of magazines that are designed in such a way that they may be readily converted to accept more than 15 rounds of ammunition are the outside flange and the removable base plate. What other objective characteristics are necessary to determine whether these magazines are in violation or not in violation of HB 13-1224?

Magazine design evolved from mechanical and manufacturing necessity, a design desire to improve the performance, reliability and life of the magazine and technological advances in material capabilities. There is no evidence that current and commonplace magazine design is based in any way on the ability to “be readily converted to accept” more than 15 rounds of ammunition and yet the nature of the common design can be interpreted to be “readily converted.”

The term “readily converted” has many possible subjective interpretations based on the level of expertise, training, and experience of the observer. An ordinary person may or may not be qualified to recognize or assess the design characteristics of a magazine as

they relate to what might be “readily converted.” This expertise will be influenced by how much or how little knowledge of and/or exposure to magazines fitted with extensions that an ordinary person might have.

I am currently aware of only one manufacturer of a rifle magazine that is specifically designed to expand and accept various amounts of ammunition: Thermold of Sandy Springs, Georgia. And it must be noted that even their lone “expandable” magazine design is not intended to be modified or “converted” to accept more rounds of ammunition; it is sold as a complete unit designed to simply slide open or closed and needs no “conversion.”

The lack of clarity, definition and the inherent subjectivity as to what “readily” is in the context of this law opens the door to arbitrary and multiple interpretations.

For example, for a person with access to a machine tools and the mechanical ability to construct a magazine extension, today’s commonly manufactured magazines may be “readily converted.” For persons with some engineering and or technical drafting knowledge and access to a 3-D printer, also known as a rapid prototyping device, designing and creating a magazine extension may be as simple as a half hour at their computer.

The expertise necessary to determine what is or is not “readily converted” is not described or contained in the law, and from a practical perspective makes it impossible to enforce fairly and consistently in the field, if at all.

Under HB 1224, enforcement activities will be determined by the individual subjective assessment of those thousands of individual officers who may or may not have any firearms expertise. Given the sheer volume of detachable magazine and firearm manufacturers, it would be very difficult, or impossible, for any one officer to have the requisite expertise to recognize and independently determine that a particular design can be “readily converted.”

1. There is no objective criteria HB 13-1224 that ordinary citizens can understand and rely on to determine compliance.

The ambiguity of the law leaves ordinary individuals without any specific identifiable feature that objectively cancels out the ubiquitous removable base plate and outside flange design. Just the ability to remove a base plate is the indicator that something else can be substituted for the factory base plate. That something may be an aftermarket cosmetic accessory or it could be an extension. How will an ordinary person determine which magazine is “readily convertible” and which is not?

If the determination to be made, as the Governor’s Brief in Opposition to Plaintiffs’ Motion for Temporary Restraining Order and Preliminary Injunction suggests, is based *not* on whether a detachable box magazine is capable of being of being converted to accept more than 15 rounds of ammunition, but instead, that it has objective features that are specifically designed to make it readily convertible, I cannot discern from HB 13-

1224 what those objective features are, if they are not the removable base plate and outside flanges.

A typical detachable box magazine has only 4 or sometimes 5 components in total: the body, the base plate, the follower and the spring (and in some cases a detent plate or tab to secure the base plate to the body). In most magazines, only three of these are visible without disassembly: the body, the base plate and the follower. (Some magazines have witness holes or windows in the sides of the magazine that allow the spring to also be seen on close inspection. Some magazines are translucent and allow all of the components to be seen).

With all the experience in the firearms industry and access to reference and research materials that I have, I cannot find a single example of a pistol magazine that has any extraordinary design features that clearly distinguish it as a magazine that is intentionally “designed to be readily converted” to accept more than 15 rounds of ammunition. I have found only one rather unusual rifle magazine that expands.

The Defendant also indicates that the characteristic that would definitely identify a magazine in violation of HB 13-1224 is one that has been converted, one that has been combined with additional components that allow it to accept more than 15 rounds of ammunition. This severely contradicts the language of HB 13-1224 and demonstrates the confusing problem with the language of this section of HB 13-1224 in describing what constitutes a “large-capacity” magazine.

What the Defendant apparently seeks to prohibit, based on his post-implementation interpretation, are actually the components that attach to a magazine that would allow it to accept more than 15 rounds of ammunition, and he apparently only seeks to prohibit them when they are actually attached and functioning. This is exactly what is not described by HB 13-1224.

2. Enforcement of HB 13-124’s “designed to readily converted” language will be difficult and confusing for Colorado Law Enforcement.

The uncertain and contradictory aspects of HB 13-1224 will play out in a confusing and detrimental way during enforcement activities.

In the event of strict adherence to the original language of HB 13-1224, the officer in the field must somehow imagine the original intent of the engineer or inventor of the particular magazine he or she is looking at and enforce accordingly. I cannot imagine how I would teach, train or supervise an officer in the field to perform this function.

In the event of construing the language to mean that any magazine that is designed in such a way that it can be converted, all removable base plate magazines, no matter what their actual capacity, will become prohibited, if obtained after July 1, 2013. This will effectively prohibit all semi-automatic firearms that utilize a detachable magazine.

Interpreting the law to mean, as the Defendant now indicates, only magazines that have been combined with other independent components, that when combined allow the magazine to contain more than 15 rounds of ammunition, are prohibited, will present additional uncertainty and problems for compliance and enforcement.

In the event a suspect magazine is encountered by law enforcement, this field investigation will require an extensive knowledge of magazine component design, construction and the original capacity of the magazine. It will also require some kind of verification or determination that the magazine was not configured in its discovered form before July 1, 2013 (see Grandfathered and Continuous Possession sections below). In other words; how will any officer know, simply by observing an extended magazine, that the magazine was extended before or after July 1, 2013?

Aftermarket magazines may not have an imprinted round count or total capacity marking. The extension is almost always a solid enclosure that will not obviously reveal its capacity. An extension, as described above, may or may not be one that allows additional capacity.

In the best case, the original magazine will at least have a factory capacity marking, but the capacity of the extension will not be so obvious. It will require disassembly and inspection and the expertise to determine if it does in fact allow additional capacity and if so how much.

A modification of the magazine that increases its overall length in order to increase its capacity will necessarily require the substitution of a longer spring. The additional length of the spring, because of the additional coils, will correspondingly take up more room in the base of the magazine when compressed. Aftermarket followers may also be longer than the factory originals. Each of these replacement components aggravates the capacity verification problem, because any change in the dimensions of the components may affect the space left for overall capacity. Every law enforcement officer is not necessarily a firearms expert; a modified magazine will likely be made up of components that field law enforcement officers are not familiar with, leaving them facing an untenable enforcement situation.

It will necessitate that some form of verification of actual capacity be conducted in the field. This will typically require 16 dimensionally correct dummy rounds (inert ammunition) to be inserted into the suspect magazine and will require every law enforcement officer to have access to 16 dummy rounds of every common pistol and rifle caliber and the expertise to identify the correct caliber for that particular magazine.

Different calibers have different diameters. Based on the design of the magazine, ammunition may be staggered inside the magazine at different angles from one model magazine to the next. Therefore, no simple measurement of the exterior of the magazine will definitively confirm actual capacity.

Add to this dilemma the fact that every different model of magazine may use a different shape and depth of follower and different wire size and coil design for the spring; the

complexity of determining the actual capacity becomes quite steep, as does the possibility of error.

Because of HB 1224, many forms of internal magazine blocks will be employed to facilitate compliance with the restricted capacity requirement while utilizing existing “large-capacity” magazine bodies. This is especially predictable because there is no currently manufactured 15 round capacity magazine for modern sporting rifles, the most popular rifle in use today. Starting with 10 round capacity, these types of magazines come in capacity multiples of 10, with the standard capacity at 30 rounds. Users who wish to comply and who also wish to take advantage of the full 15 rounds of capacity allowed by HB 1224 will employ 20 or 30 round magazine bodies that are modified with internal blocking devices that limit capacity to 15 rounds of ammunition.

These blocking components will not be visible from the outside of the magazine and will require expertise in disassembly of the suspect magazine and technical verification that the blocking device, which is part of the magazine, is not “designed to be readily converted.” Since there are no standard engineering, design or construction criteria enumerated in HB 13-1224 for how these blocks shall be constructed and secured, how will law enforcement determine what is in violation and how will ordinary users know what complies?

B. “Capable of Accepting” is a problematic and impractical concept because it subjects firearms owners to criminal liability that may have been caused by the manufacturer if the magazine unintentionally holds more ammunition than the manufacturer specifies or that the user is able to recognize.

It has been my experience that certain magazines of a stated capacity will actually, when forced, accept one extra round of ammunition. This can result from manufacturing tolerance differences that unintentionally allow a little bit too much room for the magazine spring to compress within the body of the magazine. Many magazine manufacturers also intentionally design in some additional room in the bottom of the magazine to prevent the spring from being crushed against itself and thereby causing deformation that will lead to malfunctions.

Retailers who order and receive bulk or pre-packaged shipments of magazines do not individually test or necessarily have the expertise to test each magazine to insure that their mechanical specifications only allow the magazine to accept the stated capacity of ammunition. Prepackaged magazines often come in heat sealed blister packaging that does not allow casual access prior to sale.

It would be naive to believe that every magazine manufacturer and wholesaler distributor has a perfect quality control and product identification control system. Mistakes happen, and as stated above, small incremental tolerance discrepancies can allow a magazine that is stated to hold 15 rounds of ammunition to actually be “capable of accepting” 16 rounds.

Tubular magazines of some pump action rifles, such as the Uberti Goldrush or the Taurus Thunderbolt will accept two different lengths of ammunition cartridges. When one or the

other length of ammunition is used, or a combination of both, the actual capacity of the magazine will be different. An ordinary user or even seller or buyer of the firearm may not be aware of this design characteristic.

The question of private party transfers under HB 13-1229 has ramifications related to the flawed application of “capable of accepting” because not every Federal Firearms Licensee has expertise in every firearm and every magazine. Will FFL dealers that are required to perform background checks for private party transfers be responsible and criminally and civilly liable if they do not physically verify that magazines included in the transfers are not “capable of accepting” more than 15 rounds of ammunition?

From a purely technical perspective, the law is so intrinsically ambiguous and confusing that it is impossible for me to see any way for the ordinary citizen to understand all the technical nuances and possible configurations of magazines, and equally difficult for me to envision how law enforcement will be able to conduct enforcement fairly and consistently.

C. The requirement that the owner of the magazine(s) “maintains continuous possession of the large-capacity magazine” is unrealistic in ordinary practice and for compliance and enforcement.

Colorado Revised Statutes section 18-12-302 (II) provides an exemption for a person who “maintains continuous possession of the large-capacity magazine.”

Merriam-Webster’s Collegiate Dictionary, 2009, definition of CONTINUOUS:
I : marked by uninterrupted extension in space, time, or sequence

This requirement of HB 13-1224 appears to describe a requirement that the owner of a “large capacity” magazine, which he legally possesses, must physically maintain possession of that magazine on his person or in his immediate control at all times in order to comply with this law.

This requirement is impractical and incongruous from both compliance and enforcement standpoints.

There are myriad circumstances where, even if an owner wanted to comply and maintain continuous possession of a large capacity magazine, it would be impossible. For example: when traveling on an airline, in a Federal or State government facility, in a private facility that prohibits firearms, when hospitalized, when unconscious.

Many firearms owners legally possess many of what HB1324 calls “large-capacity magazines,” for several different firearms systems. Are they to carry all the magazines on their person at all times? I am personally aware of magazine owners who have dozens of legally owned magazines that have a capacity of more than 15 rounds of ammunition.

The continuous possession requirement also prohibits the loaning on a temporary basis of “large capacity” magazines, even to family members. The continuous possession

requirement prohibits shipping “large capacity” magazines to oneself or packing them in a moving box and allowing a third party to transport them to another location in the State.

In fact, the continuous possession requirement prohibits storing and leaving the “large capacity” magazine while traveling on vacation or business, prohibits giving the “large capacity” magazine to a gunsmith while he services the firearm it goes with, and would criminalize military personnel who store or leave their “large capacity” magazine behind when serving their country.

In actual practice, both physically and logistically, diligent compliance with this requirement will be beyond the capabilities of ordinary citizens.

The implementation of enforcement activity is equally flawed because in the case of a field enforcement activity, the activity itself (such as a traffic violation, a traffic accident, an investigatory stop) will often lead to the separation of the owner and the magazine. The simple act of getting out of one’s vehicle and leaving the magazine behind is a violation. Should a traffic accident victim be transported to the hospital and the magazine be left in the towed away vehicle, it is a violation.

A more relaxed interpretation of the term “Continuous Possession” has been construed in the May 16, 2013, Technical Guidance document authored by the Colorado Attorney General to mean general custody and control, inferring that maintaining possession on your own property, in your own vehicle, or within your immediate control would be in compliance.

Unfortunately, many of the same inherent inabilities to comply with these parameters will exist as with the stricter iteration.

As an example: in much of rural Colorado, unincorporated counties allow residents to legally discharge firearms on their own property. As a result, informal shooting ranges on privately owned properties are not uncommon. An ordinary citizen, who may have a relative or a guest join him for recreational shooting on his own property, would risk being in violation if he were to leave them alone, even though they remained on his own property while they were temporarily using his “large capacity” magazine, because he would not be in physical proximity to the temporary user of the magazine.

HB 13-1229, the Background Check provision that also was implemented on July 1, 2013, allows a temporary transfer of a firearm under some circumstances, such as if it “occurs while in the home of the unlicensed transferee and the transferee is not prohibited from possessing firearms and the unlicensed transferee reasonably believes that possession of the firearm is necessary to prevent imminent death or serious bodily injury to the unlicensed transferee.” But under the continuous possession requirement of HB 13-1224, a “large capacity” magazine, which may be the original factory-provided magazine for that firearm, may not be allowed outside the custody and control of the owner.

In the event that such a temporary transfer were to be necessary to prevent imminent death or serious bodily injury and all that was available for the temporary transfer was a firearm equipped with a “large capacity” magazine, the owner of the firearm would not

be able to facilitate the defensive need of the person in danger because it would violate the continuous possession requirement. It would also place the “unlicensed transferee” into violation of the prohibited possession of “large capacity” magazines provision of HB 13-1224.

Continuous possession will also affect firearms owners’ ability to have their firearms repaired or customized. The custom shop that I operate primarily caters to out-of-state clients, but a regular stream of local gun owners contact me to make an appointment to bring a firearm into my shop for repair or customization.

The proper function and reliability of semi-automatic firearms that utilize detachable magazines, as discussed above, are inexorably tied to the function and reliability of their magazines. The magazine is an integral part of the semi-automatic firearm feeding system and many functional repairs require the use of those magazines to diagnose malfunctions and to confirm the firearm’s proper function after repair or customization.

A firearm that is brought into my shop for repair may be inspected while the customer waits, if time permits. And if the cause of the problem is obvious and simple to remedy, I will do so; but typically the firearm and the magazines must be left with me for at least a week and frequently longer. During this time the owner cannot maintain continuous possession.

The effect will be that defensive firearms will not be brought to gunsmiths for repair for fear of violating the continuous possession provision of HB 13-1224. Those defensive firearms that are not brought in for repairs may malfunction during actual defensive use or may be discarded in lieu of some other less suitable and/or less capable firearm resulting in the degradation of the owner’s ability to defend him or herself.

In the event of the owner’s death or incapacity, the heirs or subsequent trustees will immediately be in criminal violation simply by mere possession, made worse by the reality that most estates take time to resolve and the discovery and subsequent possession of the prohibited magazines may be not be realized or recognized at all. So someone who legally owns a “large capacity” magazine, will, upon their death, effectively make someone else a criminal under this provision, because there are no compliance exceptions for involuntary possession.

D. The sale and transfer of legally owned firearms that were originally designed and sold with magazines with a capacity of more than 15 rounds of ammunition, for which there are currently no smaller capacity magazines, are the subject of a de facto ban.

The question of the sale and/or transfer of a legally owned firearm that came from the manufacturer equipped with “large capacity” magazines is also relevant because under this provision, the magazines may not be legally transferred with the firearm. Currently there are a number of semi-automatic pistols that are manufactured with “large capacity” magazines as standard equipment for which there are no commercially available magazines with a capacity of 15 rounds or less available.

This essentially renders those firearms useless and valueless in the State of Colorado. Without magazines, these semi-automatic pistols cannot function. There is no market for modern pistols that cannot function. (Non-functional antiques may have some value.)

This has huge ramifications not only for individual sellers, but for Colorado firearms retailers and distributors, because any inventory of pistols that they may have had on the shelves or in pending orders from manufacturers or wholesale distributors, for which there are no available magazines that comply with HB 13-1224, have become worthless as a retail commodity.

As part of my preparation of this report, I queried the Plaintiff retailers. One retailer detailed 47 different models of pistols that had to be removed from his shelves because magazines with a capacity of 15 rounds or less that would function in those 47 different models were either back ordered for months or longer, or were simply not produced.

These affected pistols included multiple models from the following mainstream manufacturers: Beretta, CZ, FNH, Glock, Keltec, Smith & Wesson, Springfield Armory and Sturm Ruger.

Most of the other retailers indicated they also do not have 15 rounds or less magazines for pistols that came from the factory designed for magazines with a capacity of more than 15 rounds.

The effect of HB 13-1224 on these firearms retailers is a detrimental financial impact on their businesses. The retailers that depend on the defensive pistol customers to come through their doors have reported a significant drop in their business. These same retailers reported that their handgun business is based overwhelmingly on semi-automatic pistol sales and that is exactly what has been impacted by HB 13-1224.

For the individuals who are seeking a pistol for defensive use, this severely curtails their ability to meet that need. Defensive pistol users that are forced to buy alternative handguns with inferior capabilities will be placed at a disadvantage when defending themselves.

E. The provision that “A person may possess a large-capacity magazine if he or she: owns the large-capacity magazine on the effective date of this section” (July 1, 2013) will have serious unintended consequences.

So-called “large-capacity” magazines, those detachable magazines that will accept more than 15 rounds of ammunition, which were legally owned prior to July 1, 2013, are not dated or serialized.

“Large capacity” magazines that are manufactured outside the State of Colorado cannot be required by Colorado law to be dated or serialized.

A “large capacity” magazine found in the possession of a private citizen in the State of Colorado after July 1, 2013, cannot, from any outward appearance or feature, be

definitively dated nor can the acquisition of said magazine be dated. This can only be a self-enforcement criminal law.

Although HB 1224 creates criminal acts that may be enforced, the question is how.

I am aware that the pending implementation of this new law caused many Colorado citizens to buy "large capacity" magazines. Many purchased magazines for firearms they did not actually own. For several reasons, modern sporting rifles had become difficult to obtain and expensive, so in anticipation or "just in case" the time came when the consumer could obtain and/or afford one, these people purchased multiple "large capacity" magazines because they were about to become unavailable

I too purchased a quantity of 30 round AR15 magazines from various wholesale sources. The new magazines are sealed in the manufacturer's packaging.

Based on my experience in law enforcement, I can imagine a scenario where a year or two or three down the road, someone who had pre-purchased "large capacity" magazines before the July 1, 2013, date, later purchases a brand new rifle, perhaps one that is a new model not manufactured prior to July 1, 2013, and places the previously owned, still in the manufacturer's packaging "large capacity" magazine with the brand new, still in the box, rifle in the back seat of this or her vehicle.

During a routine traffic stop only a few miles from one of the seven contiguous states, none of which have magazine restriction laws, the officer from one of the hundreds of law enforcement agencies in Colorado observes what he recognizes as a brand new rifle and several "brand new"-looking "large capacity" magazines with it. Although only a misdemeanor, this give the officer probable cause to believe a crime is being committed. This probable cause can be acted on and an arrest effected; the vehicle may be searched for additional evidence of the crime, the firearm and magazine seized as evidence, the vehicle impounded pursuant to arrest.

Section 18-12-302 (b) states: "If a person is alleged to have violated subsection (1) of this section asserts that he or she is permitted to legally possess a large-capacity magazine pursuant to paragraph (a) of this subsection (2), the prosecution has the burden of proof to refute the assertion."

There is nothing in this section that would prevent a zealous law enforcement officer from making an arrest. In fact the above language is conspicuously obtuse, because our legal system is already supposed to consider those accused innocent until proven guilty and the prosecution always bears the burden of that proof. There is no special relief or comfort in section (b) above. In fact it explicitly states that the allegations can be made.

Where there is probable cause, the arrest is always valid, regardless of the subsequent decision to prosecute or the result at trial. In the meantime, the arrestee has lost his freedom, has had his vehicle impounded and his property seized. He must now make bail, appear in court, and retain legal representation.

There will undoubtedly be severe and unintended consequences as the result of the situations created by the passage of this law.

The seven contiguous states mentioned above that do not have restrictions on the sale of “large capacity” magazines will be a source for those Colorado citizens who choose to travel to those states, buy “large capacity” magazines and bring them back to Colorado in violation of Colorado law.

Although reputable dealers and wholesalers in other parts of the country will certainly refuse to ship “large capacity” magazines to individual Colorado citizens after July 1, 2013, unscrupulous mail-order dealers and private citizens are likely to do so. There is no magazine sniffing dog that can root out illicit magazine shipments. The Internet will facilitate a black market for those willing to violate the law.

V. Analysis and Summary

HB 13-1224 creates a prohibition of “large capacity” magazines by attempting to designate and distinguish prohibited magazines by their design, specifically that they are “designed to be readily converted.” Unfortunately, that designation is so technically incorrect and inadequate, that when examined in light of the design characteristics shared by most modern detachable magazines, it either means all magazines with a removable base plate, or it means none of them.

The “continuous possession” requirement of HB 13-1224, apparently intended to prevent the loaning of “large capacity” magazines, is demonstrably impractical to comply with and enforce.

Equal or greater confusion exists in the “Grandfather” portion of the law because of the lack of any technically verifiable method of dating a suspect magazine or establishing in the field the date of acquisition.

VI. Conclusion

HB 13-1224 is deeply flawed because of incoherent and incorrect technical language and the fact that it simply does not comport with any firearms industry standards that can be recognized and enforced.

The operation of this law unintentionally creates criminal liability in situations that ordinary citizens would consider normal and lawful use.

Firearms professionals and ordinary citizens cannot effectively and confidently comply with laws that ostensibly address highly technical issues, and law enforcement cannot fairly and consistently enforce technical firearms laws when those laws are ambiguous because of their technical inaccuracies and inadequacies.

The facts and opinions expressed above are accurate to a reasonable degree of professional certainty. I reserve the right to supplement or modify this report in the event that pertinent additional information or evidence comes to my attention.

Experience

July 1994: President & General Manager, AIMPRO Tactical, LLC

Operate firearms manufacturing, custom gunsmith services, training and consulting firm. Design and manufacture firearms accessories, provide custom and performance shop work for individual firearm clients, customize firearms for dealer direct wholesale orders and develop custom product design concepts for manufacturers. Provide training, testing, comprehensive assessments and evaluations, consultations and expert witness testimony for manufacturers, distributors and dealers. Conduct law enforcement and civilian firearms training, including basic and advanced firearms handling techniques and tactics and concealed carry courses. Provide technical advice and hands on training for firearms industry and non-firearms industry clients. Clients include UCLA Medical Center, Cedars Sinai Medical Center, Brinks International, Sturm Ruger, Beretta U.S.A., Heckler & Koch, Sig Arms, Smith & Wesson, Springfield Armory, Bersa, Weatherby, Touchstone Pictures, Icon Entertainment, and Warner Brothers. Conduct national law enforcement training and operate national law enforcement service center for O.F. Mossberg & Sons, Inc. Clients include military, federal, state and local law enforcement personnel and civilian students.

April 1994: Adjutant to the Acting Chief of Police, UCLA Police Dept

Directed and managed all Internal Affairs investigations and coordinated Personnel matters with Human Resources. Developed training documentation, trouble shot and coordinated maintenance for department's computer aided dispatch and records management system. Developed and implemented new policies. Planned and directed special event field operations.

December 1993: Commander Patrol Division

O.I.C. Internal Affairs Division, UCLA Police Dept

Directed all uniformed services to a community of approximately 65,000. Supervised seven Patrol Sergeants/Watch Commanders and approximately 40 Police Officers. Managed Patrol Division resources, including vehicle fleet, emergency response equipment and computer support systems. Evaluated and approved training. Assigned, reviewed and conducted Internal Affairs investigations.

March 1992: Lieutenant

Promoted after placing third on a Statewide qualified candidate list. Commander of the Medical Center Division. Directed all Police, Security and Community Services to the largest medical complex in the Western United States. Administered a budget of approximately \$850,000 and a staff of eight sworn and twenty five civilian personnel, including mid-level managers and clerical staff. Supervised two full time investigators, all investigative follow-ups, crime prevention services and community service programs. Co-chaired departmental policy committee.

October 1990: Sergeant, Patrol Division, UCLA Police Dept

Field Supervisor/Watch Commander. Conducted roll call and field training, deployed personnel and directed field operations. Special projects included Internal Affairs investigations, background investigations and extensive revision of the department's policy manual.

*April 1988: Sergeant, Records and Communications Division,
UCLA Police Dept*

Supervised 15 civilian personnel in addition to sworn staff. Supervised the selection, training and evaluation of staff. Coordinated the acquisition and directed the installation of a comprehensive records management system and computer aided dispatch system.

*January 1985: Rangemaster/Principal Firearms Instructor,
UCLA Police Dept*

(In addition to Detective duties) Developed and administered department weapons training program, including department transition to autoloaders. Managed quarterly firearms qualifications for seventy plus sworn personnel. Evaluated weapons and force related incidents and policies, recommended and provided remediation. Evaluated, tested and approved duty, off-duty and back-up firearms and ammunition.

April 1985: Detective, UCLA Police Dept

Assigned to "Crimes Against Persons" desk. Conducted investigations, follow-ups and District/City Attorney criminal filings of all death investigations, robberies, sex crimes, assaults and weapon violations. Acted as Intelligence Liaison to outside agencies.

October 1983: Patrol Officer, UCLA Police Dept

General Law Enforcement duties, including responding to calls for service, preliminary investigation of crimes, apprehension of suspects, protection of life and property. Deployed as part of L.A. Olympic Games multi-agency athlete protection detail.

July 1983 Police Officer – Trainee

U.C.L.A. Police Department. Attended Orange County Peace Officers Academy.

Qualifications

Possess *Basic, Intermediate, Advanced, Supervisory and Management* P.O.S.T Certificates

Completed P.O.S.T approved Supervisory School

Completed P.O.S.T Certificated Management School

Completed P.O.S.T Certificated Narcotics Investigation (*Course taught by DEA and LA County Sheriffs*) and Sexual Assault Investigation Schools (*taught by CA DOJ and San Jose PD*)

Completed L.A. County Sheriff's Department Homicide Investigator Training Program.

Completed L.A. County Sheriff's Department Automatic Weapons Training Program (*M-16, H&K MP5*)

Completed F.B.I. Certificated Firearms Instructor School

Completed L.A. County Sheriff's Department Autoloader Transition School

Completed Alameda County Advanced Officer's Tactics School

Completed L.A. County Sheriff's Laser Village I & II Schools

Completed P.O.S.T. approved Internal Affairs Investigator School

Completed C.S.T.I. Civil Emergency Management School (*San Louis Obispo*)

Completed D.O.J. Visual Investigative Analysis Training

Former Member of the California Peace Officers' Association
Former Member of the California Sexual Assault Investigator Association
Former Member of the California Narcotics Officers Association

Member of the California Rangemasters Association
Member of the National Shooting Sports Foundation
Member of the National Association of Shooting Ranges
Member of the International Association of Law Enforcement Firearms Instructors
Member of the International Defensive Pistol Association

Additional qualifications are listed at the end of the c.v.

Expert Witness Experience

(Deposition, Court Testimony or Federal Court Report)

Nelson v. Glock, United States District Court, District of Oklahoma, 2013

Arbogast v. Jerry's Sports Inc., Lackawanna County Superior Court, 2012

Mantooth v. Glock, United States District Court, Eastern District of Michigan, 2011

Hayden v. Glock, Santa Clara Superior Court, 2011

Stoklund v. Thompson/Center, United States District Court, District of North Dakota, 2007

West v. NAA, United States District Court, District of Alaska, 2005

Smith v. Austin & Halleck, United States District Court, District of Oregon, 2005

Paderez v. SIGARMS, San Fernando Superior Court, 2004

Adams v. Beretta, Cook County Superior Court, 2004

Beauchamp v. Bersa, United States District Court, District of Colorado, 2004

Ryan v. Smith & Wesson, United States District Court, District of Pennsylvania, 2003

California Municipal Firearms Litigation, San Diego Superior Court, 2002

Stotts v. Heckler & Koch, United States District Court, Western District of Tennessee, 2002

Maxfield v. Bryco, Alameda Superior Court, 2002

Grunow v. Valor, Palm Beach Superior Court, 2001

Jewell v. Jackson Arms, Alameda Superior Court, 2002

Pinkerton v. Esber, Los Angeles Superior Court, 2001

Robinson v. Ryan, Orange County Superior Court, 2001

Atkien v. Heckler & Koch, United States District Court, District of Pennsylvania, 2001

McMahon v. Manning, Santa Barbara Superior Court, 2000

Huber v. Smith, Los Angeles Superior Court, 2000

Mathieu v. Beretta, United States District Court, District of Massachusetts, 1999

Qualifications (Expanded)

- 1977 UCLA Match Pistol Team
- 1983 Orange County Peace Officers Academy - P.O.S.T approved Basic academy, successful completion is qualification for employment in any police agency in CA. Staff instructors from Huntington Beach PD, Santa Anna PD, Brea PD, La Habra PD, LAPD & Anaheim PD. Cadet classmates included Bell Gardens PD, Anaheim PD, Brea PD, La Habra PD, Newport Beach PD, Huntington Beach PD, Irvine PD, Santa Anna PD.
- 1984 Assigned to Olympic Village Athlete Protection Detail (Special response team, counter terrorism task force deployment.)
- 1985 Assigned to LAPD Pacific Division, Mid-Watch Patrol (8UC49L)
Patrolled housing projects in Mar Vista and Venice areas of Los Angeles, received calls for service and made crime broadcasts over LAPD frequency. Attended roll calls and briefings at LAPD Pacific Division. Booked arrests in LAPD stations and jail facilities.
- 1985 Worked joint foot patrol program with LAPD.
- 1989 Served on selection panel for Santa Monica Police Department recruitment of new rangemaster. Other panel members included U.S. Secret Service and Santa Monica PD.
- 2001 Speaker at American Bar Association Conference on Gun & Media Violence, Beverly Hills, CA
Panel on "Designs and Warnings" in relation to firearms. Explained design and manufacturing defects, authorized user technology, chamber loaded indicators and magazine disconnects.
- 2003 Teach and coordinate national armorers schools and develop tactical training program for O.F. Mossberg & Sons, Inc. (Guest instructor at the Ohio Peace Officers Training Academy, Alpharetta Public Safety Training Center, Tucson Public Safety Academy and Post certified instructor by the Missouri Department of Public Safety.)
- 2003 Federal Firearms License – Dealer.
- 2004 Member Rocky Mountain 3 Gun Association (National rifle, pistol and shotgun competitions.)
- 2004 Attended International Association for Law Enforcement Firearms Instructors Annual Training Conference (including 24 hours of advanced instructor training).
- 2005 Guest Instructor – International Association for Law Enforcement Firearms Instructors Annual Training Conference. (Tactical Shotgun for Instructors).
- 2009 Member, Board of Directors, Camp Fickes Shooting Range.
- 2010 Federal Firearms License – Manufacturer.
- 2011 Guest Instructor, International Association of Law Enforcement Firearms Instructors, Master Law Enforcement Instructor Program. (Co-Instructed Master Law Enforcement Firearms Instructor Course, Colorado and California)
- 2013 Consultant, private shooting range development, Conifer, CO.