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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

STEVEN RUPP, et al.,

Plaintiffs,

vs.

XAVIER BECERRA, in his official
capacity as Attorney General of the
State of California,

Defendant.

Case No.: 8:17-cv-00746-JLS-JDE

**DECLARATION OF SEAN A.
BRADY IN SUPPORT OF
PLAINTIFFS' MOTION FOR
SUMMARY JUDGMENT;
EXHIBITS 1-8**

Hearing Date: May 31, 2019
Hearing Time: 10:30 a.m.
Courtroom: 10A
Judge: Josephine L. Staton

[Filed concurrently with Notice of
Motion for Summary Judgment,
Memorandum of Points and Authorities,
Statement of Uncontroverted Facts and
Conclusions of Law, Request for
Judicial Notice, Declarations of Steven
Rupp, Steven Dember, Cheryl Johnson,
Christopher Seifert, Alfonso Valencia,
Troy Willis, Michael Jones, Dennis
Martin, and Richard Travis]

1 **DECLARATION OF SEAN A. BRADY**

2 I, Sean A. Brady, am an attorney at the law firm Michel & Associates, P.C.,
3 attorneys of record for Plaintiffs in this action. I am licensed to practice law before
4 the United States Court for the Central District of California. I am also admitted to
5 practice before the Eastern, Northern, and Southern Districts of California, the courts
6 of the state of California, and the Ninth Circuit Court of Appeals. I have personal
7 knowledge of the facts set forth herein and, if called and sworn as a witness, I could
8 and would testify competently to the truth of the matters set forth herein.

9 1. On October 25, 2018, Plaintiffs served Defendant with Plaintiffs' Initial
10 Disclosure of Expert Witnesses in this matter. Three exhibits were attached to
11 Plaintiffs' disclosure: (1) the Expert Report of Mr. J. Buford Boone III; (2) the
12 Expert Report of Professor William English; and (3) the Expert Report of Mr.
13 Stephen Helsley. A true and correct copy of Mr. Boone's expert report, as appended
14 to Plaintiffs' Disclosure of Expert Witnesses, is attached hereto as **Exhibit 1**. A true
15 and correct copy of Mr. English's expert report, as appended to Plaintiffs'
16 Disclosure of Expert Witnesses, is attached hereto as **Exhibit 2**. A true and correct
17 copy of Mr. Helsley's expert report, as appended to Plaintiffs' Disclosure of Expert
18 Witnesses, is attached hereto as **Exhibit 3**.

19 2. On October 25, 2018, Defendant served Plaintiffs with the Expert
20 Report of Detective Michael Mersereau and the Expert Report of Mr. Blake Graham.
21 A true and correct copy of Detective Mersereau's expert report, is attached hereto as
22 **Exhibit 4**. A true and correct copy of Mr. Graham's expert report, is attached hereto
23 as **Exhibit 5**.

24 3. On December 4, 2018, I deposed Defendant's expert witness, Michael
25 Mersereau. Attached hereto as **Exhibit 6** is a true and correct copy of experts from
26 the deposition transcript of Michael Mersereau.

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4. On December 19, 2018, I deposed Defendant's expert witness, Blake Graham. Attached hereto as **Exhibit 7** is a true and correct copy of excerpts from the deposition transcript of Blake Graham.

5. On September 14, 2018, Defendant served Plaintiffs a Response to Plaintiff Christopher Seifert's Request for Admissions, Set One. Attached hereto as **Exhibit 8** is a true and correct copy of excerpts from the Response.

6. On September 14, 2018, Defendant served Plaintiffs a Response to Plaintiff Christopher Seifert's Interrogatories, Set One. Attached hereto as **Exhibit 9** is a true and correct copy of excerpts from the Response.

7. On November 15, 2018, Defendant served Plaintiffs a Second Supplemental Response to Plaintiff Troy Willis's Interrogatories, Set One. Attached hereto as **Exhibit 10** is a true and correct copy of excerpts from the Response.

8. A true and correct copy of Jerry Lee *2018 Standard Catalog of Firearms, The Collector's Price & Reference Guide* is attached as **Exhibit 11**.

9. A true and correct copy of Patrick Sweeney, *The Gun Digest Book of The AR-15*, (2005) is attached as **Exhibit 12**.

10. A true and correct copy of an AR ad on Guns & Ammo, April 2001 Issue is attached as **Exhibit 13**.

11. A true and correct copy of *New Industry Statistics Underscore Popularity of "America's Rifle" – 16,069,000!?*, NRAHQ via Ammoland Inc., (2018), https://www.ammoland.com/2018/09/new-industry-statistics-underscore-popularity-of-americas-rifle/?utm_source=Ammoland+Subscribers&utm_campaign=6bc8efca25-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_6f6fac3eaa-6bc8efca25-20582661#axzz5SGKnCoj8 (last visited Mar. 25, 2019) is attached as **Exhibit 14**.

12. A true and correct copy of Chris Eger, *NSSF: AR-15/AK Numbers Top 16 Million*, Guns.com, (2018), <https://www.guns.com/news/2018/09/17/nssf-ar-15-ak-numbers-top-16-million> (last visited Mar. 25, 2019) is attached as **Exhibit 15**.

1 13. A true and correct copy of, *M1 Carbine*, Civilian Marksmanship
2 Program, http://thecmp.org/cmp_sales/rifle_sales/m1-carbine/ (last visited March 25,
3 2019) is attached as **Exhibit 16**.

4 14. A true and correct copy of Alex Yablon, *How Many Assault Weapons*
5 *Do Americans Own?*, The Trace, (2018), [https://www.thetrace.org/2018/09/how-](https://www.thetrace.org/2018/09/how-many-assault-weapons-in-the-us/)
6 [many-assault-weapons-in-the-us/](https://www.thetrace.org/2018/09/how-many-assault-weapons-in-the-us/) (last visited Mar. 25, 2019) is attached as **Exhibit**
7 **17**.

8 15. A true and correct copy of David Heath, Elise Hansen, AJ Willingham,
9 *How An 'Ugly,' Unwanted Weapon Became The Most Popular Rifle In America*,
10 CNN, (2017), [https://www.cnn.com/2017/12/14/health/ar15-rifle-history-](https://www.cnn.com/2017/12/14/health/ar15-rifle-history-trnd/index.html)
11 [trnd/index.html](https://www.cnn.com/2017/12/14/health/ar15-rifle-history-trnd/index.html) (last visited Mar. 25, 2019) is attached as **Exhibit 18**.

12 16. A true and correct copy of *Why the AR-15 Is America's Rifle*, NRP,
13 (2018), <https://www.npr.org/2018/02/15/586172062/why-the-ar-15-is-americas-rifle>
14 (last visited Mar. 25, 2019) is attached as **Exhibit 19**.

15 17. A true and correct copy of Jon Schuppe, *America's Rifle: Why So Many*
16 *People Love the AR-15*, NBC News, (2017), [https://www.nbcnews.com/news/us-](https://www.nbcnews.com/news/us-news/america-s-rifle-why-so-many-people-love-ar-15-n831171)
17 [news/america-s-rifle-why-so-many-people-love-ar-15-n831171](https://www.nbcnews.com/news/us-news/america-s-rifle-why-so-many-people-love-ar-15-n831171) (last visited Mar. 25,
18 2019) is attached as **Exhibit 20**.

19 18. A true and correct copy of *Firearms Retailer Survey Report: Trend*
20 *Data 2008-2016*, National Shooting Sports Foundation, Inc. ("NSSF") Report
21 (2017) is attached as **Exhibit 21**.

22 19. A true and correct copy of *Sport Shooting Participation in the United*
23 *States in 2016*, NSSF (2017) is attached as **Exhibit 22**.

24 20. A true and correct copy of *Modern Sporting Rifle (MSR)*
25 *Comprehensive Consumer Report 2013*, NSSF (2017) is attached as **Exhibit 23**.

26 21. A true and correct copy of *2015-2016 Industry Reference Guide: A*
27 *Compilation of Firearm and Ammunition Industry Data*, NSSF (2017) is attached as
28 **Exhibit 24**.

22. A true and correct copy of Christopher S. Koper, *Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994-2003*, National Institute of Justice, United States Department of Justice, (2004) <https://www.ncjrs.gov/pdffiles1/nij/grants/204431.pdf> (last visited Mar. 25, 2019) is attached as **Exhibit 25**.

23. A true and correct copy of Duncan Long, *The AR-15/M16 A Practical Guide*, (1985) is attached as **Exhibit 26**.

24. A true and correct copy of the Bureau of Alcohol, Tobacco, and Firearms Weapon Selection Presentation is attached as **Exhibit 27**.

25. A true and correct copy of *The AR For Home Defense: One Expert's Opinion*, NRA American Rifleman, (2015), <https://www.americanrifleman.org/articles/2015/5/26/the-ar-for-home-defense-one-experts-opinion> (last visited Mar. 25, 2019) is attached as **Exhibit 28**.

26. A true and correct copy of Jim Wilson, *AR-15 Rifles for Home Defense? Yes!*, NRA Family, (2017), <https://www.nrafamily.org/articles/2017/6/27/ar-15-rifles-for-home-defense-yes/> (last visited Mar. 25, 2019) is attached as **Exhibit 29**.

27. A true and correct copy o, Bartt Brenton, *5 Reasons to Hunt With An AR15*, Brenton AR Hunting Rifles, <https://www.brentonusa.com/5-reasons-to-hunt-with-an-ar-15/> (last visited March 25, 2019) is attached as **Exhibit 30**.

28. A true and correct copy of Jacki Billings, *Why Hunters Are Trading In Traditional Hunting Rifles For the AR-15*, Guns.com, (2017), <https://www.guns.com/news/2017/11/17/why-hunters-are-trading-in-traditional-hunting-rifles-for-the-ar-15> (last visited March 25, 2019) is attached as **Exhibit 31**.

29. A true and correct copy of Richard Mann, (2016), *ARs for Deer Hunting: The Modern Answer to an Age Old Tradition*, NRA Blog, <https://www.nrablog.com/articles/2016/11/ars-for-deer-hunting-the-modern-answer-to-an-age-old-tradition/> (last visited March 25, 2019) is attached as **Exhibit 32**.

30. A true and correct copy of Adam C., *Turning The AR-15 Into a Great Hunting Rifle*, OffTheGridNews, <https://www.offthegridnews.com/survival-hunting/turning-the-ar-15-into-a-great-hunting-rifle/> (last visited March 25, 2019) is attached as **Exhibit 33**.

31. A true and correct copy of Allyson L. Holbrook, Melanie C. Green, Jon A Krosnick, *Telephone Versus Face-to-Face Interviewing of National Probability Samples with Long Questionnaires, Comparisons of Respondent Satisficing and Social Desirability Response Bias*, Public Opinion Quarterly (2003) is attached as **Exhibit 34**.

32. A true and correct copy of Jens Ludwig, PhD, Philip J. Cook, Tom W. Smith, *The Gender Gap in Reporting Household Gun Ownership*, American Journal of Public Health (1998) is attached as **Exhibit 35**.

33. A true and correct copy of Ivar Krumpal, *Determinants of Social Desirability Bias in Sensitive Surveys: A Literature Review*, Springer Science+Business Media (2011) is attached as **Exhibit 36**.

34. A true and correct copy of Ann P. Rafferty, PhD, John C. Thrush, Patricia K. Smith, Harry B. McGee, *Validity of a Household Gun Question in a Telephone Survey*, Public Health Reports (1995) is attached as **Exhibit 37**.

35. A true and correct copy of Adam Winkler, *Why Banning Assault Rifles Won't Reduce Gun Violence*, The Los Angeles Times, (2015), (<https://www.latimes.com/opinion/op-ed/la-oe-winkler-folly-of-assault-weapon-ban-20151211-story.html>) (last visited March 25, 2019) is attached as **Exhibit 38**.

36. A true and correct copy of *2017 Crime in the United States: Expanded Homicide Data Table 8*, Federal Bureau of Investigation, <https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/tables/expanded-homicide-data-table-8.xls> (last visited March 25, 2019) is attached as **Exhibit 39**.

37. A true and correct copy of David B. Kopel, *Rational Basis Analysis of "Assault Weapon" Prohibition*, 20 J. Of Contemp. L. 381-417 (1994),

1 <http://www.constitution.org/2ll/2ndschol/62rati.pdf> (last visited March 25, 2019) is
2 attached as **Exhibit 40**.

3 38. Cramer, Clayton E., *Assault Weapon Bans: Can They Survive Rational*
4 *Basis Scrutiny?* (April 13, 2016). University of Akron ConLawNOW, Forthcoming.
5 <https://ssrn.com/abstract=2764549> or <https://ssrn.com/abstract=2764549> (last visited
6 March 25, 2019) is attached as **Exhibit 41**.

7 39. A true and correct copy of Listing # 4842 on the Civilian
8 Marksmanship Program website, *Inland M1A1 Carbine 6630815*,
9 [http://cmpauction.thecmp.org/detail.asp?id=4842&n=Inland-M1A1-Carbine-](http://cmpauction.thecmp.org/detail.asp?id=4842&n=Inland-M1A1-Carbine-6630815)
10 [6630815](http://cmpauction.thecmp.org/detail.asp?id=4842&n=Inland-M1A1-Carbine-6630815) (last visited March 25, 2019) is attached as **Exhibit 42**.

11 40. A true and correct copy of *About the CMP*, <http://thecmp.org/about/>
12 (last visited March 25, 2019) is attached as **Exhibit 43**.

13 41. A true and correct copy of *Pistol Grips*, Brownells,
14 <https://www.brownells.com/rifle-parts/grip-parts/pistol-grips/index.htm> (last visited
15 March 25, 2019) is attached as **Exhibit 44**.

16 42. A true and correct copy of *Adjustable Rifle Stocks*, Brownells,
17 [https://www.brownells.com/rifle-parts/stock-parts/rifle-](https://www.brownells.com/rifle-parts/stock-parts/rifle-stocks/index.htm?avs%7cStyle_1=Adjustable)
18 [stocks/index.htm?avs%7cStyle_1=Adjustable](https://www.brownells.com/rifle-parts/stock-parts/rifle-stocks/index.htm?avs%7cStyle_1=Adjustable) (last visited March 25, 2019) is
19 attached as **Exhibit 45**.

20 43. A true and correct copy of *Flash Hiders*, Brownells,
21 <https://www.brownells.com/rifle-parts/muzzle-devices/flash-hiders/index.htm> (last
22 visited March 25, 2019) is attached as **Exhibit 46**.

23 44. A true and correct copy of Oral Argument Transcript, *District of*
24 *Columbia*, 554 U.S. 570 (No. 07-290) is attached as **Exhibit 47**.

25 45. A true and correct copy of Jane Gross, *California Becomes the First*
26 *State to Vote Curbs on Assault Rifles*, N.Y. Times (Mar. 14, 1989),
27 [https://www.nytimes.com/1989/03/14/us/california-becomes-the-first-state-to-vote-](https://www.nytimes.com/1989/03/14/us/california-becomes-the-first-state-to-vote-curbs-on-assault-rifles.html?mtref=www.google)
28 [curbs-on-assault-rifles.html?mtref=www.google](https://www.nytimes.com/1989/03/14/us/california-becomes-the-first-state-to-vote-curbs-on-assault-rifles.html?mtref=www.google).

1 [com&gwh=09CE7AA50D749C3FEFE643FDB436516A&gwt=pay](#) is attached as
2 **Exhibit 48.**

3 I declare under penalty of perjury that the foregoing is true and correct.
4 Executed within the United States on March 25, 2019.

5
6 /s/Sean A. Brady

7 Sean A. Brady

8 Declarant
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EXHIBIT 1

Expert Witness Report of J. Buford Boone III

Rupp, et al. v. Becerra

United States District Court

Central District of California, Southern Division

Case No.: 8:17-cv-00746-JLS-JDE

October 25, 2018

ASSIGNMENT

I have been asked by counsel for the plaintiffs in the above described matter to provide my opinion on the suitability of semiautomatic, centerfire rifles with detachable magazines, having angular pistol grips, flash suppressors, and adjustable stocks for home defense. This report sets forth my qualifications and foundation for my opinions. I offer these opinions to a reasonable degree of firearm, ballistic, law enforcement, and scientific certainty and am willing and able to testify consistently with the contents of this report.

COMPENSATION

I am being compensated for my time in this case at the rate of \$700 per hour. My compensation is not contingent on the results of my analysis or the substance of my testimony.

BACKGROUND AND QUALIFICATIONS:

I am currently the sole member of Boone Ballistics, LLC and a retired Supervisory Special Agent (SSA) of the Federal Bureau of Investigation (FBI). I was the primary SSA with oversight of the FBI Ballistic Research Facility (BRF) from April 15, 1997 – August 31, 2012.

As the Member of Boone Ballistics, LLC, I have been employed as an expert witness in civil and criminal cases. Additionally, I have been employed as a consultant in civil and criminal cases. I teach internal, external and terminal ballistics, including selection of ammunition and weapons for efficiently incapacitating an aggressive human adversary. I have lectured on the applicability of the Hague Convention of 1899 to the selection of ammunition for use by the U.S. Military. I conduct time of flight testing to better document small arms projectile flight as it applies to the use of a Ballistic Coefficient to predict projectile impact at long distances.

Prior to my first full-time law enforcement employment, I served as a reserve police officer or Deputy Sheriff with Tuscaloosa County, Alabama, Upson County, Georgia, Las Animas County, Colorado and Trinidad Colorado.

Approximately May of 1988 I was hired as a Police Officer with the Tuscaloosa, Alabama, Police Department. I was subsequently offered a position as a Special Agent of the Federal Bureau of Investigation (FBI) in July of 1988. I began employment with the FBI on 07/25/1988. I was graduated from the FBI Academy on 10/21/1988. My first duty station was New Haven, Connecticut.

I have maintained an interest in firearms all my adult life. I have shot competitively. My firearms scores at the FBI Academy were sufficiently high to allow me to attempt the "Possible" Club. I was successful on my first attempt. To shoot a "Possible", Agents must fire a perfect score on a very difficult course. Though there were in excess of 10,000 Agents in 1988, my "Possible" was approximately number 1,198 in FBI history.

Upon arrival in New Haven, I was assigned to the Reactive Squad conducting background, bank robbery and fugitive investigations. I later served as the Fugitive Coordinator for the New Haven Division. I was named "Detective of the Month" by the Bronx Homicide Task Force for the capture of an America's Most Wanted fugitive.

I successfully completed FBI Firearms Instructor School in July of 1989. This qualified me to teach firearms to Field Agents.

I was transferred to the Organized Crime/Narcotics Squad in July of 1990. I primarily participated in investigations of drug gangs. These investigations typically involved significant amounts of surveillance, electronic monitoring and the service of multiple search warrants. I also participated in organized crime investigations. I have participated in multiple arrests in urban and suburban areas.

I was named the Principal Firearms Instructor (PFI) of the New Haven Division in November of 1992. I maintained that position until I transferred to the Firearms Training Unit at the FBI Academy, Quantico, Virginia.

As PFI, I oversaw all firearm and defensive tactics training of the 90+ Agents in the New Haven Division of the FBI. I coordinated training sessions for all firearms issued to general Agents. This included revolvers, pistols, carbines and shotguns. It also included coordination of deadly force training with the Principal Legal Advisor. During my time as the PFI, the FBI transitioned from revolvers to semi-automatic pistols. The training for this transition was my responsibility for New Haven Division Agents.

In September of 1989 I was admitted to the FBI New Haven Special Weapons and Tactics (SWAT) Team as a Sniper/Observer. I successfully passed both the two week Sniper/Observer and the two week Basic SWAT courses at the FBI Academy. I served operationally on the New Haven SWAT Team until my transfer to the FBI Firearms Training Unit at the FBI Academy, Quantico, Virginia.

In March of 1996, I was promoted to a position as a Term GS-14 Firearms Instructor at the Firearms Training Unit (FTU), FBI Academy, Quantico, Va. During this assignment, I performed line and PFI instruction of Agent trainees. I provided or oversaw line and combat instruction in handguns, carbines and shotguns. I also provided judgmental instruction utilizing Firearms Training Simulator (FATS) equipment. The FATS training was used primarily to teach Agents when the use of deadly force was appropriate, and when it was not.

I was transferred to the Ballistic Research Facility (BRF) of the FTU on April 15, 1997. I maintained my position at the BRF for more than 15 years, retiring on August 31, 2012. I

received a permanent promotion to Supervisory Special Agent in September of 1997.

The BRF has responsibility for testing and evaluating all ammunition used operationally by the FBI. The BRF was created following a 1986 shootout wherein a subject was fatally injured by FBI projectiles but continued fighting and ultimately killing two Agents after receiving the “fatal” wound. A thorough investigation revealed the primary cause of the failure to rapidly incapacitate was the projectiles lack of sufficient penetration in the subject’s body. It stopped short of the heart.

This investigation spawned research into the mechanics of wound ballistics. Ultimately, the research led to the creation of a scientifically repeatable method of comparing the potential effectiveness of individual cartridges. The resultant test has been referred to as the “FBI Method”. The BRF published test findings available upon official request of Law Enforcement and Military agencies. The BRF became the most trusted source of ballistic information in the Law Enforcement and Military community.

As SSA of the BRF, my responsibility was to oversee all aspects of the research. I was the only full-time person at the BRF until a support person (non-Agent) was assigned as an Engineering Technician, Ballistics (ETB), in the last quarter of 1998. I was the Supervisor and rating official of the ETB.

As SSA, I performed or directed all functions of the BRF. I hand loaded cartridges, put test firearms together, hand-fired firearms for testing, built tissue simulant blocks, conducted penetration testing and reported on same. I created a relational database to store data and report test results. I operated sophisticated ballistic testing and photographic equipment. I was frequently sought out to train others in the use of this equipment.

I was the primary author of specifications for ammunition procurements for the FBI. This included ammunition used for training as well as for operational use, commonly referred to as “Service” ammunition.

I was the primary author of the FBI Body Armor Test Protocol.

I directed the creation of a procurement of 5.56mm NATO ammunition using piezoelectric conformal transducers for pressure testing.

The BRF served as the primary source of ballistic information regarding ammunition and firearms for all FBI Agents. Field Agents routinely referred local and state partners to me for ballistic information and advice.

During my service at the BRF, a strong liaison was formed with the Department of Defense (DOD). The BRF performed testing for and consultation with the DOD on many occasions. My expertise has been, and continues to be, sought out and relied upon by the Special Operations Community. During my service at the BRF, the Department of Defense Law of War Chair established protocol that all new DOD small arms munitions required testing and evaluation by the FBI BRF prior to legal authorization being granted for their use.

I have been a participant in a number of government sponsored Integrated Product Teams researching ballistics, including:

- Joint Services Wound Ballistics
- Lead Free Ammunition
- Protective Armor
- Armor Piercing Ammunition development

In 2002, I traveled to Darligen, Switzerland, at the specific request of the Department of State, to represent the United States in discussions of wound ballistics.

I have provided numerous live-fire terminal ballistic demonstrations to local, state and federal law enforcement officers as well as to all branches of the United States Military.

I have conducted international presentations on wound ballistics, ammunition selection, weapon selection, sniper operations and body armor.

I have briefed the Secretary of the Army and provided, at his request, my professional opinion of a 5.56mm NATO cartridge intended to replace the M855.

I have functioned as the primary instructor of 52 Basic Law Enforcement Sniper/Observer schools. Approximately 978 students have successfully completed this course under my instruction.

I consistently received high performance ratings in the FBI. I received the highest possible, "Outstanding", each of the last 4 years of my service. I have received numerous letters of commendation and performance awards.

I was the 2008 recipient of the National Defense Industrial Association Joint Armaments Committee's Gunnery Sergeant Carlos Hathcock Award.

Publications I authored during my FBI employment and restricted to official law enforcement or government request:

- Review of Accuracy 1st Training
- Weapon Selection – Revision III
- Ammunition Selection 2007
- TSWG MURG Briefing Accuracy Expectations
- AIM III TSWG Briefing 3/16/2010
- Wound Ballistics
- B2 Sniper Rifle Cleaning Method

Publication I authored during my FBI employment that is publicly available:

- FBI Body Armor Test Protocol

OPINIONS AND ANALYSIS:

It is my opinion, for the reasons explained in detail below, that semiautomatic, centerfire rifles with detachable magazines, particularly those based on the AR-15 platform—i.e., having a pistol grip, flash suppressor, and adjustable stock and using appropriate ammunition—are well suited for use in home defense.

For purposes of this report, rifles similar to the AR-15, despite their manufacturer or model variation, will be referred to as “AR-15” rifles. This is for ease of reference. To be clear, it is not my opinion that only actual AR-15 rifles are the only semiautomatic, centerfire rifles with detachable magazines that are useful for self-defense.

Self Defense

Defensive shooting is shooting to stop a threat. It is not “shooting to kill”. While it is reasonable to believe that the use of a firearm might result in death, death is not certain. Nor is it the goal. Stopping the attack is the goal. Death, if it occurs, is an unintended by-product of the encounter. All FBI firearms training I received stressed that the application of deadly force must stop once the threat is eliminated.

Firearms, when used for defensive purposes, are actually used to compel an attacker to stop the attack. There is no logical method of calculating how many cartridges will be required to stop an attacker. Nor can it be known ahead of time how quickly shots will need to be made to stop an attacker. Similar attacks may require vastly different numbers of shots, as there is no reliable method of accurately estimating how determined the attacker will be, how he will react to being shot, or whether shot placement or penetrating trauma will be effective.

Wound Ballistics

Centerfire cartridges consist of a casing, usually brass but sometimes other materials (steel, aluminum or polymer), to contain the primer, propellant and projectile. The projectile is propelled forward of the firearm and is the only component responsible for tissue damage in all but very close (contact) shots. “Bullet” is a synonym for “Projectile”. Wound ballistics is a component of terminal ballistics and refers to a projectile’s interaction with tissue.

Contrary to the many Hollywood depictions, there is no particular cartridge that can be relied on to cause immediate incapacitation of an attacker, regardless of the situation. Firearms should not be counted on to stop aggressive human beings in the manner depicted in entertainment media. Though real life can, and sometimes does, mimic fantasy, it is not predictable. The reality is that there are no “magic bullets”.

Aggressive human actions can only be stopped by two methods, physical or psychological (or a combination of the two). Simply put, humans stop either because they consciously want to or their body ceases to be able to support action.

The most important salient characteristic of any cartridge's ability to be effective is the construction of its projectile. Assuming similar barrel properties, the projectile performs similarly, regardless of the type of firearm used to launch it. Comparing the terminal effectiveness of cartridges without specifying the projectile used is similar to attempting to compare vehicles simply by the number of doors they have. For example, while it may be reasonable to say a 4 door sedan accommodates more adults than a 2 door coupe, it is not reasonable to say that 2 door coupes are faster than 4 door sedans.

For a firearm to be effective in stopping a threat at a physiological level, the projectile it launches must sufficiently penetrate the subject's body. The expected range of penetration is critical in deciding the appropriate firearm/ammunition to use. Wound ballistic research conducted by the FBI (Handgun Wounding Factors and Effectiveness, Urey W. Patrick, 1989) has determined that the most desirable range of penetration is 12" – 18" in human tissue. As a person's physiology does not change according to what he is hiding behind or where he is encountered, this penetration range is appropriate for the majority of incidents of human aggression, regardless of where they occur.

Many projectiles deform when impacting tissue with sufficient velocity. As velocity decays with distance, most projectiles will experience some expansion when impacting at distances commonly associated with home defense. This deformation is typically referred to as expansion. Expansion increases surface area. Increased surface area results in increased resistance from tissue and, all other things being equal, decreased penetration. Fragmentation, the breaking apart of the projectile into multiple pieces, is best characterized as "hyper expansion". Fragmentation also typically results in decreased penetration.

It is not uncommon for the penetration performance of a projectile to be influenced by intermediate barriers, i.e., an object between the firearm and the target. Those without a firm foundation in ballistics would understandably believe an intermediate barrier would necessarily decrease the penetration potential of a projectile. There are many instances, however, wherein a projectile's penetration has actually been increased due to its reaction to an intermediate barrier. In these cases, the intermediate barrier acts to retard or completely prevent the projectile from expanding. Some hollow point handgun projectiles are particularly known for this type of behavior when encountering intermediate barriers typically found in home construction, such as drywall and plywood.

"Over-Penetration" is a term typically used to explain the situation where a projectile fully perforates the intended target and continues on, thereby posing a threat to unintended persons. Fast moving, light handgun projectiles are believed by many to lessen the possibility of "over-penetration" in defensive situations. While the logic appears sound, the results may be opposite of intentions. For example, a test I participated in at the BRF showed a particular 115 grain +P+ 9mm bullet—a loading typical of the light and fast projectile category commonly used with good, but misguided, intentions in handguns in-home self-defense—averaged approximately 11" in bare tissue simulant but approximately 29" in the same simulant *after* going through ¾" plywood. The projectile's penetration performance actually increased as a result of going through an intermediate barrier that is commonly found in residential walls. In other words, these handgun rounds underperform regardless of

circumstances, as they either under penetrate or over-penetrate.

Law Enforcement

The United States Department of Justice, in a memorandum dated October 17, 1995, issued a Policy Statement on the use of deadly force:

“Permissible Uses. Law enforcement officers and correctional officers of the Department of Justice may use deadly force only when necessary, that is, when the officer has a reasonable belief that the subject of such force poses an imminent danger of death or serious physical injury to the officer or to another person.”

<https://www.justice.gov/archives/ag/attorney-general-october-17-1995-memorandum-resolution-14-attachment-0>

United States law enforcement officers, outside of training, therefore, discharge firearms solely in defense of self and others. It is reasonable to assume this is the case for all levels of law enforcement in the country. Law enforcement officers found to have discharged a firearm at another person in other than defensive use are typically charged in criminal court, as seen in the recent case in Chicago with an officer convicted of murder for an on-duty shooting:

https://www.washingtonpost.com/news/post-nation/wp/2018/10/05/chicago-police-officer-jason-van-dyke-convicted-of-second-degree-murder-for-killing-laquan-mcdonald/?utm_term=.6c328dd28d8a

The unit of the Federal Bureau of Investigation (FBI) with responsibility for purchasing and approving all firearms for operational use is called the Defensive Systems Unit (DSU). FBI Agents receive training on the use of AR-15 rifles during New Agent Training. AR-15 rifles are issued to some Agents and, to the best of my knowledge, continue to be on the list of approved personally owned firearms for all Agents. I can recall FBI Agents using AR-15 rifles in the 1990s.

Therefore, it must be inferred that the FBI believes the AR-15 is an appropriate firearm for defensive purposes. And, the FBI is not alone. Based on my experience, the AR-15 platform rifle is the most common rifle in use by American law enforcement today and has been for many years.

To successfully survive a violent encounter, the FBI teaches its agents to fire until the threat is eliminated. There is no minimum or maximum amount of shots per subject. It is as simple as realizing the aggressor is in total control of the situation. If shooting must occur, it will stop as soon as the aggressor stops his aggressive actions. Such a policy is the foundation of truly “defensive” use of a firearm.

The physiological makeup of a human-being-attacker is identical for attacks upon law enforcement officers and citizens protecting themselves. Therefore, the mechanism(s) required to immediately incapacitate aggressive human attackers must also be identical by

definition.

There are no projectiles, cartridges, or firearms that are more appropriate for stopping aggressive human actions against law enforcement officers than they are for a citizen protecting his home. The projectile is incapable of discriminating its terminal performance by classifying the person or type of firearm responsible for launching it. The AR-15 platform rifle is, therefore, useful for self-defense for law enforcement and non-law enforcement alike.

Handguns vs. Long Arms

Firearms come in many shapes and sizes. The cartridge used in the firearm reasonably places limits on the size of the firearm. Weapons that are designed to be held against the shoulder are commonly referred to as “Long Arms”. Typical examples are rifles and shotguns.

My training and experience in wound ballistics has shown me that handguns are the most convenient but least effective choice for self-defense. They are commonly used simply because their size renders them more concealable than a shoulder fired weapon. If the optimum choices are used in ammunition selection, handguns are typically far less terminally effective than rifles or shotguns. In addition, handguns are much more difficult to accurately fire than rifles or shotguns.

The Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) is an association of the nation's leading manufacturers of firearms, ammunition and components. SAAMI was founded in 1926 at the request of the federal government and tasked with:

- Creating and publishing industry standards for safety, interchangeability, reliability and quality;
- Coordinating technical data; and
- Promoting safe and responsible firearms use.

SAAMI publishes ammunition standards in four classifications:

- Centerfire Pistol and Revolver
- Centerfire Rifle
- Rimfire
- Shotshell

<https://saami.org/technical-information/ansi-saami-standards/>

It is not uncommon to find a shoulder-fired weapon chambered for “Pistol and Revolver” cartridges, such as the HK94, Ruger PC Carbine, Marlin 1894 and others. It is also not uncommon to find a hand held firearm chambered for “Centerfire Rifle” cartridges, such as the Heizer PAR1, Magnum Research Big Frame Revolver, Thompson Center Encore, and others. Generally speaking, and based on testing I conducted while employed by the FBI, the effectiveness of a “Pistol or Revolver” cartridge fired from a shoulder arm is not substantially improved in stopping a threat at a physiological level. In contrast, the effectiveness of a

“Rifle” cartridge fired from a short barreled handgun is frequently diminished, sometimes by a large margin.

While “Rifle” cartridges are typically more effective than handgun cartridges in stopping a threat at a physiological level, it is possible to reverse this order by choosing a poorly constructed rifle cartridge and a well-constructed pistol cartridge. An example would be attempting to stop the driver of a vehicle by engaging through the windshield with a light, fast, fragile .223 vs. the FBI 9mm Luger “Service” ammunition. This, however, is the exception, not the norm.

My observations of handguns, particularly pistols, shows they are typically more sensitive than long guns to shooter technique. Many pistols require a great deal of support (resistance) to operate reliably. One of the most common explanations for pistol malfunctions is “limp-wristing”. This refers to shooters not locking their wrists, which is proper technique. This can induce malfunctions, as the pistols are designed so that the slide moves back and forth on top of the frame. If the frame is also allowed to move rearward, the slide frequently does not travel its full distance and can fail to properly eject a spent cartridge casing or pick up a fresh cartridge from the magazine. Modern, gas operated, semi-automatic rifles, on the other hand, are not so sensitive to technique. When using the proper ammunition, such rifles will usually function normally when fired with only one hand.

Additionally, I have observed that semi-automatic handguns are typically more sensitive to the addition of safety equipment, such as an attached flashlight to aid in target identification or a laser to aid in aiming. I have assisted with testing and documentation of these failures and I have additionally received numerous reports of pistols failing to function when fitted with these devices. I am unaware of any report of an AR-15 style rifle that failed to function, due to a properly mounted flashlight or laser.

There is little need, beyond perhaps storage, to conceal a weapon in a home-defense situation. The mere presence of a weapon may be sufficient to cause the aggressor to go away. The goal in a self-defense situation, after all, is to compel the aggressor to stop and leave. Larger firearms are typically more intimidating than small firearms.

AR15 rifles, because of their commonality in both real life and the entertainment industry, are readily recognizable as effective defensive firearms. It is reasonable to believe that a criminal would be more intimidated by a homeowner with an AR-15 than the same homeowner with a small frame 5-shot revolver that the criminal may not even see, due to its compact size. I have personally witnessed the immediate surrender of a known violent subject who later explained his actions as directly attributable to the imposing nature of the firearm I pointed at him.

Observations from 23 years as an FBI Firearms Instructor have shown that rifles and shotguns are easier to fire accurately than handguns. While I recall numerous failed qualification attempts by agents with handguns, there were less with shotguns and a failure with the carbine or rifle was rare.

This is particularly notable in that both shotgun and carbine courses required shots at 50 yards while the pistol qualification course only required shots at 25 yards.

Because rifles and shotguns are typically easier to employ accurately, fire cartridges that possess the potential to be most effective, and are more intimidating than handguns, it is my opinion that they are among the most logical and effective choice for home defense. This is particularly the case for semiautomatic, centerfire rifles with detachable magazines having pistol grips, flash suppressors, and/or adjustable stocks, as together they offer the most terminally effective weapon which can be easily operated with a single hand, loaded or unloaded (made safe) quickly, and adapted to multiple size users. Flash suppressors dissipate the bright light created by the burning of residual propellant once the projectile exits the muzzle. This dissipation of light reduces the level of light exposure experienced by the shooter and can shorten the recovery time of vision in a dark environment. This shorter recovery time enables a more rapid evaluation of the remaining threat and need, or lack thereof, to continue the application of force.

While shotguns have great potential for effectiveness, they are limited by the large amount of recoil they generate and the small number of cartridges (shells) they contain. Most shotguns utilized for home defense will have a capacity of between 2 and 8 rounds with the most common number being 5. Shotgun ammunition that is more reliably effective for self-defense, typically buckshot or slugs, has a great deal of recoil and, therefore, can be more difficult to master than a 5.56mm carbine, which is very low on the recoil scale for rifles. It is desirable to keep recoil as low as possible inasmuch as recoil can cause the firearm, and shooter's view, to stray from the target. Greater recoil equates to longer time required to evaluate the situation and refocus on the threat. The NRA Firearms Fact Book, Third Edition, page 219, shows recoil tables for rifles, handguns and shotguns. This table shows a .223 Remington load having 3.7 ft.-lbs. of recoil energy vs. 12 gauge shotgun varying from 18.2 – 55.4 ft.-lbs.

Additionally, buckshot and slugs can be counted on to penetrate deeper than desired, practically guaranteeing pass-through shots in a home defense situation.

Though buckshot is believed by many to have little chance of pass-through, testing I participated in at the BRF showed that close shots (10') with buckshot have resulted in deeper tissue simulant penetration than lead slugs. The empirical data, therefore, show that buckshot is more likely to "over penetrate" than the projectiles of many other cartridges typically chosen for home defense.

Another consideration in the use of a shotgun is the shooter's responsibility for multiple projectiles with each press of the trigger. If 00 buckshot is used in a 2 3/4" 12 gauge shotgun, multiple (between 8 and 12) .32" lead balls are expelled with each shot—as opposed to only one projectile from a rifle. These projectiles spread as distance increases. During qualifications I witnessed, it was not uncommon for an agent to have one or more 00 buck pellets outside the scoring area of the FBI target. The 00 buckshot portion of the FBI Shotgun Qualification Course is fired at 21 feet.

In 1988, general FBI Agents had the option of two shoulder weapons, H&K MP5-SF and

Remington 870. The MP5-SF is a semi-automatic carbine that fires 9mm Luger ammunition. This is ammunition commonly used in handguns. Advantages of the MP5 over a handgun are that it is easier to shoot accurately, has a 30 round magazine and a more intimidating appearance. The Remington 870 shotgun used either 00 buckshot or a rifled lead slug. The issued 870 magazine held four (4) rounds. While there were AR-15 rifles available at that time, they were normally used only by SWAT Agents or Firearms Instructors. The FBI later made MP10 carbines available to general Agents. These carbines utilized 30 round magazines and had a selector that included an option for “two round burst” (two shots with one trigger press).

The FBI began making AR-15 rifles more readily available following a procurement action conducted jointly with the DEA. The contract was awarded to Rock River, Colt, and Sig Sauer in approximately December of 2003. Though the FBI does not officially “endorse” any particular firearm that I am aware of, there could be no better endorsement than awarding a firearm a contract and making it a general issue item.

The FBI has since begun to phase out the MP5. General policy has been to not repair broken MP5s, thereby removing them through attrition. This can only be interpreted as the FBI believing that an AR-15 rifle is better suited to their defensive needs than a carbine firing a handgun cartridge, even one with select-fire capability.

FBI agents routinely use AR-15 rifles in arrest situations occurring in and around common housing structures. The FBI presentation I authored entitled “Weapon Selection” specifically demonstrates the appropriateness of using an AR-15 rifle for close quarters encounters. FBI training included the use of AR-15 rifles while entering and securing buildings. FBI promotional literature shows Agents using AR-15 rifles. Based on my experience training law enforcement officers, it is my opinion that the AR-15 can be considered the “weapon of choice” for not only the FBI, but the majority of U.S. Law Enforcement.

While shotguns continue to be available to FBI Agents, my experience was that their popularity decreased first as MP5s became readily available and more so as AR-15 rifles were made more readily available.

Based on my observations that the shotgun is not popular in a federal law enforcement agency with high physical fitness standards, it is reasonable to believe that it is not the best overall choice for the average citizen.

The AR-15 rifle has characteristics that make it particularly suitable for defensive purposes:

- It is relatively lightweight
- It is available with a telescoping/adjustable stock
- It has a vertical pistol grip;
- It is semi-automatic and can be fired with one hand;
- It can be chambered in a variety of cartridges so the user can choose one that is an ideal combination of effective while having relatively mild recoil; and
- It utilizes magazines of varying capacities, depending on the need.

Being lightweight, having low recoil, and being adjustable in size, the AR-15 style rifle can easily be mastered by persons of any stature.

A telescoping/adjustable stock enables the firearm to be quickly adjusted to fit people of different statures. Additionally, because it allows for a more compact overall size, it enhances the user's ability to maneuver in the tight spaces of a home.

The vertical pistol grip design is easier to operate with one hand than less-pronounced pistol grips, such as those found on the M1 Garand. This is because it places the hand in a location where the user can manipulate the rifle's primary controls, including the trigger and selector (safety). This can also be of particular benefit when needing to use one hand to hold a flashlight or call 911. Pump, lever and bolt action firearms typically require two hands to function if more than one shot is required.

The most common chambering, 5.56mm NATO/.223 Remington, has proven effective in stopping human aggression when the proper projectile is chosen. Additionally, its relatively mild recoil renders it easily mastered by persons of slight stature. It is recognized that there are differences between 5.56mm NATO and .223 Remington. For purposes of this discussion, however, the two should be considered substantially identical.

Finally, the ability to vary its magazine capacity allows the shooter to choose his or her optimal combination of sufficient ammunition and weight.

Dated: October 25, 2018

A handwritten signature in black ink, appearing to read "J. Buford Boone III". The signature is fluid and cursive, with a stylized "J" and "B". There is a small mark at the end of the signature that looks like a crossed-out "X" or a flourish.

J. Buford Boone III
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Member
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EXHIBIT 2

Expert Witness Report of William English, PhD

Rupp, et al. v. Becerra

United States District Court

Central District of California, Southern Division

Case No.: 8:17-cv-00746-JLS-JDE

October 25, 2018

ASSIGNMENT

I have been asked by counsel for the plaintiffs in the above described matter to provide my opinion on the ownership and use rate by the law-abiding American public of semiautomatic, centerfire rifles with detachable magazines, having pistol grips, flash suppressors, and/or adjustable stocks. This report sets forth my qualifications and foundation for my opinions on that question, which I offer to a reasonable degree of scientific certainty. I am willing and able to testify as to the contents of this report.

COMPENSATION

I am not being compensated for my work on this case other than reimbursement for any reasonably necessary travel costs I might incur as a direct result of that work.

BACKGROUND AND QUALIFICATIONS

I am currently employed as an Assistant Professor of Strategy, Economics, Ethics, and Public Policy at the McDonough School of Business at Georgetown University, a position I have held since 2016. Prior to that I was employed at Harvard University for five years, first as a research fellow and later as the research director of the Edmond J Safra Center for Ethics. I also served as research associate with the Harvard Initiative for Learning and Teaching and as the executive director of The Abigail Adams Institute, an educational non-profit located in Cambridge, MA from 2014-2016. Before coming to Harvard I held a one-year postdoctoral research fellowship at Brown University with the Political Theory Project. I received my PhD in Political Science from Duke University in 2010 and an MSt in ethics from Oxford University in 2004. In 2003, I graduated Duke University with a Bachelors of Science in Economics and a Bachelors of Arts in Mathematics. For two summers I was employed as a laboratory technician with the Office of Law Enforcement Standards at the National Institute of Standards and Technology, where I assisted with the revision of standards for body armor and autoloading pistols for police officers issued by the National Institute of Justice. Throughout high school and college I was involved with competitive shooting sports and I have followed developments in the firearms industry and recreational shooting sports closely for over 20 years.

My scholarly research has focused on empirical methods in the social sciences, behavioral economics, and regulatory policy. I am in the process of conducting research on the impact of various firearms laws within the United States. I have authored or co-authored the following publications:

- "Varieties of Citizenship and the Moral Foundations of Politics" in *The Ethics of Citizenship in the 21st Century*, David Thunder (Eds): Springer International Publishing, 2017 DOI:10.1007/978-3-319-50415-5
- "Paying People to Make Healthy Choices" *eLS*, John Wiley & Sons Ltd, February, 2017.
- "Two Cheers for Nudging" *Georgetown Journal of Law and Public Policy*, Vol. 14, 2016: 829.
- "The Logic of Gift: Inspiring Behavior in Organizations Beyond the Limits of Duty and Exchange" *Business Ethics Quarterly*. April 2016: Vol 26 (2), 159180. (with Tomas Baviera and Manuel Guillen)
- "The Demographic Challenge to Entitlements: A Comment, Criticism, and Caveat" in *Science, Virtue, and the Future of Humanity*, Peter Augustine Lawler and Marc D. Guerra (Eds), Lexington Books: 2015.
- "Economic and Ideological Corruptions of the Regulatory State" *Society*, May/June, 2014: Volume 51, Issue 3.
- "Institutional Corruption and the Crisis of Liberal Democracy" Edmond J. Safra Working Papers, No. 15. June, 2013.
- "Locke, Hegel, and the Economy" *Society*, October, 2013: Volume 50, Issue 6.
- "Corruption in Bioethics" *Compendium of Global Bioethics*. Edited by ten-Have and Gordijn. Springer, 2013. (with Jennifer Miller).
- "Genopolitics and the Science of Genetics" *American Political Science Review*. April 2013: Vol 107 (2), 382-395. (with Evan Charney)
- "Why Genes Don't Predict Voting Behavior: when it comes to complex behaviors, gene variants don't count for much" *Scientific American*. Nov 2012 (with Evan Charney).
- "Candidate Genes and Political Behavior" *American Political Science Review*. February 2012: Vol 106(1), 1-34. (with Evan Charney)
- "Demystifying Trust: Experimental Evidence from Thailand and Cambodia." *Journal of Theoretical Politics*. April 2012 vol. 24 no. 2 172-209.
- "The Ethics of Competition" in the Harvard Ethics Center Research in Action Blog. <http://ethics.harvard.edu/blog/william-english-ethics-competition> August, 2012.
- "Still Awaiting Redemption" review of Redeeming Economics: Rediscovering the Missing Element by John D. Mueller in *The Intercollegiate Review*, Spring 2011 (p.57-60).
- "Can Neuroscience Tell Us Anything About Virtue?" review of The Social Animal: The Hidden Sources of Love, Character, and Achievement by David Books in *Public Discourse*, Sept 23, 2011.

- "Unlocking the Secrets of Human Biology: Implications for Diplomacy, Security, and War" in Rose McDermott and Peter K. Hatemi, eds. *H-Diplo ISSF Roundtable on "Biology and Security"*, *H-Diplo ISSF Roundtable Reviews* Volume I, Number 2 (April 2010) (p. 6-34).
- "Illiberal Arguments" review of James Kalb's *The Tyranny of Liberalism* (part of a larger symposium) in *First Principles* May 13, 2009.
- "The Compartmentalization of Moral Inspiration," *Proceedings of the 36th St. Gallen Symposium*, Switzerland: St. Gallen Press, 2006. (p. 103-107).

OPINIONS AND ANALYSIS:

Because the National Shooting Sports Foundation (NSSF)—which is a nationwide firearms industry trade association that produces reports and conducts surveys on which I rely, in part, in formulating my opinions herein—uses the term "Modern Sporting Rifle" or "MSR" to describe a range of semiautomatic rifles, most of which are based on the AR-15 and AK-47 designs—both of which virtually always are equipped with a vertical pistol grip and often have a flash suppressor and/or an adjustable stock—I use that term throughout this report in analyzing that general category of rifles but use more specific language when analyzing a more specific category of rifle.

A semiautomatic firearm, also known as a self-loading firearm, uses the energy produced by firing a cartridge to cycle a gun's action and reload the firearm each time the trigger is pulled and released. Note that when the trigger of a semiautomatic firearm is pulled, the gun fires once and only once, and the trigger must be released and pulled again in order to fire the reloaded gun. Modern sporting rifles are typically able to accept a detachable magazine and often have modular components allowing them to be customized for a variety of applications. Although the most common calibers for the AR-15 and AK-47 have traditionally been .223 Remington/ 5.56 NATO and 7.62×39mm respectively, modern sporting rifles are available in a range of calibers. For the purpose of this report, modern sporting rifles will often be referred to as "AR style rifles," because the AR platform is the most prevalent design in the United States.

AR-15's have been available to the public for over 50 years. Early details regarding the firearm were reported in an article entitled "The Armalite AR-15 Rifle" in the June 1959 issue of *The American Rifleman*, one of the most widely circulated firearms magazines. The article noted that a "Firing trial by several members of The Rifleman staff showed the AR-15 to be easy, pleasant, and accurate to shoot." Three years later, in May of 1962, *The American Rifleman*, published an extensive review of the first Colt AR-15 rifle, concluding: "In every instance the AR-15 has functioned well and there is no doubt it is a fine little weapon."

In 2010, a survey of 2,547 hunters and shooters conducted by the NSSF found that 18.1% of respondents owned an AR-platform modern sporting rifle. By 2012, a subsequent NSSF survey of 5,342 hunters and shooters found that this percentage had increased to 26.3%. The most recent and largest survey conducted in 2015 of 6,521 hunters and shooters found that 47.1%

respondents owned an AR platform modern sporting rifle, suggesting that roughly one of every two active hunters and shooters now owns an AR style rifle.

For its “Modern Sporting Rifle (MSR) Comprehensive Consumer Report 2013,” the NSSF conducted a survey of 21,942 owners of MSRs. This survey found that owners consider accuracy and reliability to be the most important characteristics of these rifles. Many also cited low recoil, light weight, ergonomics, and ease of shooting as reasons for their purchase. Recreational target shooting was the most prevalent reason cited for owning a MSR, followed by home defense. Additional reasons for owning these firearms include, but are not limited to, hunting, pest control, competitive shooting sports, and gun collecting.

A large number of Americans participate in shooting sports. A nationally representative survey of 24,143 respondents conducted by The Outdoor Foundation for the “2017 Outdoor Participation Report” estimates that in 2016 about 14 million people participated in rifle target shooting, about 16 million participated in handgun target shooting, about 5 million participated in trap/skeet shooting, and about 5 million participated in sport/clays shooting. In aggregate, these numbers compare favorably to those who participate in golf (~24 million), basketball (~22 million), baseball (~14), or soccer (~17 million). An independent telephone survey of 3,050 respondents conducted by the NSSF in 2016 estimated that 49.4 million individuals participated in any target shooting or shooting sports in 2016. That same report also estimated that about 14 million people used modern sporting rifles for target shooting at some point that year.

The “2017 Edition Firearms Retailer Survey Report” published by the NSSF found that of 226 firearms retailers surveyed from across the United States, 92.9% sell new AR’s/modern sporting rifles. Moreover, modern sporting rifles were reported to be the most popular selling long gun, accounting for 17.9% of overall gun sales, while traditional rifles accounted for 11.3% and shotguns for 11.5%.

The precise number of MSRs in circulation is difficult to know with certainty because, while rifle sales are tracked by the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF), the type of rifle sold is not. However, by drawing on publicly available government records, industry reports, and survey responses we can estimate general levels of ownership with some degree of confidence. One of the best examples of this approach can be found in a research paper co-authored by Nick Clossman and Chris Long entitled “A Business Case Analysis of the M4/AR-15 Market,” which was published in September of 2015 as a Joint Applied Project of the Naval Postgraduate School. In what follows, I describe their methodology, estimates, and conclusions.

Clossman and Long first examine the Annual Firearms Manufacturing and Exportation Report (AFMER) compiled by the BATF to obtain records regarding how many rifles were manufactured each year (note that AFMER does **not** include firearms produced for the U.S. military). The AFMER also reports how many rifles were manufactured by each individual company. Clossman and Long examined every reporting company to determine which ones primarily or exclusively manufacture AR-15’s. Because many large companies, such as Ruger and Remington, manufacture various types of rifles in addition to AR-15’s, these companies

were excluded, as were any small manufacturers who made fewer than 100 rifles per year or who primarily manufactured other modern sporting rifle variants such as AK-47's, AR-15 style lower receivers, or AR-15 style pistols. Following this approach, Clossman and Long conclude that between 2004 and 2013 approximately 4.6 million AR-15s were manufactured in the U.S.

This methodology means that Clossman and Long's estimates are conservative and likely to significantly underestimate the total number of AR style rifles that entered into circulation during this period. For example, although excluded from the count, large companies such as Ruger—one of only a few publicly traded firearm manufacturers in the country—and Remington both manufacture AR style rifles. Indeed, Remington's 2016 annual report suggests that the company is one of the largest commercial producers of these rifles. Also excluded from Clossman and Long's estimates are sales of so-called "80% lowers," which are blocks of metal or polymer in the basic size and shape of an AR-15 style lower receiver that are not fully machined and thus do not qualify as "firearms" as defined by the BATF. Individuals may legally purchase and finish machining these parts on their own in order to produce a fully functional AR style rifle for personal use. Although sales numbers are hard to come by, a simple internet search reveals that there are many companies that sell "80% lowers" and some have reported that they sell over 30,000 per year.

There are two further caveats regarding Clossman and Long's estimates that deserve mention, although the net effect is likely to again incline their estimates to be conservative. First, the AFMER data that Clossman and Long draw on includes AR style rifles that are sold to law enforcement agencies. Although the precise number of law enforcement sales are not recorded, we can estimate an upper bound for these sales. According to the FBI/US Bureau of Justice Statistics "Crime in the United States 2017" report, there are 422,869 full time law enforcement officers in the United States. Since not every officer is issued an AR style rifle, we expect that the number possessed by law enforcement agencies will be less, and perhaps far less, than 422,869. Second, Clossman and Long estimate that between 2004-2013 an average of about 8,750 AR style rifles were exported per year. Thus, both law enforcement sales and exports should decrease the estimate of AR style rifles in circulation amongst the general public. However, Clossman and Long do not account for modern sporting rifles that were imported during this period (AFMER reports do not include imports). According to other BATF records, the number of rifles imported each year of this period greatly exceeded the number of rifles exported, sometimes by an order of magnitude. For example, in 2013 the BATF reported that 131,718 rifles were exported from the United States, while 1,507,776 were imported (military import licenses accounted for a small fraction, 319 total in 2013). If the ratios of modern sporting rifles imported are similar to the ratios exported, we would expect another ~170,000 modern sporting rifles to have entered the U.S. market in 2013 alone. Between 2004 and 2013 aggregate imports of modern sporting rifles are likely to have more than offset both exports and domestic law enforcement sales.

Finally, it is important to note that Clossman and Long's data further suggests that the number of AR-15's manufactured per year have increased significantly in recent years, going from an estimated 88,730 rifles in 2004 to 1,182,609 in 2013. Industry reports appear to corroborate

these growth estimates. For example, Remington Outdoor Company Inc.'s 2016 annual report notes, "We believe we are one of the largest producers of commercial MSRs, a category that has grown at a 14.9% CAGR from 2010 through 2014." Based on AFMER reports of the total number of rifles sold, Clossman and Long estimate that by 2013 AR-15 rifles accounted for 19% of all guns manufactured in the United States and 29% of all rifles manufactured in the United States. Note that the 19% estimate corresponds closely to the 17.9% estimate mentioned above that was derived independently from the 2017 Firearms Retailer Survey Report published by the NSSF.

Even if production remained flat at 2013 levels, one would expect that from 2014-2018 another ~4.7 million would have entered circulation, in addition to the 4.6 million estimated from 2004-2013, plus how ever many entered circulation between 1960-2004. This leads to a plausible minimum estimate of over 9 million AR style rifles in aggregate circulation in 2018. However, the number could be even higher if production and sales have continued to grow since 2013. Indeed, if one looks at the number of background checks conducted for firearm sales, which are logged by the FBI in the National Instant Criminal Background Check System, and corrects for the number that correspond to a firearm's transfer rather than a permit check, which NSSF does in their "NSSF-Adjusted NICS" data, there were approximately 14,244,000 firearms sold nationwide in 2015. If modern sporting rifles do constitute 17.9-19% of overall sales, then annual sales may be as high as 2,549,676 to 2,706,360 rifles in recent years. This would lead to an estimate of around 15 million AR style rifles in circulation by the end of 2018.

Based on the statistics, research, and estimates listed above, it is my opinion that semiautomatic, centerfire rifles with detachable magazines and a pistol grip, flash suppressor, and/or adjustable stock, such as the AR-15 design, are commonly owned and used by millions of law-abiding Americans for a variety of lawful purposes. Moreover, it is my opinion that the lawful use and ownership of these rifles has increased in commonality over the years.

 10/25/18

William E. English

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EXHIBIT 3

Expert Witness Report of Stephen Helsley

Rupp, et al. v. Becerra

United States District Court

Central District of California, Southern Division

Case No.: 8:17-cv-00746-JLS-JDE

October 25, 2018

I. ASSIGNMENT

Counsel for plaintiffs in *Rupp, et al. v. Becerra* (Case No. 8:17-cv-00746-JLS-JDE) have asked me to provide opinion on the historical existence and prevalence of semiautomatic, centerfire rifles with detachable magazines, as well as the features that such rifles commonly have. Counsel has also asked that I provide opinion on the purposes for the development of such rifles and characteristics. This report sets forth my qualifications, opinions, and scholarly foundation for those opinions.

II. BACKGROUND & QUALIFICATIONS

I am a retired peace officer from the California Department of Justice (DOJ). The bulk of that career was in drug enforcement. The last three positions I held were Chief of the Bureau of Narcotic Enforcement, Chief of the Bureau of Forensic Services and finally Assistant Director of the Division of Law Enforcement. As Assistant Director, I was responsible for the department's criminal, civil and controlled substance investigations as well as law enforcement training, intelligence gathering and our forensic laboratory system. In my executive level positions, I had occasion to review special agent-involved shootings and a wide range of homicides involving firearms. I have qualified as an expert in both criminal and civil matters. I was the department's principal firearms instructor for many years and am an FBI certified range master. I also participated in the firearm training that was part of the FBI National Academy Program in Quantico, Virginia. Additionally, I am a member of the American Society of Arms Collectors and a technical advisor to the Association of Firearm and Tool Mark Examiners. I have co-authored five books on firearms and have authored or co-authored more than fifty firearm-related articles for US and Russian journals. For the past twenty-four years, I was first a state liaison and, then later, a consultant to the National Rifle Association. Throughout my adult life I have been an active participant in handgun, rifle and shotgun competitions. I have also been a firearm collector and ammunition reloader since the early 1960s. Finally, I am a collector of firearm related books – of which I have thousands. Included in my book collection are approximately 50 different issues of *Gun Digest*. It is a standard resource that is widely used by gun dealers and buyers alike. *Gun Digest* has traditionally provided a comprehensive overview of the firearms and related items available to retail buyers.

A. Published Articles

In the past ten years, I have written or contributed to the following published articles and opinion editorials:

1. Articles

- *Of Birmingham and Belgium*, Double Gun Journal, vol. 18, iss. 2 (2007).
- *The .470 Nitro Express*, Sports Afield (June/July 2007).
- *Readings on the Roots of the .410*, Shooting Sportsman, Nov./Dec. 2007.
- *Hunting in Wales*, Hunting and Fishing (Russia), Dec. 2007.
- *A Pair for a Pair of Friends*, Shooting Sportsman, March/April 2008.
- *A Welsh Fantasy*, Shooting Sportsman, July/Aug. 2008.
- *A Maine Gun Goes Home*, Shooting Sportsman, Sept./Oct. 2008.
- *The Pin Fire Comes Home*, Libby Camps Newsletter, Winter 2008.
- *John Rigby & Co.*, Hunting and Fishing (Russia), July 2008.
- *The All-American Double Rifle*, Safari, Sept./Oct. 2008.
- *Eastern Oregon Odyssey*, Shooting Sportsman, Nov./Dec. 2008.
- *Rigby Marks 275th Anniversary*, Safari, Nov./Dec. 2009.
- *Finding Papa's Guns*, Shooting Sportsman, March/April 2010.
- *The Searcy Stalking Rifle*, Safari, May/June 2010.
- *The Ruggs Riders*, Shooting Sportsman, July/Aug. 2010.
- *Searcy Brings Back the Rising-Bite*, Shooting Sportsman, Sept./Oct. 2010.
- *John Rigby & Co.*, African Hunting Gazette, Fall 2010.
- *The Ageless .416 Rigby*, Safari, Nov./Dec. 2012.
- *J. P. Clabrough*, Shooting Sportsman, March/April 2015.
- *The Mystery of Hemingway's Guns*, Friends and Neighbors, Summer 2015.
- *The Enigma of Hemingway's Guns*, Master Gun (Russia), Sept. 2015.
- *The Mystery of Hemingway's Guns*, CRPA Firing Line, Sept./Oct. 2015.
- *Pistols at Dawn*, CRPA Firing Line, Jan./Feb. 2016.
- *The Silver Star*, CRPA Firing Line, Jan./Feb. 2016.
- *Women Guns & Politics*, CRPA Firing Line, March/April 2016.
- *Hunting the Big Mouse*, CRPA Firing Line, Sept./Oct. 2016.
- *Do Guns Make Heroes? The Congressional Medal of Honor*, CRPA Firing Line, Nov./Dec. 2016.
- *Thumbs-Up Guns*, Shooting Sportsman, Jan./Feb. 2017.
- *Is Your Gun Safely Stored? (Part 1)*, Friends and Neighbors, Summer 2017.
- *History of William Powell and His Patents*, Master Gun (Russia), Aug. 2017.
- *Guns from San Francisco and Birmingham*, Master Gun (Russia), Oct. 2017.
- *Is Your Gun Safely Stored? (Part 2)*, Friends and Neighbors, Autumn 2017.

2. Opinion Editorials

- *It's About Time: State has Eroded Gun Owner's Rights*, Sac. Bee (July 4, 2010).
- *Nevada Views: Is Gun Registration Worth Cost?*, Nev. Rev. J. (Sept. 16, 2012).
- *Gun Roundup Program Has Too Many Flaws*, Sac. Bee (May 3, 2013).

B. Expert Witness History

In the past four years, I have not testified at trial as an expert witness but have been deposed as an expert witness in *Duncan, et al. v. Becerra, et al.*, United States District Court (S.D. Cal.), Case No: 3:17-cv-01017-BEN-JLB.

III. OPINIONS & ANALYSIS

1. *Semiautomatic, centerfire rifles having a detachable magazine are, and have been for over a century, ubiquitous, as have been their similar-functioning predecessors historically.*

A semiautomatic firearm is one that will discharge a new round with each trigger pull, until the device feeding ammunition into the firearm's chamber is empty, or there is a malfunction. Its purpose is to provide the shooter multiple shots without having to reload. A detachable magazine is an ammunition feeding device that can be readily removed from its insertion point on a firearm, usually by the user's depressing a button or lever with a finger. Its purpose is to facilitate the shooter's ability to load or reload a firearm.

Multi-shot rifles have been available for centuries.

In the late-15th Century, Leonardo Da Vinci designed a 33-shot weapon. In the late 17th Century, Michele Lorenzoni designed a practical repeating flintlock rifle. A modified 18th Century version of Lorenzoni's design, with a 12-shot capacity, is displayed at the NRA's National Firearms Museum. In May 1777, the Continental Congress ordered 100 eight-shot shoulder arms with detachable magazines from Philadelphia gun maker Joseph Belton (who claimed a 16-round version was also available). The order was subsequently cancelled because of a pricing issue. John Adams and John Hancock were involved in the squabble that followed the cancellation and Benjamin Franklin had corresponded with George Washington the previous year about one of Belton's designs.

The founding fathers, thus, did not have to imagine multi-shot arms with a detachable magazine—not only did such arms already exist but the Founders were aware of them and wanted them.

Then and now, having a firearm capable of firing more ammunition without reloading and able to be reloaded quickly is both comforting and potentially life-saving, if the firearm is to be used for self-defense.

The road to the modern semiautomatic detachable magazine firearm required a series of technical innovations. First came with the discovery by Dr. Alexander Forsyth c.1800 that fulminate of mercury could be used as a way to ignite a powder charge. In the early 1800s, the percussion cap using Dr. Forsyth's mixture was developed (many claim credit for it), which spelled the end of the flintlock era and made firearms far less susceptible to ignition failures caused by rain or moisture. By 1860, the percussion cap had evolved into a primer that could be inserted into the center of a drawn brass cartridge case. By the late-1860s, the modern self-contained cartridge had arrived. Next came the detachable magazine in 1879 from American inventor, James Paris Lee. In the 1880s, American inventor Hiram Maxim began developing self-loading (i.e., semiautomatic) firearm designs. Rifles at that time relied on some mechanical effort by the shooter to load a successive round into the firing chamber, such as manipulating the bolt, or lever. At that point, only black powder was available – a powder that produces a substantial amount of fouling and is not well suited to semiautomatic firearms. Help would come from French inventor Paul Vieille in the mid-1880s with his development of *poudre blanche* or smokeless powder. By weight, this new powder generated three times the energy of black powder and produced higher velocities. This in-turn resulted in the final piece necessary for the “semiautomatic/detachable magazine” rifle: the metal jacketed bullet—a bullet that could withstand higher velocities than bullets made only of lead.

These advances resulted in the rapid development of both semi and fully automatic firearms. Winchester introduced its first semiautomatic, detachable magazine rifle in 1905. Additional models were introduced in 1907 and 1910. Remington introduced its own version in 1908. In preparation for a major offensive in the Spring of 1919 (which never occurred because the war ended in November 1918), the United States had converted over 100,000 bolt action Springfield M1903 rifles to 40-shot, detachable magazine semiautomatics.

After WWI, the United States began development of a semiautomatic to serve as its main battle rifle. The result was the M1 Garand – a semiautomatic but not equipped with a detachable magazine that would serve with distinction in WWII and Korea. The U.S. military also used two semi auto rifles in WW2 - the M1 carbine and the Model 60 Reising. Two of the other major combatants also had

semiautomatic/detachable magazines – Russia’s M38 and M40 Tokarev and Germany’s Gewehre 41 and 43.

After WWII more military semiautomatic/detachable magazine rifles were adopted by various countries, including the Swede AG42, Egypt’s Hakim and Rashid, the Czechoslovakian M52 and later the M52/56, French M44, 49 and 49/56—all of which (including the German and Russian rifles previously described) would later be sold to civilian buyers in the United States.

New commercial models also became available, including the Remington M760, the Winchester M100, and M1 carbines by Plainfield and Universal. The resumption of M1 carbine production was most likely driven by U.S. Government sales through the Director of Civilian Marksmanship (DCM). Created in 1916, one of its functions was the sale of surplus military rifles and handguns via the National Rifle Association to civilian buyers. Over Six million M1 carbines were produced between 1942 and 1945. In the early 1960s, they became widely available both on the surplus market and through the DCM. Those purchased from the DCM generally cost \$20 and were shipped directly to the buyer’s home – no licensed dealer or background check required. It was nothing short of a government endorsement of semiautomatic rifles with detachable magazines for civilian use. The DCM was subsequently quasi-privatized and replaced by the Civilian Marksmanship Program in 1996. M1 carbines are still occasionally available. M1 carbines with issued wood stocks are “benign happy face rifles.” Change the stock (in California) to an original folding paratrooper version and you have an “evil assault weapon.” Same rifle different configuration.

Here, it is important to understand the nature of the so-called “assault weapon.” Politically, the meaning of the term is, to quote Humpty Dumpty, “When I use a word – it means just what I choose it to mean – nothing more nor less.” It is not based on function but rather on appearance, country of origin or other irrelevant criteria. It is a description that sounds like “assault rifle,” which is a term used for select-fire (capable of both semi and full automatic fire), general purpose, medium power rifles. In layman’s terms the “assault rifle” is a “machinegun.” The “assault weapon,” by contrast, may look like an “assault rifle” but fires only one round with each pull of the trigger, like all other semiautomatic and other types of firearms. The two terms have, by design, been conflated by the media and gun control proponents alike. To quote Josh Sugarman, the Executive Director of the Violence Policy Center: “The weapons’ menacing looks, coupled with the public’s confusion over fully automatic machine guns versus semi-automatic assault weapons—anything that looks like a machine gun is assumed to be a machine gun—can only increase the chance of public support for restrictions on these weapons.”

The second wave of surplus rifle imports began c.1987 with the express authorization of the U.S. government. All of the previously described rifles were once again available. And, there was one new important player that was not widely available before then: the SKS. The SKS is a semiautomatic rifle with a fixed ten round magazine (that is easily and frequently converted to detachable). SKSs from China, Russia, Albania, Yugoslavia and other countries were imported to the U.S. in large numbers. Also part of the import mix were semiautomatic/detachable magazine versions of the AK-47. As the result of the large numbers of those rifles imported in the early -1990s, they became so popular that that they now produced in the United States.

Before WWI, American arms buyers generally favored lever action designs. After millions of men had been trained in the use of bolt-action rifles, they gradually became the standard. The next wars (WWII, Korea, Viet Nam and those in Iraq and Afghanistan) all involved self-loading detachable magazine arms – and for the last 50 plus years, variants of the AR-15. It's interesting that the AR-15 has become known as the “modern sporting rifle.” Given that its first review in the *American Rifleman* appeared in the June 1959 issue – 60 years ago –it might better be called ‘America’s Venerable Sporting Rifle.’ AR’s and other domestic and imported semiautomatic/detachable magazine rifles like the Ruger Mini-14, the Springfield M1A, or various Heckler & Koch models are ubiquitous. If you compete in rifle matches (e.g., “three gun” rifle, pistol and shotgun), regional, state or national level (as tens of thousands do) you most likely will use an AR-15 type rifle. The “world series” of U.S. rifle competition is held annually at Camp Perry, Ohio and there you will find literally thousands of AR rifles in use.

2. *None of the features that California prohibits on semi-automatic, centerfire rifles with non-fixed magazines—a “pistol grip” (or “forward pistol grip”), a “thumbhole stock,” a “flash suppressor,” and an adjustable (“telescoping”) stock—has anything to do with the rifle’s rate of fire, power, or capacity to accept ammunition. Nor are any of them dangerous per se or when used in conjunction with any of the other features. Each of these features is designed to both independently, and in conjunction with other features, make a rifle more user friendly and thus safer to operate—whether for target practice or in the critically important moments where self-defense is necessary.*

The hallmark of state and federal assault weapon regulation has been a focus, not on the firearm’s operating system (semiautomatic loading), or it’s chambering (what ammunition it uses), but rather on the accessories attached to it. If the operating system is the engine/ transmission/ driveshaft/ differential of a car – the “pistol grip” is nothing more than an adjustable steering wheel, the adjustable stock is a rudimentary adjustable seat, and the “flash suppressor” is a modern exhaust

system or a windshield wiper. All improve the shooting/driving experience while having nothing to do with the basic, mechanical function of the firearm or vehicle.

A. The Pistol Grip

The pistol grip of a rifle or shotgun is the area immediately behind the trigger. It is designed for grasping by the shooter's 'strong hand' and protrudes below the receiver and trigger mechanism of the firearm at various lengths and angles depending on the intended use of the firearm. A 'full pistol grip' helps absorb recoil and positions the hand (trigger finger) for optimum trigger control. Many shotguns, especially those with two barrels and two triggers, have a 'straight hand' grip. This configuration allows the shooting hand (trigger finger) to slide slightly rearward in recoil to be better positioned for use of the second trigger. Virtually all modern bolt-action, pump-action and semi-automatic rifles and shotguns have stocks with pistol grips.

When a pistol grip was first fashioned as part of a gunstock has been lost to history. Over the past two centuries the grip, in its various configurations (metal, wood, plastic, etc.), has been described as Prince of Wales, half, semi, full, scroll guard, scant and—most recently by the California legislature—"conspicuously protruding." Likely the first with a 'conspicuously protruding' pistol grip—though it was not called that at the time—was on a flintlock c.1813 Baker Cavalry Rifle used by the British military. With the confluence of understanding regarding conical bullet design and the rifling twist rate needed to achieve the proper rotational rate, accurate long-range (1,000 yard) shooting became practical. As a result, rifles intended for sporting use quickly incorporated a full pistol grip. This allowed, particularly when firing from the prone position, for a steadier grip and the better trigger control necessary for precision accuracy. Long-range competition began in England c.1860 with the first international match being held at the Creedmoor range in New York in 1874 between teams from the United States and Ireland. The rifles (Rigby, Remington, and Sharps) were all fitted with full pistol grip stocks. The first patent for a 'pistol-grip' stock was likely No.1559 of 1877 (England) awarded to Alexander Henry and Daniel Fraser.

Since the first government-made military muskets/rifles were produced at a U.S. armory in 1795, until WWI, virtually all had 'straight hand' (no pistol grip) stocks. Exceptions were the M1819 Hall that had a version of a scroll guard grip and specialized rifles with 'screw-on' grips designed primarily for target competition in the 1870s and 1880s. The Civil War demonstrated the efficacy of magazine fed rifles (Henry) and precision long range shooting (Berdan Sharpshooters) but those lessons were quickly discounted with costs being a major issue. The battle at the Little Big Horn was another reminder but, as the military was poorly funded, marksmanship

training and improved rifles were a low priority. It's worth noting that the stock blanks necessary for a full pistol grip stock are larger and slightly more expensive, which, as in the case of magazine fed rifles, may have worked against their adoption.

The U.S. was not alone in its commitment to the past. By the last decade of 19th Century, most military rifle stocks were 'straight hand.' Then, c.1890, what could be described as a 'scant' pistol grip, appeared on the Mannlicher, Enfield and Mauser rifles from England and Europe. When the U.S. entered WWI, its M1903 Springfield rifle had a straight hand stock. However, the primary US battle rifle of that war was the M1917 Enfield, a design 'borrowed' from the 'Brits' with its scant pistol grip. Springfield introduced a full pistol grip c.1921 for national and international match rifles. With our entry into WWII, Springfield M1903 rifle production resumed. The importance of marksmanship had been accepted but initially, the stock blanks available would only allow for scant pistol grips. Newly adopted rifles – M1 Garand, M1 Carbine and the M1941 Johnson - all had full pistol grip stocks. When the M1 Garand was replaced in the late 1950s by the M14, those too had full pistol grips.

In the late 1950s, with the development of the AR-15, the traditional wood stock was replaced by a multi piece 'plastic' or "synthetic" stock. Instead of being carved from a wood blank, the plastic AR pistol grip was attached with a screw. As with pistol grips before it, the AR grip has no role in the mechanical functioning of the firearm. As with older rifle designs, the AR grip simply places the shooting hand in the optimal position to operate the firearm's trigger, magazine release, and safety-mechanism. An AR type rifle can still be fired without a pistol grip installed, but would leave the user's hand in a non-optimal and less safe position to operate the rifle. For example, the "MonsterMan" style grip (roughly comparable to a Prince of Wales or semi-pistol grip)—that does not allow the user's strong-hand to wrap around it beneath the firearm's action—is not prohibited by California law.

At one point in the pistol grip's regulatory machinations its "conspicuous protrusion" was a critical factor. It is an 'inconvenient truth' that all full pistol grips, including that on the 1813 Baker flintlock 'protrude' below the trigger guard of a rifle or shotgun. Like the AR grip, if a grip is of proper design and fit, it facilitates the safe operation of the firearm. Proper use of a rifle or shotgun requires the use of both hands. The 'strong hand' grasps the pistol grip and actuates the trigger. The strong hand and shoulder absorb much of the recoil impulse, and generally the more vertical the pistol grip, the more effective the strong-hand can manage recoil. The 'weak hand' is critical for muzzle control and accurate aimed fire (for which purposes some users find helpful a "forward pistol grip").

Pistol grips (which includes “thumbhole stocks,” as they are functionally equivalent) are, and always have been, nothing more than a part that, if well designed, allows for safe and comfortable operation of a firearm - while serving no role in its mechanical function. A detachable pistol grip can be installed (with some gunsmithing) on rifles for which it wasn’t designed (including non-semi-automatics). Doing so may affect the user’s experience with the rifle—either negatively or positively—but does nothing to change the firearm’s rate of fire, ammunition capacity, or power. In some cases, a “protruding pistol grip” is an accommodation for a shooter with a disability. Perhaps the most famous example is Germany’s Kaiser Wilhelm whose deformed left arm required him to use a specially configured firearm. The Luger Pistol Fred A. Datig, Borden Publishing Co. LA 1962 pg.81.

B. Adjustable Stocks

Proper stock length is based on arm and neck length, chest muscle development, fullness of face, hand size and finger length. Clothing and the type of sights used must also be considered. What is referred to as ‘length of pull’ (LOP) is the distance between the center of the trigger and the center of the back surface (butt plate) of the stock. It’s not hard to imagine that Shaquille O’Neil and Danny DeVito have different LOPs, and require different stock lengths.

Most mass-produced rifles and shotguns are equipped with a stock that will fit the ‘average’ user – whoever that is. Some firearms come with factory stocks that are designed to allow the user to adjust the LOP. Those not so-designed can be adjusted by cutting off the end of the butt stock or adding extensions to it. Custom gunmakers can fashion a stock to exactly meet a user’s wishes - but that can be very costly. Further complicating stock fit is that the proper LOP for a person wearing a t-shirt might be unusable if that same person was cold weather hunting while wearing a bulky coat. A user-adjustable telescoping stock is simply an acknowledgement that people come in different sizes. The issue of proper LOP is as old as firearms themselves. The British military bolt-action of the early 20th Century - the Short Magazine Lee Enfield - had a four part wood stock with a butt stock secured by a massive through bolt. To address the need for various LOPs, - three different (and easily replaceable) lengths of butt stocks were available. The Lee-Enfield Rifle, Major E.G.B Reynolds, ARCO Publishing, NY 1962 pg.88. If a rifle’s stock is too long, the rifle cannot be shouldered and is thus virtually unusable.

Many AR type rifles are equipped with telescopic sights. Such sights generally have an eye relief requirement of 3 to 4 inches. “Eye relief” is the distance the eye must be from the rear glass element of the sight. Shooting position can impact achieving the proper ‘eye relief’. For instance, it is easier to place your face in a more forward position on the stock when firing from the prone (laying down)

position than if in the standing position. The design of the AR rifle platform is ideally suited for a user-adjusted (telescoping) stock that allows the user to adjust the LOP whenever conditions dictate.

To some, adjustable stocks have become associated with “lethality” of the firearm they are attached to. That is simply baseless. Such stocks have a relatively short adjustment range—usually 3-4 inches—so there is little, if any, change in the user’s ability to conceal an AR with a telescoping stock. Such stocks can be compared to adjustable car-seats. Adjustment allows the user a range of several inches from which to choose a comfortable and safe driving position but has nothing to do with the power, speed or basic functioning of the vehicle. In fact, some of the most adjustable stocks will be found on rifles and shotguns used at the highest level of competition, e.g., the Olympic games. *See* Exhibit “A” attached hereto. Such competition stocks will also be found with “conspicuously protruding pistol grips” and “thumbholes.”

C. Flash Suppressors

Flash suppressors are intended to reduce the visible signature in low-light conditions – thus protecting, to some degree, the shooter’s “night vision,” i.e., prevent pupils from dilating. “Flash suppressors” do not hide the flash from those in the direct line of fire. In the cosmos of regulated firearm accessories, only the bayonet lug is more irrelevant than the “flash suppressor,” as far as addressing the alleged threats from rifles with “assault weapon” features. The science of why a muzzle flash is generated when a rifle is fired is very complex. Simply put, it results from the heated gas expelled from the muzzle and the combination of barrel length/ bullet weight and type/amount of powder. Generally speaking, with the same ammunition, longer barrels will produce less “flash” than shorter ones – with or without a flash suppressor. Muzzle flash, with or without a flash suppressor, can be difficult to see in daylight conditions. I am unaware of any studies identifying “flash suppressors” as a relevant element in any firearm-related crime, or a single anecdote in which they played a role in making a crime worse than it otherwise would have been.

The flash suppressor is similar in appearance to its ‘cousin’ – the “muzzle break.” Both are attached to the muzzle end of the barrel, are generally two to three inches in length, are roughly double the diameter of the barrel and have slots and/or holes to release the gas created by firing a cartridge. The “muzzle break” is primarily designed to reduce the recoil impulse. Distinguishing between a “flash suppressor” and a “muzzle break” can be difficult. This has been made even more difficult by the commercial availability of combination devices that serve to both reduce recoil and flash.

Finally, there are “compensators,” devices that are similar in appearance to “flash suppressors” and “muzzle brakes” but that serve to redirect noise and concussion away from the shooter. While it may cause some minimal reduction in flash, their *raison d’être* is to increase shooter comfort by reducing perceived recoil.

Just when, or if, a “muzzle brake” or “compensator” morphs into a “flash suppressor” requires the ‘wisdom of Solomon’, or sophisticated testing equipment, as each may perform some of the function of the other, more precise legal definitions might also be helpful. As with other rifle accessories or ‘do-dads’, the presence of a “muzzle break,” “flash suppressor” or “compensator” has no relevance to a firearm’s “rate of fire and capacity for firepower” or chambering.

3. *Semiautomatic, centerfire rifles having a detachable magazine and the features described above have been commonly chosen by the American public for lawful purposes such as self-defense for decades*

Semiautomatic, centerfire rifles with detachable magazines have been in safe and effective use by civilians in this country for over a century. Over the past six decades, semiautomatic, centerfire rifles with the above described “features” have enjoyed significant evolution and a tremendous growth in popularity. Perhaps the best examples are rifles built on the AR-15/AR-10 platforms (the “platform” is the lower receiver group). An owner can configure his AR to use .22 rimfire ammunition for training a new shooter, as a 7lb rifle for hunting in steep difficult terrain and easier handling in self-defense, or as a 12lb single-shot rifle for 1000-yard target competition. Multiple configurations are possible because the AR is comprised of three readily detachable groups of parts – the stock, lower receiver, and upper receiver. It’s a functionality that is similar to Nikon or Hasselblad film camera systems where film backs, motor drives and lenses could be quickly substituted as the photographer’s needs changed. As the result of important design changes, better ammunition, and the flexibility given by the proliferation of ‘after market’ parts’ (the 2015-2016 Brownells catalog devotes 99 pages to AR parts), ARs have become the Modern Sporting Rifle of the United States.

Two other factors have resulted in the extraordinary popularity of the AR – the rust resistant materials used in its construction and the .223 Remington (5.56x45mm) cartridge for which most are chambered. The AR is ideally suited to the harshest conditions and is extremely reliable. It is the cartridge for which most are chambered that is most likely the key to its appeal. The .223 Remington cartridge is available in a number of load configurations but one of the most common is a 55 grain bullet at 3200 feet per second from a 20” barrel. It is more powerful than the vast majority of handgun cartridges but is on the low end for rifle cartridges. According to TWOAMENDMENTS.com (rifle recoil table) the recoil of a .223

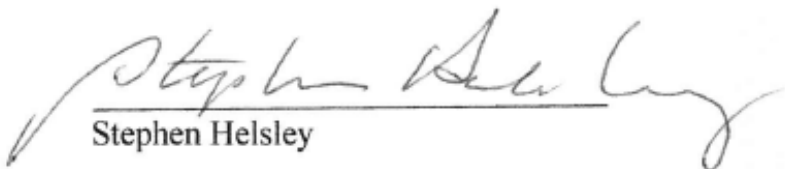
Remington using a 55-grain bullet is 3.2 foot-pounds in an 8lb rifle. In comparison, a .30-06 (180 grain at 2700fps)—which is a standard deer hunting cartridge—generates 20.3 foot pounds of recoil in a similar weight rifle. Adding weight to the stock or a muzzle brake will further reduce felt recoil. This is very important when training new shooters as the combination of recoil and the noise of the muzzle blast can cause accuracy destroying “flinching.”

AR-platform rifles serve a variety of functions, including target shooting, hunting, collecting, and self-defense. The AR is a particularly excellent choice for self-defense when coupled with the appropriate ammunition because of its accuracy, light recoil, ergonomic-design, and, most importantly, that it can be configured to the user’s needs. Each of the features described above is common, if not standard, on AR-platform rifles because they are intended to provide at least one of those benefits. One would be hard-pressed to find an AR-platform rifle without a “conspicuously protruding” pistol grip affixed.

IV. CONCLUSION

The assertion pushed by “assault weapon” ban advocates is that rifles falling under that invented term—which can be any rifle the legislature wants—are only good for quickly killing lots of people. It is simply based on ignorance and ignores the reality of the widespread use of these rifles over decades for various lawful purposes. AR platform rifles and other semiautomatic/detachable magazine rifles will be found not only at rifle ranges but in rancher’s pick-up trucks, slung over hunters’ shoulders, and strategically placed for home defense. These rifles have endured “the slings and arrows” of their detractors for decades. They are however what American shooters want. A 1920s Cadillac Motor Car advertisement explains it best. “That which is good or great will make itself known no matter how loud the glamour of denial. That which deserves to live, lives.”

Dated: October 25, 2018



Stephen Helsley

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December 18th, 2013

Fully Adjustable, 'Customizable' Smallbore Match Rifles

Report based on Lars Dalseide story in [NRABlog](#).

If you watched the position and prone shooters at the 2012 London Olympic Games, you couldn't help but notice the exotic rifles competitors were shooting. There were wood stocks, metal stocks, off the shelf rifles and customized specials. Why are there are so many different design features and stock types? To answer this question, the NRAblog's editors called on Jessie McClain of the NRA Competitive Shooting Division.

"The customized rifles, like the Anschütz you showed me, can make a real difference in a shooter's performance," explained McClain. "I went from a decent shooter to making the varsity shooting team my freshman year because of the rifle." As Jessie explained, one new feature out there is the adjustable stock, which she called the Porsche of the shooting world. Fully adjustable from the butt plate to the check piece to the hand stop and risers and bolt knobs, this component is fully customizable to the athlete ... which can be a huge advantage. "Every person is different ... a customizable rifle fits anyone. A rifle team can purchase four of these and field a shooting team for years."

Not for Novices

The one warning she did have is that these are not for the novice shooter. Get a couple of years of shooting under your belt and then think about moving on to a customized rifle. That way, you can learn the basics before investing in the high dollar equipment. "You wouldn't give your 16 year old a Ferrari for his first car, would you?"

The Modern Anschütz Position Rifle

Smallbore match rifle makers are using modern materials in response to the need for greater adjustability (and enhanced accuracy). One of the popular new designs is the Anschütz model 1913 position rifle with a "1918 ALU Precise" brushed aluminum stock. This looks like it has been crafted in an aircraft plant.



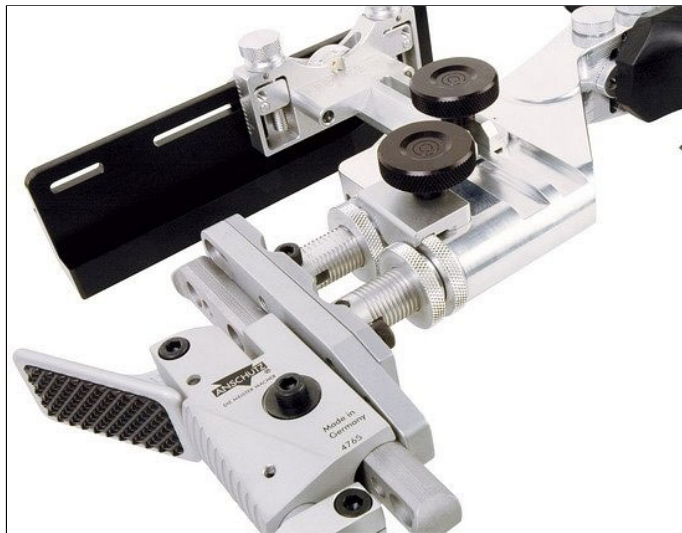
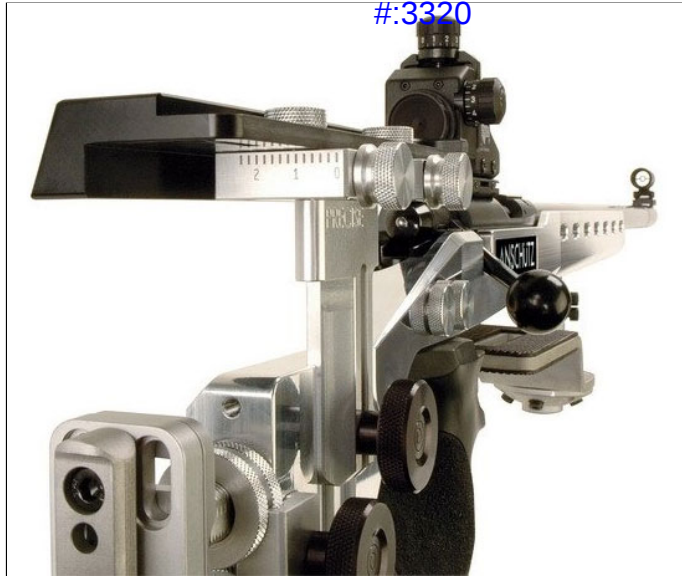
- Articles (648)
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Story by Lars Dalseide, courtesy the [NRA Blog](#).

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EvoComp

The fully adjustable
modular stock system

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Ergonomics and Design "Made by Wilfried Nill"

Wilfried Nill (born 1965 in Tübingen)

- Active in sport shooting (air/sport pistol, shotguns in large caliber, skeet) since 1975
- Working in the Karl Nill company since 1978
 - in the production sector until 1987
 - in the sector of product development and design since 1987
 - technical manager and associate from 1987 to 2000
 - managing partner since 2000 (continuation of the family-owned enterprise in 2nd generation)
- Foundation of Ergosign in 1998



Decades of experience as an active sport shooter, the development and fabrication of ergonomic grips for pistols and revolvers and of many accessories as well as the involved mechanical understanding for production processes and their transformation with CAD/CAM and CNC technologies are the basis for the realization of innovative products.

Many well-known manufacturers of firearms (like Heckler & Koch, Hämmerli, Walther, Sig Sauer) were able to successfully realize numerous projects in direct cooperation with Wilfried Nill.

Wilfried Nill – a life for sport shooting.

EvoComp – a story of success

Owing to his personal enthusiasm for clay target shooting, Wilfried Nill set himself the goal of designing an ergonomically perfect fitting shotgun stock in 2005 yet. The result of this experience and development is presented to you in detail on the following pages.

National and international top shooters have very quickly recognized the advantages of the modular stocks and are convinced by the improved control of the shotguns provided by ergonomic optimization and individual possibilities of adjustment. On pages 15 and 16 we are presenting you a short list of references.

The worldwide success since the introduction of the Ergosign EvoComp stock system in summer 2009 is speaking for itself. The current peak of EvoComp during the Olympic Games 2012 in London with four medals could set lasting trends (see below).

With the Ergosign EvoComp, Wilfried Nill is continuing the estimated family tradition in order to support our customers by offering them the optimal connection between man and sporting tool.

EvoComp – Advantages of the modular stock system

Ergonomic grips in different sizes for left and right handed shooters

One significant advantage compared to conventional stocks lies in the anatomical moulding of the pistol grip, which gives the stock an absolutely unique, comfortable and secure hold. Due to its optimal ergonomic design, the position of the trigger finger (with respect to the trigger) remains constant, thus reducing the recoil effects tremendously.

Individual adjustability to body/anatomy and shooting position

A basic requirement for a steady mount position and therefore successful shooting is a personalized adjustment of the stock depending on the shooter's anatomy and shooting stance. These preferences change with time and can be corrected with ease by resetting the stock.

Modular construction allows the interchangeability of all components

All stock parts can be tuned to different requirements if changes occur. If you are going to switch guns, you will only need to purchase a new grip (and maybe a different comb, if using a different rib height) which your authorized dealer will gladly install for you.

The gross weight is only 850 grams [30 oz.] for the standard version.
All settings are reproducible via scales on the system.

Olympia 2012, Skeet



Gold: Vincent Hancock (USA)

Olympia 2012, Double Trap



Gold: Peter R. Wilson (GBR)
Silver: Håkan Dahlby (SWE)

Bronze: Vasily Mosin (RUS)

World Records

Vincent Hancock (USA), Skeet, 2015 in Acapulco (MEX)

Tim Kneale (GBR), Double Trap, 2014 in Munich (GER)

Peter R. Wilson (GBR), Double Trap, 2012 in Tucson (USA)

Further peak results under www.ergosign.com

EvoComp – the basis for success



Ergonomic grips with beavertail, small thumb rest and slight palm swell

With finger grooves and Rhomlas®-surface structure in four different sizes (XL, L, M and S) or without finger grooves in the sizes L and S, with stippled surface as an individual custom-made fabrication according to a hand outline sketch or after a personal orthopaedic adjustment: all our grips are produced for personal fitting to all different kinds of possible hand shapes.

Please find our detailed description on page 12.



Drop of the butt plate

Depending on the length of the shooter's neck and the mounting position, the level of the butt plate can be individually adjusted within a range of approx. 40 mm [1.575 in] to approx. 60 mm [2.285 in] (for a middle section 4°). By mounting a higher clamping collar between the comb and the middle section (see page 10) the height of the butt plate rises proportionally.



Pitch adjustment

The pitch is fully adjustable by approx. 90°- 82°. Once it has been fitted correctly, the gun will remain in exactly the same position after a shot. This greatly increases the hit ratio on the second shot of the target pair.

Pitch adjusting plate +4°

An extended pitch adjustment of +4° is optional. For shooters with an upright shooting position and a big chest measurement the pitch can be additionally extended by 4° (can be recommended for a heightened middle section under 0° and for the TR version).



Cast

For up to 9 mm by adjusting the butt plate. Additionally the butt plate is rotatable by $\pm 10^\circ$.

Cast + 4 mm

For shooters with a short neck or a big chest measurement the additional cast of about 7-13 mm (standard 3-9 mm) optimizes the adjustment to the body – to reach a higher comfort.

EvoComp – the basis for success



Comb

The correct position of the head to the rib is essential for a precise point of impact. For this reason, the standard comb of 33 mm can be fully adjusted in height (drop) from approx. 42/46 to 36/36 (with a comb of 38 mm from approx. 37/41 to 28/28) and approx. 4 mm in width (cast +1 to +5 mm).

Picture: Beretta DT11 with grip in size L, comb R33, butt plate in grenadille,
Drop of butt plate approx. 40 mm to 60 mm, middle section 4°

Stock length

Having a range of adjustment from approx. 340 mm to approx. 390 mm, it is simple to fit the stock with the telescopic tube to the individual body size. Additionally, a shorter version for smaller shooters or for shooters with short arms of approx. 320 to 360 mm as well as a long version for very tall shooters with an adjustment range of approx. 360 to 430 mm are available.

Which stock configuration is the ideal one for me?

1. Which of the following anatomic conditions do apply for me?

- a) An average neck and shoulder anatomy
- b) A long neck with a low gun position
- c) A long neck with a high gun position
- d) A short neck with a low gun position
- e) A short neck with a high gun position



2. Which posture is usually the best for me?

- a) Body and head slightly leaning forward (recommended)
- b) A body leaning forward keeping the head a little further to the front
- c) A body standing upright keeping the head almost vertical



3. What is the position to place the shotgun at my shoulder?

- a) Below the collarbone: more drop of the butt plate is necessary ► more upcoil at the muzzle
- b) Above the collarbone on the muscle at your shoulder: less drop of the butt plate ► less upcoil at the muzzle

It also depends from the preferred stock length and posture whether 3.a) or 3.b) is recommendable for the shooter.

4. Higher ribs

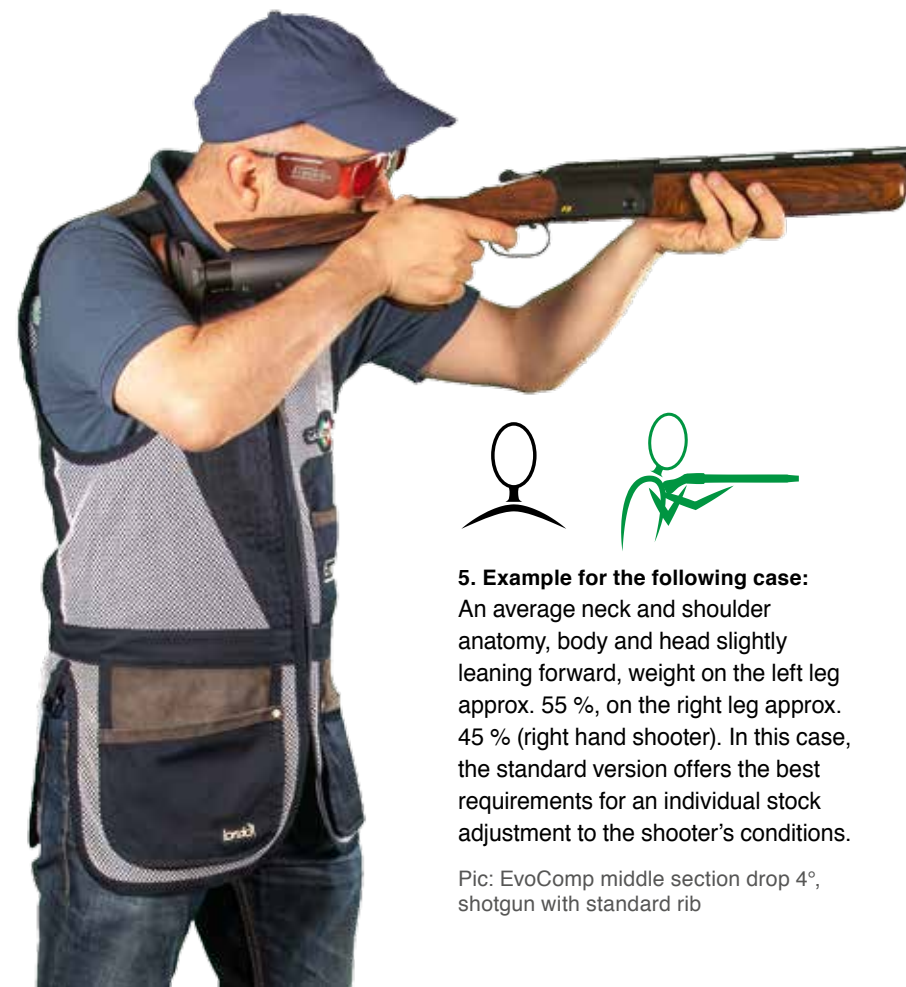
Meanwhile, most gun manufacturers also produce shotguns with heightened ribs, which help to offer you a more relaxed shooting position and a reduced upper recoil after the shot, depending on the anatomic conditions.

- a) 10/15mm higher: possible for all disciplines and favorable for shooters of categories 1.a) -d) and 2.b).
- b) 20/25 mm higher: recommendable for all trap, double trap and DTL shooters, especially for 1.b) and 2.c).
- c) 30/35 mm higher: for trap, double trap and DTL shooters from the categories 1.b) and 2.c)

On the basis of all the factors listed under points 1-4, the drop of the butt plate in relation to the top edge of the rib will result. Within the different stock configurations, the shooter can use the adjusting range of the drop of the butt plate (see picture: height/drop of butt plate on page 4). The smaller the drop between the top edge of the butt plate and the principal axis of

the barrels is, the less is the upper recoil of the shotgun with a correctly adjusted pitch. The drop of the comb always refers to the position of the upper edge of the

rib and also depends from the distance between eye and cheek-bone and from the requested upshot.



5. Example for the following case:

An average neck and shoulder anatomy, body and head slightly leaning forward, weight on the left leg approx. 55 %, on the right leg approx. 45 % (right hand shooter). In this case, the standard version offers the best requirements for an individual stock adjustment to the shooter's conditions.

Pic: EvoComp middle section drop 4°, shotgun with standard rib

Summary:

When ordering a shotgun or a new stock system, the shooter should seek analysis and advice from a professional shooting instructor or gun fitter with own shooting experience, who is knowledgeable

on innovative shotguns/stocks. The completed questionnaire is one of the most important factors (see page 14). Moreover, photos from different perspectives – with your shotgun in shooting

position – can be of additional assistance to find the best fitting stock configuration. Not only the balance of your shotgun but also your anatomy and preferred shooting position are of great importance for the

configuration of your stock system. Most shooters prefer the posture from our first example. We keep the most popular and common shotguns available and will be pleased to help you with our advice.



6. Example for the following case:

A long neck with a high shooting position and a body leaning forward keeping the head a little further.

Pic: EvoComp middle section drop 1° + 10 mm clamping collar, Shotgun with 10-15 mm heightened rib



7. Example for the following case:

A body standing upright keeping the head almost vertical.

Pic: EvoComp middle section drop 4° + 20 mm clamping collar, Shotgun with 20-25 mm heightened rib

Without Pic: EvoComp middle section drop 4° + 30 mm clamping collar, Shotgun with 30-35 mm heightened rib

Standard version

The standard version of our stocks comprises the following configuration:

- Grip with finger grooves, Rhomlas® surface structure in the sizes XL/L/M/S for right hand or left hand shooters
- Stock length adjustment of approx. 340-390 mm
- Drop of butt plate approx. 40-60 mm middle section 4°
- Adjustable comb R33 (36/36 – 42/46 mm) for skeet/sporting
- Alternatively comb R38 (28/28 – 37/41 mm) for trap or for a very small distance between cheek-bone and eye
- Fully adjustable stock ending with a butt plate made of walnut wood and a partial rubber pad, alternatively with a butt plate made of elastomere (for trap or sporting)
- Grip and comb made of walnut
- Aluminium parts with black coloured or titanium coloured (only middle section) coating

Picture: Perazzi MX8 with grip in size XL, comb R38, butt plate for sporting



Skeleton version

Compared to the standard version the middle section of the stock is skeletal. This provides the stock with an even more technical appearance and reduces its weight by approx. 15 grams. The skeleton version is available for a stock length of 340-390 mm and 360-430 mm.

Picture: Renato Gamba Daytona with a grip in size L, comb R33, butt plate in walnut



Shortened version of 20 mm

For smaller shooters or for shooters with short arms a shortened version is additionally available with an adjustment range of 320 to approx. 360 mm in length. This version can only be delivered with aluminium parts in black colour (not in skeleton). Moreover, the combs are 20 mm shorter.

Picture: Beretta 682 Gold E with grip in size S, comb RS33, butt plate in grenadille



20 mm extended version

For tall shooters or shooters with long arms we can offer an extended version with an adjusting range of 370 to approx. 450 mm length. This version is only available with black aluminium parts (in skeleton) and can be supplied as an option for all stock configurations.

Picture: Caesar Guerini Invictus, grip size L, comb R38, butt plate in elastomere (for trap)





Clamping collar +10 mm for heightened ribs of approx. 10-15 mm

By mounting a heightened clamping collar of approx. 10 mm between the middle section and the comb the drop of the comb can be adapted to the heightened rib (e.g. Perazzi MX2000/3, MX10, Beretta X-Trap, Caesar Guerini etc.).

Picture: Beretta DT10 with grip in size M, comb R38, clamping collar +10, butt plate in elastomere (for trap)



Clamping collar +30 mm for heightened ribs of approx. 30-35 mm

See left descriptions, clamping collar however 30 mm higher.

Picture: Krieghoff K-80 with sighting rib, double trap special, grip in size L, comb R38, clamping collar +30, butt plate in elastomere (for trap)



Clamping collar +20 mm for heightened ribs of approx. 20-25 mm

Our clamping collars offer the best possible flexibility in adjustment for shotguns which need a modified drop (even after the additional mounting of heightened ribs). Further differences in height can be balanced through the possibility of choosing heightened combs with its range of adjustment.

Picture: Blaser F3 with special barrel rib or e.g. F3 Super Trap, grip in size M, comb R38, clamping collar +20, butt plate in elastomere (for trap)



Version TR 1°

This version is particularly recommendable for shooters who have a short neck and a high gun position. The drop is adjustable from approx. 35-55 mm. The comb has been drawn for approx. 5 mm forwards, the drop is parallel to the rib at the front/at the back. Pitch 93° to 85° (Special version +4° is adjustable from approx. 93° to 81°).

Picture: Beretta 692, grip size L, comb R38 OCTR, butt plate in elastomere (trap)



Version TR +10 1°

In comparison to the previous system (TR 1°) the drop of the butt plate is adjusted by approx. 10 mm in height. This configuration can be used as a base for the MX2000/3 (and other shotguns with a heightened rib of 10-15 mm) in connection with a +10 mm clamping collar for a 20-25 mm heightened rib or with a +20 mm clamping collar for a 30-55 mm heightened rib.

Picture: MX2000/3 with grip in size L, middle section in skeleton, comb R38 OCTR10, butt plate in elastomere (for trap)



Special version Perazzi MX2005 + 20 0°

On the request of various double trap top shooters, we have developed further stock configurations with removable trigger group for the Perazzi production series. In this special version the complete back stock part is raised to the level of the barrel rib on MX2005, so that the drop is correspondingly adjusted. The result is that the recoil of the shotgun is straighter to the shoulder and that the muzzle jump is considerably more influenced by the pitch adjustment (in comparison to stocks in standard version).

Picture: MX2005 with orthopaedic grip, comb R43 OC, butt plate in elastomere (for trap)



Special version Perazzi MX2008 +30 0°

See bottom left description, but adapted to the MX2008.

Picture: MX2008 with orthopaedic grip, comb R43 OC, butt plate in elastomere (for trap)



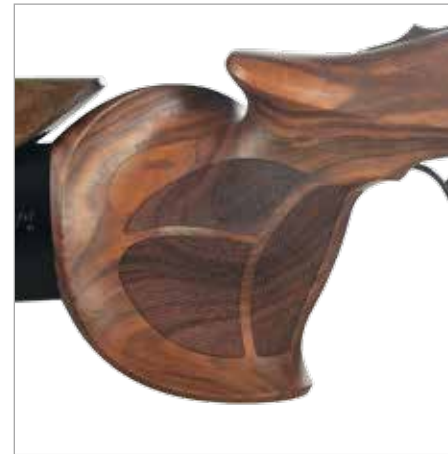
Recoil reducer

Resulting from many years of development and numerous tests a hydraulic system dampens the back stock through a cylinder against the shooting direction. By an adjusting screw the damping can be regulated according to munitions, barrel length and choke drillings as well as the body measurements which influence the recoil. Thus the shooter will get the requested feedback.



Rhomlas®-surface structure

Another high point of the development is the integration of Rhomlas® surface structure which is well-proven for many years and is appreciated by international top shooters. With much attention to detail, non-slip segments are incorporated at crucial points in a complex process. A dynamic design – but “Ergosign” is also created for practical use.



Ergonomic grip without finger grooves

The version without finger grooves is exactly the right choice, if the shotgun is used by multiple shooters (for example as a training-, rental- or club gun) or if a plain moulding is preferred. This grip is available with Rhomlas® surface in the sizes L and S.



Individual grips – fabricated according to your hand outline sketch

Shooters whose hands highly differ from the standard measurement (for instance very short/thick or very long/slim hands) have the possibility to order individual grips fabricated according to an exact hand outline sketch for an additional fee. Thus the shooter gets individually fabricated grips with stippled surface in the palm area which are specially adjusted to his shooting hand.



Orthopaedic grip customized according to a plastic moulding

During a personal fitting appointment an exact wood/plastic moulding is made from the shooter's hand by using a grip blank. All the contour elements of the grip are adjusted in detail to the shooter's hand and his shooting position. The result is a grip which fits “like a glove” and which always guarantees the same hand position on the stock. Thus the exact consistent position and steady distance to the trigger can be guaranteed.



Butt plates

The correct butt plate for each discipline:

- Walnut (standard), ideal for Skeet & Sporting, 50 grams [1.75 oz.]
- Grenadille (option), ideal for Skeet & Sporting, 95 grams [3.35 oz.]
- Elastomere (alternatively), ideal for Trap/Double Trap/American Skeet, 110 grams [3.88 oz.]

Further versions under www.ergosign.com

Wood qualities

All wooden parts can be ordered in the following wood qualities for an additional fee according to the fore end: selected wood, burl wood, selected burl wood, top burl wood and bird's eye burl wood.



Heightened combs & clamping collars

For shotguns with heightened ribs our different combs and clamping collars (the holder between middle section and comb) allow one to raise the standard ratio of the drop in proportion to the rib. For widely varying head positions we offer the possibility of lengthening the comb. Combs are available with a height of 33, 38, 43 and 48 mm, the corresponding clamping collars are available with a height of +10, +20 and +30 mm. For combs R33 the height adjustment pins are 14/17 mm high (for R38 17/20 mm). Additionally height adjustment pins of 23 mm are available.



Balancer

The balancer offers the possibility to balance the weight of the shotgun (approx. 68 to 240 grams). The longer the size of the barrel, the more weight is needed on the stock.



Colour of the aluminium parts

Aluminium parts in the standard version are supplied with black coloured coating. For stocks in standard length of 340 – 390 mm the aluminium can alternatively be supplied with titanium coloured coating parts (only the middle section).



Accessories

Each stock system is supplied with:

- A tin of special hard oil for wood preservation
- A towel
- Mounting instructions and tools (without picture)



Construction

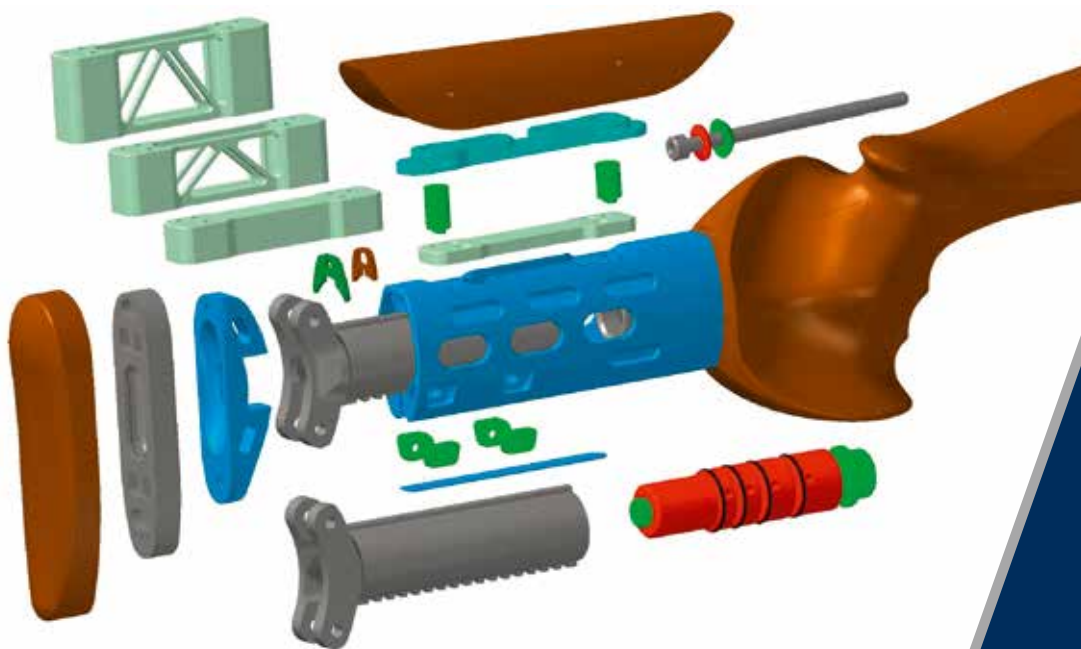
What is hidden in a fully adjustable stock system? The modular construction of the patented system is identified on the basis of the exploded drawing, whose detailed design serves as simplification for orders of accessories and spare parts (e. g. higher clamping collar for high ribs, balancer, screws etc.).

Further information

You may find our answers to frequent questions about the EvoComp in the sector "FAQ" under www.ergosign.com.

Available for:

- Beretta: DT10, DT11, 682/686, 692
On request: ASE Gold, ASE 90
- Blaser: F3, F3 SuperSport
- Krieghoff: K-32, K-80, K-80 Pro Sporter
On request: K-80 Trap Special, K-80 Doppeltrap Special
- Perazzi: MX8, MX2000, MX2000/3, MX2005, MX2008
- Renato Gamba: Daytona K2, Carrera, Star Cup
- Caesar Guerini: Invictus, Temper, Tempio, Challenger, Summit, Summit Black



With the questionnaire
in three steps to your
individual quotation

Download

www.ergosign.com



Fill out

completely by hand



Send

by e-mail, fax or letter post

We are always prepared to send you the
questionnaire by e-mail or letter post.

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Young professionals are waiting in their starting blocks

Many young shooters are already recognizing the advantages of our developments and are successfully using them at championships around the world for victories and titles. Here is a small excerpt:

"I am and always will be eternally grateful to everyone at Ergosign Evocomp for helping me and my competitors to be the best we can be."
(Peter R. Wilson, Olympic champion and James Dedman's coach)

"My son and me have used EvoComp Ergosign stocks for four years and we think we have made the right choice. Our results have increased and are more stable now, thanks to comfortable position of our hands and exactly adjusted stocks. We have made the right choice. Thanks for collaboration with Nill company."
(Vitaly Fokeev, top shooter and Kirill Fokeev's Dad)

"We put the Ergosign stock on her gun in mid February 2015 and we saw an improvement in her score right away, her average went from a 17 to a 20 within one week after installing. The EvoComp is the perfect stock for youth shooting athletes, because it can be adjusted as the athlete grows and that adjustment may be needed 3 to 4 times a year depending on how fast they grow. This has proven to have been a great investment for us!"
(Dave Bechtold, Heidi Bechtold's Dad)



James Dedman (GBR), Double Trap



Felix Haase (GER), Skeet



Kirill Fokeev (RUS), Double Trap



Gerrit Wülpern (GER), Skeet



Heidi Bechtold (USA), Olympic Trap



Filip Praj (SVK), Double Trap, Trap

The shooter in the focus of attention

Satisfied and successful customers are the best reference. Please find below a short excerpt from the list of the national and international top shooters who have decided to actively use our fully adjustable Ergosign EvoComp stock system.



Vasily Mosin (RUS), Double Trap;
Olympia 2012: Bronze



Gabriele Rossetti (ITA), Skeet;
ISSF Junior World Champion 2014



Ahmed Al Maktoum (UAE), Double Trap



Peter Robert Russell Wilson (GBR),
Double Trap; Olympia 2012: Gold



Vincent Hancock (USA), Skeet;
Olympia 2012: Gold



Abbey Ling (GBR), Trap



Richard Bognar (HUN), Double Trap;
Olympia 2012: Position 6



Andreas Chasikos (CYP), Skeet



Håkan Dahlby (SWE), Double Trap, Trap;
Olympia 2012: Silver



Vitaly Fokeev (RUS), Double Trap

EXHIBIT 4

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiffs,

v.

**XAVIER BECERRA, in his official
capacity as Attorney General of the
State of California et al.,**

Defendants.

8:17-cv-00746-JLS-JDE

**EXPERT REPORT AND
DECLARATION OF DETECTIVE
MICHAEL MERSEREAU OF THE
LOS ANGELES POLICE
DEPARTMENT**

I, Michael Mersereau, declare and state as follows:

1. I am a Detective employed by the Los Angeles Police Department (the "LAPD") as a sworn officer for approximately 22 years. I have personal knowledge of the facts set forth below except those stated on information and belief. As to those facts, I believe them to be true and if called as a witness, could and would testify competently thereto.

2. I am currently assigned to the LAPD Gun Unit and have been for approximately 15 years. The LAPD Gun Unit is involved exclusively in the enforcement of the California Dangerous Weapons Control Act and the Municipal Code of the City of Los Angeles as it pertains to firearms. Prior to this assignment, I worked uniform patrol, unformed gangs, and divisional gang detectives. In these assignments, I have encountered a wide variety of firearms and firearms accessories, including assault rifles, and I have made numerous arrests for firearms violations.

1 3. Pursuant to my current assignment, I received training from the Bureau
2 of Alcohol, Tobacco, Firearms and Explosives (BATFE) on illegal firearms
3 trafficking, firearms identification and tracing, undercover operations, hidden
4 compartment identification and recognition, assault weapons, and Federal Firearms
5 laws. I have also received informal training on the above- mentioned subjects from
6 more experienced investigators. I routinely review California Department of
7 Justice (DOJ) and BATFE publications related to firearm identification and
8 transactions. I have attended numerous gun shows and firearms trade expositions.
9 I routinely review Firearms Industry trade publications. I have spoken to hundreds
10 of persons engaged in the business of firearms sales. I have also been involved in
11 numerous investigations of illegally transferred firearms, possession of prohibited
12 weapons including machine guns, assault weapons, and short barrel shotguns and
13 rifles, as well as possession of firearms by prohibited persons. As a result of these
14 investigations, I have seized or participated in the seizure of hundreds of assault
15 rifles and numerous high capacity magazines. I am a court qualified firearms
16 expert and have testified on multiple occasions as such. I have also fired many
17 different firearms including various assault weapons and machine guns for training
18 and court testimony.

19 4. Gun violence is a significant problem in Los Angeles. The LAPD lacks a
20 central database of all firearms related statistics. The statistics set forth below are
21 accumulated by many different entities within the department including the Gun
22 Unit and Robbery Homicide division. Here are some statistics for the past several
23 years regarding gun-related crimes in Los Angeles:

Year	Total Number of Gunshot Victims
2013	1012
2014	994
2015	1119
2016	1180
2017 (as of 9/6/17)	718

Year	Total Number of "Shots Fired" Calls
2013	2198
2014	2134
2015	2419
2016	2628
2017	N/A

Year	Total Number of Firearms Related Arrests
2013	1225
2014	1153
2015	1265
2016	1509
2017	N/A

5. Not surprisingly given the above statistics, the number of weapons seized both city-wide, and by the gun unit, are high as well. Here are some statistics for the past five years regarding gun-related seizures:

Year	Total Number of Firearms Booked Citywide
2013	5130
2014	5529
2015	6151
2016	5908
2017 (as of 9/6/17)	4513

6. Statistics regarding assault weapons and machine guns (as define in the California Penal Code) are provided because these guns typically use large-capacity magazines. The LAPD does not keep statistics on the number of assault weapons and machine guns recovered citywide due to the expertise needed to determine whether a weapon is actually an assault weapon or a machine gun. The below statistics represent Assault Weapons / Machine Guns recovered by the Gun Unit only. Citywide numbers are likely higher.

Year	Number of Assault Rifles/Machine Guns recovered by the Gun Unit
2013	123
2014	113
2015	145
2016	89
2017	125

7. With respect to large-capacity magazines specifically, the statistics provided below represent only the seizure of large capacity magazines by the Gun Unit. As with assault rifles, the LAPD does not keep statistics on the number of large-capacity magazines recovered citywide.

Year	Number of Large-Capacity Magazines Recovered by the Gun Unit
2013	601
2014	392
2015	8826 ¹
2016	224
2017	551

8. It is my opinion, based on my training and experience, that assault rifles (as defined by California Penal Code sections 30510 and 30515) pose a greater danger to both police officers and the public than other unrestricted semi-automatic, centerfire rifles with detachable (non-fixed) magazines. What distinguishes Assault Rifles from unrestricted rifles (as described above) is the presence of one or more features enumerated in the California Penal Code including a pistol grip (including a forward pistol grip) or thumbhole stock, adjustable stock, or flash suppressor. These features when attached to a semi-automatic, centerfire rifle with a detachable magazine make that rifle more dangerous to police offices and the public due to an increase in the lethality of the rifle. The purpose of each of these features is to increase the control of the rifle that they are attached too. Increased control leads to the ability of the shooter to fire rounds faster and with more accuracy. Any modification to a firearm that allows a shooter to fire rounds faster with increased accuracy leads to greater potential lethality.

9. The most ubiquitous feature of assault weapons is the pistol grip or thumbhole stock. Modern military battle rifles are almost universally equipped with pistol grips. Modern military battlefield tactics rely on the ability of troops to send, rapidly and accurately, a large number of rounds down range towards enemy positions. Pistol grips and thumbhole stocks provide the combatant with more

¹ This was due to an abnormal seizure regarding a deceased individual at a condominium in the Pacific Palisades.

1 control of the rifle and thus more accuracy during rapid fire. Pistol grips and
2 thumbhole stocks also position the trigger finger relative to the trigger so that the
3 trigger press is in a straight line. This allows the shooter to not only be more
4 accurate but also increases the speed with which rounds can be fired. Pistol grips
5 and thumbhole stocks serve the same purpose when installed on civilian semi-
6 automatic rifles in that they increase the number and accuracy of rounds that can be
7 fired by any given shooter in a given amount of time.

8 10. Adjustable stocks also contribute to the control of the rifle in that they
9 allow the shooter to optimize the rifle to their arm length. This increases the
10 shooter's ability to rapidly send rounds down range with increased accuracy. By
11 collapsing the stock, the rifle becomes more concealable potentially allowing a
12 suspect to introduce the firearm into a vulnerable location such a school or
13 workplace with less fear of detection.

14 11. Flash suppressors also contribute to the potential lethality of a rifle.
15 Flash suppressors function to reduce the "flash signature" in the shooter's field of
16 vision in low light conditions. By reducing the effect of the muzzle flash on the
17 shooter's night vision, the shooter can get back on target quicker. The ability to
18 acquire one's sight picture faster allows the shooter to more rapidly deliver rounds
19 to the target with greater accuracy. Many flash suppressors on the market are
20 hybrid designs meant not only to reduce the flash signature of the rifle but to limit
21 barrel rise which increases accuracy.

22 12. By definition, assault rifles are capable of accepting a detachable (non-
23 fixed) magazine. These magazines can hold as many as 100 rounds. Large
24 capacity magazines allow the shooter to fire more rounds at their target(s) before
25 the need to stop and reload. The use of detachable large capacity magazines in
26 conjunction with any semi-automatic or fully automatic rifle makes that rifle more
27 lethal.
28

1 13. Adding any of the features described above further increases the ability
2 of the shooter to accurately and rapidly deliver rounds to the target, increasing the
3 potential lethality of the firearm beyond that presented by a featureless rifle. There
4 is a direct correlation between a shooter's ability to inflict more casualties on
5 targeted persons and the number of rounds immediately available to a shooter to
6 more rapidly and accurately deliver those rounds on target. This has been
7 illustrated in various mass-shootings in and around the City of Los Angeles over
8 the past twenty years.

9 14. For example, in one of the most brazen crimes ever committed, on
10 February 28, 1997, two heavily armed men robbed a Bank of America in North
11 Hollywood. According to reports that I have read, the bank robbers emptied more
12 than one thousand rounds of ammunition using fully automatic pistol grip equipped
13 machine guns with high-capacity drum magazines (holding 75 to 100 rounds), an
14 AR-15 assault rifle equipped with a pistol grip and converted to fire automatically
15 with two high-capacity magazines (holding 100 rounds each), a semi-automatic
16 HK-91 rifle equipped with a pistol grip and several 30-round high-capacity
17 magazines, and armor-piercing bullets. The LAPD officers responding to the scene
18 were outgunned and injured as a result of this incident. Indeed, twelve police
19 officers and eight civilians were injured.

20 15. On August 10, 1999, a white supremacist fired shots into the lobby of the
21 North Valley Jewish Community Center in Granada Hills. According to reports I
22 have read, the shooter was armed with a fully-automatic Uzi machine gun, a semi-
23 automatic pistol, and large capacity magazines. Three children, a teenage
24 counselor, and an office worker were injured.

25 16. On June 7, 2013, a shooter opened fire in and around the campus of Santa
26 Monica College. According to reports that I have read, the shooter was armed with
27 a semi-automatic rifle (similar in type to an AR-15) equipped with a pistol grip,
28

1 1,300 rounds of ammunition, and forty 30-round magazines. Five people were
2 killed and four people were injured.

3 17. On November 1, 2013, a gunman opened fire at the Los Angeles
4 International Airport. According to reports that I have read, the shooter used a
5 Smith & Wesson M&P15 semi-automatic rifle equipped with a pistol grip and
6 loaded with a detachable 30-round large-capacity magazine. The shooter also had
7 five additional 30-round large-capacity magazines and hundreds of rounds of
8 ammunition in his carrying bag. One TSA agent was killed and several other
9 people were injured.

10 18. On December 2, 2015, a married couple targeted a San Bernardino
11 County Department of Public Health event and Christmas party, killing fourteen
12 people and wounding twenty-two others. According to reports that I have read, the
13 shooters were armed with semi-automatic pistols, a Smith & Wesson M&P15 rifle
14 modified to make it fully automatic and equipped with a pistol grip and detachable
15 large capacity magazine, a DPMS A-15 rifle with a pistol grip that was modified to
16 accept a detachable large-capacity magazine, and at least four large-capacity
17 magazines.

18 19. It is my opinion, based on my training and experience, that the above-
19 described attacks would have been less deadly had the shooters not been armed
20 with assault rifles or assault rifles converted to machine guns.

21 20. There are numerous devices on the market that when installed on a semi-
22 automatic rifle, increase the rifle's rate of fire to that of some machine guns. These
23 devices are easily installed on the rifle without special tools or training. Although
24 these "multiburst trigger activators" are unlawful in the state of California, they are
25 widely available in neighboring states and on the internet. The LAPD Gun Unit has
26 encountered an increasing number of these devices in the last several years.
27 Combining a multiburst trigger activator with a rifle equipped with the above-
28

1 described features increases the lethality of the firearm many fold. This has been
2 illustrated by a mass-shooting in the City of Las Vegas on October 1, 2017.

3 21. According to reports that I have read, a single shooter firing from a 32nd
4 floor hotel window located some distance from a crowded outdoor concert venue
5 was able to shoot to death 58 concert goers and injuring hundreds of others. This
6 was the deadliest mass shooting in modern United States history. Reports about
7 and photos of the gunman's weapons that I have viewed show that he was armed
8 with numerous semi-automatic, centerfire rifles with detachable magazines and
9 equipped with pistol grips. These firearms would meet the definition of an assault
10 rifle if they were possessed within California. It is highly unlikely that this shooter
11 could have inflicted as many casualties as he was able had his rifles not been
12 equipped with features that were designed to help the shooter control his firearms
13 with improved accuracy during rapid fire.

14 22. I have been involved in the seizure of assault weapons that have been
15 converted into machine guns. This process is as simple as "dropping in" a few
16 parts to a more involved process of drilling additional holes in the receiver of the
17 rifle. Once modified in this manner, rifles equipped with the above-described
18 features are indistinguishable from the battlefield rifles used by the world's military
19 forces.

20 23. There is no evidence that assault rifles are "commonly" used for self -
21 defense. While any firearm including an assault rifle could be used effectively in a
22 self-defense scenario, handguns and shotguns are the more common and preferred
23 choice. Legally sanction use of force including deadly force is commonly
24 understood to be defense against an immediate and proximate threat of physical
25 harm to one's self or others. In other words, the threat needs to be imminent and to
26 some degree up close and personal. This proximity requirement makes a rifle an
27 inappropriate and unnecessary choice of weapon. The evidence cited in articles and
28 by internet bloggers to support the assertion that assault rifles are "commonly" used

1 by the public to defend themselves is mostly based on anecdotal evidence as there
2 is no uniformed collection of data on the subject. Many of the anecdotes cited by
3 proponents for the use of assault rifles as defensive weapons involve the mere
4 pointing of the rifle at the suspect who then fled with no shots fired. Pointing a
5 handgun at a suspect would have the same effect. Other anecdotes involve assault
6 rifles used to fend off unarmed suspects. Again, a handgun or shotgun would have
7 the same effect and of course there are numerous non-lethal options available. In
8 many of these scenarios cited the use of deadly force would not have been legally
9 sanctioned. The purpose of deploying a rifle as opposed to a handgun should be
10 based on the fact that the target is beyond the reasonable effective range of a
11 handgun. Other considerations are a need to defeat body armor, fortified
12 concealment, a position of advantage (high ground), or a suspect armed with
13 superior fire power such as a rifle. These are the criteria used by the LAPD when
14 deciding to deploy a rifle. It is highly unlikely that citizens would face a situation
15 where the threat is beyond the effective range of a handgun and certainly not with
16 any great frequency. It is even less likely that the law would view such a distant
17 perceived threat as justifying a use of force at all much less a use of lethal force
18 delivered via a rifle. I do not believe, based on my training and experience, that
19 there are frequent occasions when a member of the public would face threat by an
20 armed suspect wearing body armor or concealed behind a barrier that would defeat
21 handgun ammunition. Absent these factors a handgun, shotgun or non-lethal
22 options should suffice in dealing with the vast majority of self-defense scenarios
23 where force is legally justified.

24
25 I declare under penalty of perjury that the foregoing is true and correct.

26
27 Executed on October 25, 2018 at Los Angeles, California.

Michael Mersereau
MICHAEL MERSEREAU

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EXHIBIT 5

In the United States District Court
For the Central District of California

RUPP, et al.,

Plaintiffs,

v.

XAVIER BECERRA, in his official
capacity as Attorney General of the
State of California; et al.,

Defendants.

8:17-cv-00746-JLS-JDE

EXPERT REPORT AND
DECLARATION OF
BLAKE GRAHAM

BACKGROUND AND QUALIFICATIONS

1
2 1. I am a Special Agent Supervisor for the California Department of
3 Justice, Bureau of Firearms.

4 2. I received a Bachelor of Science degree in May 1992 in Criminal
5 Justice at the California State University Sacramento. My coursework included
6 forensics, corrections, and a number of classes in criminal justice-related topics.

7 3. Since 1994, I have worked as either an investigator for the California
8 Department of Alcoholic and Beverage Control (ABC), or as a Special Agent for
9 the California Department of Justice (DOJ). My job responsibilities in all of these
10 positions have increasingly required the recovery, investigation, and identification
11 of firearms, the ammunition used for those firearms, and the magazines used for
12 feeding ammunition for such firearms.

13 4. My work as an Investigator for ABC between 1994 and 1999 included
14 the recovery of firearms, magazines and ammunition.

15 5. Between 1999 and 2002, I worked as a Special Agent for DOJ, and was
16 assigned to the Violence Suppression Program in the Bureau of Narcotic
17 Enforcement. In this job, I investigated violent crimes and various violations
18 occurring at California gun shows. As a gun show enforcement agent, I attended
19 gun shows in the San Francisco Bay Area to monitor, and if necessary, seize,
20 firearms, ammunition, and magazines sold illegally to felons, parolees, and
21 probationers.

22 6. From October 2002 to the present, I have been a Special Agent and
23 Special Agent Supervisor, for the DOJ's Bureau of Firearms (BOF). In this
24 capacity, I am assigned to recover firearms from prohibited individuals, monitor
25 gun shows for illegal activities, conduct surveillance on gun dealers suspected of
26 illegal activity, and investigate illegal trafficking of firearms, manufacturing of
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1 assault weapons, machine guns, and illegal possession of various magazines and
2 ammunition.

3 7. Since 2008, I have been responsible for reviewing handguns that are
4 submitted by manufacturers for inclusion in California's roster of handguns certified
5 for sale. A copy of the roster can be found on the DOJ website:
6 <http://certguns.doj.ca.gov/>.

7 8. In my career I have attended at least 40 gun shows and have become
8 very knowledgeable on current laws pertaining to the sales of firearms, assault
9 weapons identification, assault weapons registration, the Automated Firearms
10 System (AFS), ammunition, and ammunition containers—including large-capacity
11 magazines (LCMs)—in the State of California.

12 9. I have been trained and qualified to carry several different types of
13 firearms, including: Glock Model 17 (9 mm semiautomatic pistol), multiple Glock
14 .40 caliber semi automatic pistols, Heckler & Koch MP5 (9 mm submachine gun),
15 Smith & Wesson, Model 60 (.38 Special revolver), multiple .45 caliber
16 semiautomatic pistols, and a Colt, Model M4 (5.56 mm machine gun). I have
17 access to other Department-owned handguns, shotguns, submachine guns, machine
18 guns, rifles, shotguns and 40 mm "less lethal" launchers.

19 10. Throughout my career, I have conducted training programs in the
20 identification and handling of firearms. I have also trained other Special Agents of
21 BOF on assault weapons and firearms identification. I also have given firearms
22 identification classes to members of the multiple District Attorney's offices in the
23 State of California.

24 11. I have also completed at least 15 firearms training courses since 1994.
25 These courses included the assembly and use of specific firearms, cartridge
26 composition (bullet, the propellant, and the casing), common calibers used by law
27 enforcement, and training on rifle and handgun ammunition. I have been certified
28

1 as a California Peace Officer Standards and Training (POST) approved Firearms
2 Instructor/Rangemaster since 2002.

3 12. During the course of my career and training I have become proficient in
4 the use and disassembly of various revolvers, pistols, submachine guns, shotguns,
5 and rifles. I have made or assisted in the arrest of at least thirty persons for
6 violations involving illegal weapons possession. In the course of my employment I
7 have participated in excess of thirty search warrants which involved the illegal
8 possession of firearms.

9 13. I have been qualified as an expert witness regarding the use of firearms
10 in 15 cases in both federal and state court since 2007.

11 **DISCUSSION**

12 **LEGISLATION LIMITING ASSAULT WEAPONS.**

13 14. I am aware of the current state and former federal laws banning the sale
14 assault weapons in California.

15 15. California's Roberti-Roos Assault Weapon Act (AWCA) prohibits the
16 sale of assault weapons and ownership of unregistered assault weapons. The
17 AWCA prohibits certain assault weapons as defined by their make and model. The
18 lists of prohibited weapons are in Penal Code section 30510 and California Code of
19 Regulations, Title 11, Division 5, Chapter 40, Section 5499 (Category 1 and
20 Category 2 weapons). Some of the firearms listed in Penal Code section 30510 are
21 weapons prohibited by the federal assault weapons ban in effect from 1994-2004.
22 In general, the firearms listed in Penal Code section 30510 and the additional ones
23 listed in the regulations could be considered semiautomatic versions of military
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1 weapons.¹ While it is not legally necessary for a Category 1 or Category 2 assault
2 weapon to have certain features, they usually have one more of the features listed in
3 Penal Code Section 30515 (Category 3 definition language). Probably the most
4 common feature of prohibited assault weapons is the pistol grip. The next most
5 common features are probably adjustable stocks (folding or telescoping) and flash
6 suppressors.

7 16. The AWCA also prohibits certain weapons as defined by their features.
8 Penal Code section 30515 defines an “assault weapon” to include “a semiautomatic,
9 centerfire rifle that does not have a fixed magazine but has any one” of certain
10 features.

11 **ASSAULT WEAPON FEATURES²**

12 17. I understand that Plaintiffs in this case have challenged California’s
13 prohibition on assault weapons based on features identified in Penal Code section
14 30515(a)(1)(A-C), (a)(1)(E-F), and (a)(3):
15 PC 30515.

16 (a) Notwithstanding Section 30510, “assault weapon” also means any of the
17 following:

18 (1) A semiautomatic, centerfire rifle that does not have a fixed magazine but has
19 any one of the following:

20 (A) A pistol grip that protrudes conspicuously beneath the action of the weapon.

21 (B) A thumbhole stock.

22 (C) A folding or telescoping stock.

23 ¹ The history of assault rifles, their military features, and their evolution from
24 military weapons have been well documented. *See AR-15/M16 Sourcebook*, by
25 Long (AG00003799-325); *Shooter’s Bible: Guide to AR-15S* by Howlett
26 (AG00003827-3836); *Special Warfare: Special Weapons* by Dockery
27 (AG00003839-3891); *Black Rifle II* by Bartocci (AG00003896-3952); *The*
28 *Militarization of the U.S. Civilian Firearms Market* by the Violence Policy Center
(AG00003955-40060); *Legends and Realities* by Shilin and Cutshaw
(AG00004008-4040); *Assault Weapons Profile* by the U.S. Department of Treasury
(AG00004311-4337); *Small Arms of the World* by Ezell (AG00004973-
5070); *Buyer’s Guide to Assault Weapons* by Peterson (AG00005059-
5070).

² These features have been defined for purposes of assault weapon
registration in California Code of Regulations, Title 11, Division 5, Chapter 39,
Article 2, § 5471 (Exhibit A).

- (E) A flash suppressor.
- (F) A forward pistol grip.

(3) A semiautomatic, centerfire rifle that has an overall length of less than 30 inches.

18. “Centerfire” refers to the type of ammunition the firearms were built to fire. This excludes many semiautomatic rimfire (usually .22 caliber) rifles that might have had one or more listed features. Centerfire ammunition is more powerful than rimfire ammunition.

19. A “pistol grip that protrudes conspicuously beneath the action of the weapon” is a grip that allows for a pistol-style grasp in which the web of the trigger hand (between the thumb and index finger) can be placed beneath or below the top of the exposed portion of the trigger while firing. In my experience, this feature is the most prevalent feature of assault rifles prohibited under the AWCA. Pistol grips are used in most modern military machine guns and semiautomatic rifles. The designers of military-style firearms are including this feature more and more. A pistol grip on an assault rifle enhances the ergonomics of the weapon. A shooter using an assault rifle without a pistol grip may shoot less accurately if the shooter’s trigger hand is in an awkward position for a significant amount of time. An assault rifle lacking a pistol grip would not necessarily be less accurate than an assault rifle with a pistol grip.

20. A “thumbhole stock” is a stock with a hole that allows the thumb of the trigger hand to penetrate into or through the stock while firing. It allows for a grip similar to that offered by a pistol grip. Below is a photograph showing a thumbhole stock on a rifle.



1
2 21. A “telescoping stock” is a stock that is shortened or lengthened by
3 allowing one section to telescope into another portion. On AR-15 style firearms,
4 the buffer tube or receiver extension acts as the fixed part of the stock on which the
5 telescoping butt stock slides or telescopes. A “folding stock” is a stock that is
6 hinged in some fashion to the receiver to allow the stock to be folded next to the
7 receiver to reduce the overall length of the firearm. A folding stock or telescoping
8 stock that still allows the shooter to fire the rifle while the stock is folded or
9 shortened will have a tactical advantage because it is more versatile. The tactical
10 advantage provided by a telescoping or folding stock include decreased overall
11 length of the rifle by the shooter if desired for concealability. For example, when
12 law enforcement personnel conduct room to room searches of a building, they
13 would not want to give away their locations. More compact weapons with folding
14 or telescoping stocks may maintain the advantage of surprise. Semiautomatic
15 assault weapons deployed by law enforcement with extremely long overall lengths
16 may be seen by antagonists who mean to do harm to law enforcement. Telescoping
17 or folding stocks also allow for easier transportation and storage of the weapon and
18 to more quickly allow the user to adjust the weapon for a better fit, but these are
19 secondary considerations. Subjects intent on shooting one or more persons may
20 have a tactical advantage by using a weapon with a shorter overall length. This
21 tactical advantage described above for law enforcement can also be used by a
22 shooter wishing to remain undetected for as long as possible. A weapon with a
23 shorter overall length could also permit the shooter to smuggle the weapon
24 undetected (by, for example, hiding the weapon in a backpack or bag) or to hide in
25 the crowd without telegraphing the shooter’s location.³ A smaller weapon can also
26 be concealed on the shooter’s person underneath loose or bulky clothing.

27 ³ Some manufacturers design and market certain backpacks specifically to
28 carry assault rifles with folding or telescoping stock while remaining

1 22. A “flash suppressor” is any device attached to the end of the barrel, that
2 is designed, intended, or functions to perceptibly reduce or redirect muzzle flash
3 from the shooter's field of vision. A hybrid device that has either advertised flash
4 suppressing properties or functionally has flash suppressing properties would be
5 considered a flash suppressor. A device labeled or identified by its manufacturer as
6 a flash hider would also be considered a flash suppressor. Most everyone has
7 experienced a flash from a camera in our lifetimes. This camera flash can cause
8 vision problems for people viewing the flash. A firearm, in low light conditions
9 may produce muzzle flash with each round fired. The muzzle flash may create
10 vision problems for the shooter, which may cause the shooter to shoot less
11 accurately. Two rifles, one with a flash suppressor and one without, shooting the
12 same ammunition with the same length barrels should perform differently in terms
13 of reducing the amount of flash created. The rifle with the flash suppressor should
14 be easier to shoot in low light conditions because the shooter should have less
15 problems aiming accurately.

16 23. A “forward pistol grip” is a grip that allows for a pistol style grasp
17 forward of the trigger. Many modern military machine guns, submachine guns and
18 assault rifles worldwide have built in forward pistol grips or locations that allow for
19 forward pistol grips to be attached. This feature can aid the shooter by offering an
20 optional grip location on the rifle for the shooter’s non-trigger hand.

21 24. Overall, in my experience, the challenged features described in Penal
22 Code section 30515 on assault rifles may aid the shooters in being potentially more
23 effective and efficient while shooting people. Semiautomatic assault rifles are
24 generally modelled after successful military machine guns and submachine guns.⁴

25 _____
26 inconspicuous. The 5.11 Tactical COVRT M4 Gun Bag with the “Roll-down
27 Assault Compartment” is one example. See <http://www.armtactical.com/5-11-tactical-covrt-m4-gun-bag.html>;
28 https://www.youtube.com/watch?v=EaZ7s5mtA_o; see also <https://www.tactical-life.com/gear/6-discreet-carry-bags/>.

⁴ See sources cited in footnote 1.

1 Target practice is done by militaries of the world so their soldiers are better able to
2 shoot and kill or injure their opponents.

3 25. Generally, weapons currently deemed to be Assault Weapons under
4 California law have had a similar version issued to a military or police force
5 somewhere in the world. The main difference between those military or police
6 forces machine guns and California assault weapons are that defined California
7 assault weapons are semi automatic. In some cases, military or police forces might
8 issue semi automatic rifles that are functionally the same as defined California
9 assault weapons in terms of “rate of fire” or “capacity for firepower.”

10 26. Pistol grip that protrudes beneath the action of the weapon, thumbhole
11 stock, and forward pistol grip may provide the shooter increased physical control of
12 the rifle. These features also provide increased ergonomics, which can enhance
13 more accurate rapid shooting.

14 27. Folding or telescoping stock and a rifle with overall length under 30
15 inches aid in the concealability of the weapon.

16 28. A flash suppressor may increase efficiency while the shooter is firing
17 since the shooter’s vision is less likely to be impaired by excess flash in low light
18 settings.

19 29. Militaries across the world have incorporated these features into their
20 armed forces firearms for many years.

21 30. The photo below depicts a Sturm Ruger, Mini-14/Ranch Rifle with no
22 prohibited features listed in Penal Code section 30515. It is a semiautomatic center
23 fire rifle that is not an assault weapon. It is effectively “featureless” in terms of
24 Penal code section 30515. These types of rifles are currently legal for sale in
25 California and can be lawfully transferred and possessed by California residents
26 who follow state and federal laws. It has a traditional wooden stock, no pistol grip
27 and no muzzle device:
28



31. The semi automatic centerfire rifle depicted below is a Sturm Ruger, Mini-14/Ranch Rifle with a folding stock, pistol grip and flash suppressor on the end of the barrel. These types of rifles are currently not legal for sale in California and cannot be lawfully transferred by California residents.⁵



32. Assault Rifles, as defined under Penal Code Section 30510, typically will have one or more features that are listed in Penal Code Section 30515 (pistol grip, etc.).

ASSAULT RIFLES HAVE HIGHER CAPACITY FOR FIREPOWER.

33. Assault rifles, as defined by California law, must be semiautomatic. One round per pull of the trigger will be fired as long as the rifle has available ammunition in its magazine. LCMs for assault weapons are present in California. As of this writing, certain persons can still legally possess LCMs.⁶ Firearms-prohibited persons such as felons, and persons subject to a restraining order, gun violence restraining order, or certain mental health statuses may also choose to

⁵ Although California residents who registered a rifle similar to the one depicted below during the one year (2000) registration window can still lawfully possess a firearm like this.

⁶ California's prohibition on LCMs has been stayed, in part, by a federal court.

1 acquire LCMs for use in illegally possessed assault weapons. Non-prohibited
2 persons may choose to use assault weapons illegally in conjunction with LCMs.
3 Some LCMs can hold 20, 30, 50, 75 or 100 rounds of ammunition at a time. A
4 person intent on doing harm to citizens or law enforcement will often pair assault
5 weapons and multiple LCMs together. This individual will have a lot of available
6 firepower. Many rounds can be fired quickly and the assault rifle can be rapidly
7 reloaded with the magazines on hand.

8 34. Assault rifles as defined in Penal Code section 30515 are often used
9 with rifle rounds that are associated with increased lethality. The United States
10 military uses various centerfire rifle rounds (5.56 mm and 7.62 x 51, for example)
11 in multiple weapons systems. Some California assault rifles are capable of firing
12 the same centerfire rounds as these military weapons and could have the same high
13 capacity for firepower as the military weapons. In my experience being around the
14 California gun industry and gun culture for nearly 20 years, rounds most commonly
15 used with assault rifles are rifle-caliber rounds such as .223 caliber, 5.56 mm, or
16 7.62 x 39 mm. These rounds will typically defeat normal bullet resistant body
17 armor used by law enforcement. While rifle resistant plates can be added to most
18 law enforcement body armor, the rifle plates are not going to block or resist rifle-
19 caliber rounds fired at all angles. Some rifle rounds are strong enough to defeat
20 even the available rifle resistant plates available to law enforcement. Some assault
21 weapons are chambered in traditional pistol caliber rounds such as 9mm, .40 and
22 .45 calibers. Handgun caliber bullets fired from assault weapons chambered in
23 these calibers may or may not be stopped by traditional law enforcement body
24 armor. Generally, the longer the barrel the faster the bullet will travel. A rifle and
25 handgun both shooting the same ammunition may have different results in terms of
26 penetrating body armor of equal protection levels. The shorter barrel lengths
27 usually associated with a normal semi automatic handgun might be 3-5 inches long.
28 By state and federal law, a rifle must have at least a 16-inch long barrel. The rifle

1 barrel being at least three times longer than most semiautomatic handgun barrels
2 leads to the bullet leaving the barrel at a higher rate of speed (or higher muzzle
3 velocity). In general, the faster the bullet is traveling, the more likely it is to defeat
4 body armor.

5 **USE OF ASSAULT WEAPONS IN MASS SHOOTINGS.**

6 35. Through the course of my career, I am familiar with the use of assault
7 weapons by subjects intending to do harm to civilians and law enforcement.

8 36. Often assault weapons are paired with LCMs during these crimes by the
9 suspects. LCMs are ammunition feeding devices that can hold more than ten
10 rounds, and sometimes up to 100 rounds, of ammunition.

11 37. Semiautomatic assault weapons when loaded with LCMs enable a
12 shooter to potentially fire more than 10 rounds without the need for the shooter to
13 reload the weapon.

14 38. Because LCMs enable a shooter to fire repeatedly without needing to
15 reload every 10 rounds, they significantly increase a shooter's ability to kill and
16 injure large numbers of people quickly.

17 39. Assault weapons have been a popular weapon used in several mass
18 shootings in California and elsewhere.

19 40. Based on my research, all of the shootings listed below involved
20 persons who shot and wounded and/or killed one or more persons, including peace
21 officers, while using assault weapons.

22 a. On January 17, 1989, Patrick Purdy, shot and killed 5 and wounded 32
23 others at the Cleveland Elementary School in Stockton, California. He
24 used an AK-47 style rifle and LCMs in the shooting. The Roberti-Roos
25 Assault Weapon Control Act of 1989 was signed after this shooting.

26 b. On January 9, 2005, Andres Raya used a LCM and illegal assault
27 weapon to shoot and kill Police Sgt. Howard Stevenson in Ceres,
28 California.

- c. On June 15, 2008, Marco Topete used an assault rifle and LCM to shoot and kill Yolo County Sheriff's Deputy Tony Diaz after a traffic stop near Dunnigan, California.
- d. On February 25, 2010, Ricky Liles, used multiple weapons (including an assault weapon) and LCMs to shoot and kill two law enforcement officers and wounded one other in Minkler, California.
- e. On July 20, 2012, James Holmes used an assault weapon and LCMs to kill 12 people and wound 70 others in a movie theater in Aurora, Colorado.
- f. On December 14, 2012, Adam Lanza used LCMs and multiple firearms (including an assault weapon) to kill 20 children and six adults at Sandy Hook Elementary School in Newtown, Connecticut.
- g. On June 7, 2013, John Zawahri—who was previously denied purchase of a firearm by DOJ—used a home-built AR-15 rifle and LCMs to kill his father and brother at their family home, and then kill and wound others at the Santa Monica, California Community College.
- h. On December 2, 2015, Syed Farook and his wife, Tashfeen Malik, used assault weapons and LCMs in killing 14 people and wounding 22 others at the Inland Regional Center in San Bernardino, California.
- i. On June 12, 2016, Omar Mateen used an assault rifle and LCMs to shoot and kill 49 people and wound 53 others inside a nightclub in Orlando, Florida.
- j. On July 7, 2016, Micah Johnson used an assault rifle and a LCM to shoot and kill five police officers and wound nine others in Dallas, Texas.
- k. On July 17, 2016, Gavin Long used an assault rifle and LCMs to shoot and kill three police officers and wound three other officers in Baton Rouge, Louisiana.

- 1 l. On October 1, 2017, Stephen Paddock used assault rifles and LCMs to
2 fire over 1,000 rounds on concertgoers at an outdoor music festival in
3 Las Vegas, Nevada, killing 58 people and wounding more than 500
4 others. To date, this is the deadliest mass shooting in U.S. history.
- 5 m. On October 3, 2018, Frederick Hopkins used an assault rifle in
6 Florence, South Carolina to shoot and kill two law enforcement
7 officers. Six other officers were also shot.

8 **ASSAULT RIFLES ARE SUITABLE FOR LAW ENFORCEMENT USE.**

9 41. Assault rifles are suitable for law enforcement use. As depicted above,
10 there are many instances that law enforcement and civilians have been hurt and
11 killed by subjects using assault weapons. Law enforcement needs to have equal or
12 better weapons than those subjects they are confronting so that they are not
13 outgunned by criminals with assault rifles.

14 42. Unlike civilians, law enforcement personnel are often required to enter
15 into dangerous situations to take a shooter into custody. Law enforcement
16 personnel must often affirmatively put themselves in dangerous situations to subdue
17 shooters or other criminal suspects or to protect civilians.

18 43. Law enforcement personnel undergo regular, specialized training to
19 safely and effectively use assault weapons. Each round fired by law enforcement
20 has the potential to cause criminal and/or civil ramifications for individuals
21 employed in this field and their agency they work for. We are trained to consider
22 the backdrop (area behind whatever is being aimed at) to make sure persons or
23 property are not needlessly injured or damaged. Regular qualifications with various
24 duty firearms are standard procedure for law enforcement. These qualifications
25 can sometimes include varied distances from the officer to the target, partially
26 concealed targets, and scenarios in which the best option available to the officer is
27 to not shoot the target. Verbal commands and less lethal options are among the
28 options employed by law enforcement in conjunction with potentially lethal force.

1 44. Because Assault Weapons have been used in mass shootings that have
2 occurred both in and outside of California for several years, the State of California
3 has chosen to restrict access to them.

4 45. It is my opinion that the provisions of California Assault Weapons
5 Control Act challenged by plaintiffs in this case enhances public safety by limiting
6 prohibited weapons that are unreasonably dangerous for unrestricted civilian use
7 and are often used by those who intend on committing crimes such as mass
8 shootings.

9
10 I declare under penalty of perjury that the foregoing is true and correct.

11 Executed on October 25, 2018 at Sacramento, California.
12
13


14 
15 Blake Graham

EXHIBIT A

FINAL TEXT

Text added to the regulations is shown in underline.

Text deleted from the regulations is shown in strikethrough.

California Code of Regulations Title 11, Division 5

Chapter 39 Assault Weapons and Large-Capacity Magazines

Article 2. Definitions of Terms Used to Identify Assault Weapons Registration Requirement, What Qualifies for Registration, and Definitions

§ 5469. ~~Definitions.~~ Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Who Must Register.

~~The following definitions apply to terms used in the identification of assault weapons pursuant to Penal Code section 30515:~~

- (a) ~~“Detachable magazine” means any ammunition feeding device that can be removed readily from the firearm with neither disassembly of the firearm action nor use of a tool being required. A bullet or ammunition cartridge is considered a tool. Ammunition feeding device includes any belted or linked ammunition, but does not include clips, en bloc clips, or stripper clips that load cartridges into the magazine.~~
- (b) ~~“Flash suppressor” means any device designed, intended, or that functions to perceptibly reduce or redirect muzzle flash from the shooter's field of vision.~~
- (c) ~~“Forward pistol grip” means a grip that allows for a pistol style grasp forward of the trigger.~~
- (d) ~~“Pistol grip that protrudes conspicuously beneath the action of the weapon” means a grip that allows for a pistol style grasp in which the web of the trigger hand (between the thumb and index finger) can be placed below the top of the exposed portion of the trigger while firing.~~
- (e) ~~“Thumbhole stock” means a stock with a hole that allows the thumb of the trigger hand to penetrate into or through the stock while firing.~~

Any person who, from January 1, 2001, to December 31, 2016, inclusive, lawfully possessed an assault weapon that does not have a fixed magazine, as defined in Penal Code section 30515, including those weapons with an ammunition feeding device that can be readily removed from the firearm with the use of a tool (commonly referred to as a bullet-button weapon) must register the firearm before July 1, 2018.

Note: Authority cited: Section ~~30520~~ 30900, Penal Code. Reference: Sections ~~16170(a), 16350, 16890, 30515, 30600, 30605, 30610, 30615, 30620, 30625, 30630, 30635, 30640, 30645, 30650, 30655, 30660, 30665, 30670, 30675, 30900, 30905, 30910, 30915, 30920, 30925, 30930, 30935, 30940, 30945, 30950, 30955, 30960 and 30965,~~ Penal Code.

Article 3. Assault Weapon Registration

§ 5470. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Which Weapons Must be Registered.

- (a) Except as provided in section 5472, an assault weapon that does not have a fixed magazine, as defined by Penal Code section 30515, must be registered with the Department before July 1, 2018.
- (b) A semiautomatic, centerfire or rimfire pistol with an ammunition feeding device that can be readily removed from the firearm with the use of a tool, commonly referred to as a bullet-button weapon, that has one or more specified features identified in Penal Code section 30515 is included in the category of firearms that must be registered.
- (c) A semiautomatic, centerfire rifle with an ammunition feeding device that can be readily removed from the firearm with the use of a tool, commonly referred to as a bullet-button weapon, that has one or more specified features identified in Penal Code section 30515 is included in the category of firearms that must be registered.
- (d) A semiautomatic shotgun with an ammunition feeding device that can be readily removed from the firearm with the use of a tool, commonly referred to as a bullet-button weapon, is included in the category of firearms that must be registered.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5471. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Explanation of Terms Related to Assault Weapon Designation.

For purposes of Penal Code section 30900 and Articles 2 and 3 of this Chapter the following definitions shall apply:

- (a) “Ability to accept a detachable magazine” means with respect to a semiautomatic shotgun, it does not have a fixed magazine.
- (b) “Action” means the working mechanism of a semiautomatic firearm, which is the combination of the receiver or frame and breech bolt together with the other parts of the mechanism by which a firearm is loaded, fired, and unloaded.

- (c) “Barrel” means the tube, usually metal and cylindrical, through which a projectile or shot charge is fired. Barrels may have a rifled or smooth bore.
- (d) “Barrel length” means the length of the barrel measured as follows: Without consideration of any extensions or protrusions rearward of the closed bolt or breech-face the approved procedure for measuring barrel length is to measure from the closed bolt (or breech-face) to the furthestmost end of the barrel or permanently attached muzzle device. Permanent methods of attachment include full-fusion gas or electric steel-seam welding, high-temperature (1100°F) silver soldering, or blind pinning with the pin head welded over. Barrels are measured by inserting a dowel rod into the barrel until the rod stops against the closed bolt or breech-face. The rod is then marked at the furthestmost end of the barrel or permanently attached muzzle device, withdrawn from the barrel, and measured.
- (e) “Bullet” means the projectile expelled from a gun. It is not synonymous with a cartridge. Bullets can be of many materials, shapes, weights, and constructions such as solid lead, lead with a jacket of harder metal, round-nosed, flat-nosed, hollow-pointed, et cetera.
- (f) “Bullet-button” means a product requiring a tool to remove an ammunition feeding device or magazine by depressing a recessed button or lever shielded by a magazine lock. A bullet-button equipped fully functional semiautomatic firearm does not meet the fixed magazine definition under Penal Code section 30515(b).
- (g) “Bore” means the interior of a firearm’s barrel excluding the chamber.
- (h) “Caliber” means the nominal diameter of a projectile of a rifled firearm or the diameter between lands in a rifled barrel. In the United States, caliber is usually expressed in hundreds of an inch; in Great Britain in thousandths of an inch; in Europe and elsewhere in millimeters.
- (i) “Cartridge” means a complete round of ammunition that consists of a primer, a case, propellant powder and one or more projectiles.
- (j) “Centerfire” means a cartridge with its primer located in the center of the base of the case.
- (k) “Contained in” means that the magazine cannot be released from the firearm while the action is assembled. For AR-15 style firearms this means the magazine cannot be released from the firearm while the upper receiver and lower receiver are joined together.
- (l) “Department” means the California Department of Justice.
- (m) “Detachable magazine” means any ammunition feeding device that can be removed readily from the firearm without disassembly of the firearm action or use of a tool. A bullet or ammunition cartridge is considered a tool. An ammunition feeding device includes any belted or linked ammunition, but does not include clips, en bloc clips, or stripper clips that load cartridges into the magazine.

An AR-15 style firearm that has a bullet-button style magazine release with a magnet left on the bullet-button constitutes a detachable magazine. An AR-15 style firearm lacking a magazine catch assembly (magazine catch, magazine catch spring and magazine release button) constitutes a detachable magazine. An AK-47 style firearm lacking a magazine catch assembly (magazine catch, spring and rivet/pin) constitutes a detachable magazine.

- (n) “Disassembly of the firearm action” means the fire control assembly is detached from the action in such a way that the action has been interrupted and will not function. For example, disassembling the action on a two part receiver, like that on an AR-15 style firearm, would require the rear take down pin to be removed, the upper receiver lifted upwards and away from the lower receiver using the front pivot pin as the fulcrum, before the magazine may be removed.
- (o) “Featureless” means a semiautomatic firearm (rifle, pistol, or shotgun) lacking the characteristics associated with that weapon, as listed in Penal Code section 30515.
- (p) “Fixed magazine” means an ammunition feeding device contained in, or permanently attached to, a firearm in such a manner that the device cannot be removed without disassembly of the firearm action.
- (q) “Flare launcher” means a device used to launch signal flares.
- (r) “Flash suppressor” means any device attached to the end of the barrel, that is designed, intended, or functions to perceptibly reduce or redirect muzzle flash from the shooter's field of vision. A hybrid device that has either advertised flash suppressing properties or functionally has flash suppressing properties would be deemed a flash suppressor. A device labeled or identified by its manufacturer as a flash hider would be deemed a flash suppressor.
- (s) “FMBUS” means a Firearm Manufactured By Unlicensed Subject.
- (t) “Forward pistol grip” means a grip that allows for a pistol style grasp forward of the trigger.
- (u) “Frame” means the receiver of a pistol.
- (v) “Grenade launcher” means a device capable of launching a grenade.
- (w) “Permanently attached to” means the magazine is welded, epoxied, or riveted into the magazine well. A firearm with a magazine housed in a sealed magazine well and then welded, epoxied, or riveted into the sealed magazine well meets the definition of “permanently attached to”.
- (x) “Overall length of less than 30 inches” with respect to a centerfire rifle means the rifle has been measured in the shortest possible configuration that the weapon will function/fire

and the measurement is less than 30 inches. Folding and telescoping stocks shall be collapsed prior to measurement. The approved method for measuring the length of the rifle is to measure the firearm from the end of the barrel, or permanently attached muzzle device, if so equipped, to that part of the stock that is furthest from the end of the barrel, or permanently attached muzzle device. (Prior to taking a measurement the owner must also check any muzzle devices for how they are attached to the barrel.)

- (y) “Pistol” means any device designed to be used as a weapon, from which a projectile is expelled by the force of any explosion, or other form of combustion, and that has a barrel less than 16 inches in length. This definition includes AR-15 style pistols with pistol buffer tubes attached. Pistol buffer tubes typically have smooth metal with no guide on the bottom for rifle stocks to be attached, and they sometimes have a foam pad on the end of the tube farthest from the receiver.
- (z) “Pistol grip that protrudes conspicuously beneath the action of the weapon” means a grip that allows for a pistol style grasp in which the web of the trigger hand (between the thumb and index finger) can be placed beneath or below the top of the exposed portion of the trigger while firing. This definition includes pistol grips on bullpup firearm designs.
- (aa) “Receiver” means the basic unit of a firearm which houses the firing and breech mechanisms and to which the barrel and stock are assembled.
- (bb) “Receiver, lower” means the lower part of a two part receiver.
- (cc) “Receiver, unfinished” means a precursor part to a firearm that is not yet legally a firearm. Unfinished receivers may be found in various levels of completion. As more finishing work is completed the precursor part gradually becomes a firearm. Some just have the shape of an AR-15 lower receiver for example, but are solid metal. Some have been worked on and the magazine well has been machined open. Firearms Manufactured by Unlicensed Subjects (FMBUS) began as unfinished receivers.
- (dd) “Receiver, upper” means the top portion of a two part receiver.
- (ee) “Rifle” means a weapon designed or redesigned, made or remade, and intended to be fired from the shoulder and designed or redesigned and made or remade to use the energy of the explosive in a fixed cartridge to fire only a single projectile through a rifled bore for each single pull of the trigger.
- (ff) “Rimfire” means a rimmed or flanged cartridge with the priming mixture located in the rim of the case.
- (gg) “Second handgrip” means a grip that allows the shooter to grip the pistol with their non-trigger hand. The second hand grip often has a grip texture to assist the shooter in weapon control.
- (hh) “Semiautomatic” means a firearm functionally able to fire a single cartridge, eject the

empty case, and reload the chamber each time the trigger is pulled and released. Further, certain necessary mechanical parts that will allow a firearm to function in a semiautomatic nature must be present for a weapon to be deemed semiautomatic. A weapon clearly designed to be semiautomatic but lacking a firing pin, bolt carrier, gas tube, or some other crucial part of the firearm is not semiautomatic for purposes of Penal Code sections 30515, 30600, 30605(a), and 30900.

- (1) A mechanically whole semiautomatic firearm merely lacking ammunition and a proper magazine is a semiautomatic firearm.
- (2) A mechanically whole semiautomatic firearm disabled by a gun lock or other firearm safety device is a semiautomatic firearm. (All necessary parts are present, once the gun lock or firearm safety device is removed, and weapon can be loaded with a magazine and proper ammunition.)
- (3) With regards to an AR-15 style firearm, if a complete upper receiver and a complete lower receiver are completely detached from one another, but still in the possession or under the custody or control of the same person, the firearm is not a semiautomatic firearm.
- (4) A stripped AR-15 lower receiver, when sold at a California gun store, is not a semiautomatic firearm. (The action type, among other things, is undetermined.)
- (ii) “Shotgun with a revolving cylinder” means a shotgun that holds its ammunition in a cylinder that acts as a chamber much like a revolver. To meet this definition the shotgun’s cylinder must mechanically revolve or rotate each time the weapon is fired. A cylinder that must be manually rotated by the shooter does not qualify as a revolving cylinder.
- (jj) “Shroud” means a heat shield that is attached to, or partially or completely encircles the barrel, allowing the shooter to fire the weapon with one hand and grasp the firearm over the barrel with the other hand without burning the shooter’s hand. A slide that encloses the barrel is not a shroud.
- (kk) “Spigot” means a muzzle device on some firearms that are intended to fire grenades. The spigot is what the grenade is attached to prior to the launching of a grenade.
- (ll) “Stock” means the part of a rifle, carbine, or shotgun to which the receiver is attached and which provides a means for holding the weapon to the shoulder. A stock may be fixed, folding, or telescoping.
- (mm) “Stock, fixed” means a stock that does not move, fold, or telescope.
- (nn) “Stock, folding” means a stock which is hinged in some fashion to the receiver to allow the stock to be folded next to the receiver to reduce the overall length of the firearm. This definition includes under folding and over folding stocks.

- (oo) “Stock, telescoping” means a stock which is shortened or lengthened by allowing one section to telescope into another portion. On AR-15 style firearms, the buffer tube or receiver extension acts as the fixed part of the stock on which the telescoping butt stock slides or telescopes.
- (pp) “Those weapons with an ammunition feeding device that can be readily removed from the firearm with the use of a tool” includes functional semiautomatic rifles, pistols, and shotguns with bullet-button style magazine releases. These weapons do not have a fixed magazine.
- (qq) “Thumbhole stock” means a stock with a hole that allows the thumb of the trigger hand to penetrate into or through the stock while firing.
- (rr) “Threaded barrel, capable of accepting a flash suppressor, forward handgrip, or silencer” means a threaded barrel able to accept a flash suppressor, forward handgrip, or silencer, and includes a threaded barrel with any one of those features already mounted on it. Some firearms have “lugs” in lieu of threads on the end of the barrel. These lugs are used to attach some versions of silencers. For purposes of this definition a lugged barrel is the same as a threaded barrel.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

Article 3. Assault Weapon Registration

§ 5472. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Weapons That Will Not Be Registered as Assault Weapons.

- (a) The Department will not register as an assault weapon a firearm unless it was lawfully possessed on or before December 31, 2016.
- (b) The Department will not register a firearm that was required to be registered under prior assault weapon registration laws in effect before January 1, 2017. These weapons include, but are not limited to, firearms known as “named assault weapons” and are listed in Penal Code section 30510 and sections 5495 and 5499 of Chapter 40.
- (c) The Department will not register a firearm as an assault weapon if the firearm is featureless, except for bullet-button shotguns as described in section 5470(d).
- (d) The Department will not register a firearm as an assault weapon if the firearm has a fixed magazine that holds ten rounds or less.
- (e) The Department will not register a firearm as an assault weapon unless the firearm is fully assembled and fully functional.

- (f) The Department will not register as an assault weapon a firearm manufactured by a federally-licensed manufacturer if the firearm does not have a serial number applied pursuant to federal law.
- (g) The Department will not register as an assault weapon a FMBUS if the firearm does not have a serial number assigned by the Department and applied by the owner or agent pursuant to section 5474.2.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5473. Voluntary Cancellations

- (a) The DOJ will accept voluntary cancellations for assault weapons that are no longer possessed by the registrant. Cancellations will also be accepted for assault weapons, defined and registered pursuant to Penal Code section 30515, that have been modified or reconfigured to no longer meet the assault weapon definition. Cancellation requests must be signed, dated, and provide the following information:
 - (1) Registrant's full name, telephone number, and current address; make, model, and serial number of the assault weapon; and the DOJ assault weapon registration number (as indicated on the registration confirmation letter provided to the registrant at the time of registration). If the DOJ assault weapon registration number is unknown, the request must be notarized.
- (b) After confirmation of the information provided on the cancellation request, the DOJ will permanently delete the registration for the specified assault weapon(s). If there are no remaining assault weapons registered to the individual, all personal information regarding the registrant will also be deleted from the assault weapon data base. The DOJ will mail confirmation of the cancellation to the address provided on the request.

Note: Authority cited: Section 30520, Penal Code. Reference: Sections 30900, 30905, 30910, 30915, 30920, 30925, 30930, 30935, 30940, 30945, 30950, 30955, 30960 and 30965, Penal Code.

§ 5473. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); California Firearms Application Reporting System ("CFARS"); Account Requirements.

- (a) Assault weapon registrations must be filed electronically using the Department's California Firearms Application Reporting System (CFARS), at the following website: <https://cfars.doj.ca.gov/login.do>.
- (b) A CFARS account must be created to use the electronic registration system. To create a CFARS account, assault weapon registrants will be required to agree to the following conditions of use:

- (1) Non-Liability: The Department is not responsible for and will have no liability for any hardware, software, information, or other items or any services provided by any persons other than the Department. Except as may be required by law, in no event shall either party be liable to the other or any third party, under any theory of liability, including, but not limited to, any contract or tort claim for any cause whatsoever, for any indirect, incidental, special, or consequential damages, including loss of revenue or profits, even if aware of the possibility thereof.
 - (2) Authorization: I am authorized to use CFARS for the purpose of reporting firearm information to the Department in order to comply with California firearm laws and regulations. If I become aware of an unauthorized user obtaining access to my CFARS account, I will notify the Customer Support Center immediately at (916) 227-7527, or via email at: firearms.bureau@doj.ca.gov.
 - (3) Fees: Notwithstanding such notification, the Department shall not be liable for transaction charges fraudulently incurred. It will be the cardholder's responsibility to pay any charges. The Department will not provide refunds after the submission of a transaction.
 - (4) True and Accurate Information: All of the information I submit to the Department through CFARS shall be true, accurate, and complete to the best of my knowledge.
- (c) The following information must be provided by registrants in order to create a CFARS account:
- (1) Full Name
 - (2) Email Address
 - (3) Three Security Questions and Answers
 - (4) Password

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5474. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Applicant and Firearms Information.

Once a CFARS account has been created, registrants must provide the following information:

- (a) The registrant's full name, address, telephone number, date of birth, sex, height, weight,

eye color, hair color, military identification number (if applicable), California Driver License number or California Identification Card number, U.S. citizenship status, place of birth, country of citizenship, and alien registration number or I-94, if applicable.

- (b) A description of the firearm that identifies it uniquely, including but not limited to: firearm type, make, model, caliber, firearm color, barrel length, serial number, all identification marks, firearm country of origin/manufacture, the date the firearm was acquired, the name and address of the individual from whom, or business from which, the firearm was acquired.
- (c) Clear digital photos of firearms listed on the application. One photo shall depict the bullet-button style magazine release installed on the firearm. One photo shall depict the firearm from the end of the barrel to the end of the stock if it is a long gun or the point furthest from the end of the barrel if it is a pistol. The other two photos shall show the left side of the receiver/frame and right side of the receiver/frame. These locations are typically where firearms are marked when manufacturing is complete. At the discretion of the Department the last two photos shall be substituted for photos of identification markings at some other locations on the firearm.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5474.1. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Joint Registration of Assault Weapons.

- (a) If a firearm will be jointly registered, one family member must be identified as the primary registrant. The name and relationship of each joint registrant must be provided. Joint registrants must reside in the same household and share the same address.
- (b) All joint registrants must be 18 years of age by June 30, 2018. Joint registrations are only authorized for the following family relationships:

 - (1) Spouses
 - (2) Parent to Child
 - (3) Child to Parent
 - (4) Grandparent to Grandchild
 - (5) Grandchild to Grandparent

(6) Domestic Partners

(7) Siblings

(c) Proof of address for each joint registrant shall be provided at the time of electronic submission. Acceptable forms of proof of address are as follows:

(1) Carry Concealed Weapon (CCW) Permit

(2) Curio and Relic (C & R) Federal firearm license with name and address

(3) Utility Bill: Cable, electricity, garbage, gas, pipeline, propane, alarm/security, or water bill with purchaser's name on it and dated within three months of application for registration.

(4) Military permanent duty station orders indicating assignment within California; (active duty military spouse ID is not acceptable).

(5) Property Deed: Valid deed or deed of trust for the individual's property or a certificate of title

(6) Resident Hunting License

(7) Signed and dated rental agreement/contract or residential lease

(8) Trailer certification of title

(9) DMV Vehicle Registration

(10) Certificate of Eligibility, as defined in section 4031, subdivision (g) of Chapter 3.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515, 30900 and 30955, Penal Code.

5474.2. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Firearm Manufactured By Unlicensed Subject (FMBUS).

A person seeking assault weapon registration for this type of firearm shall seek a Department issued serial number at: dojserialnumber@doj.ca.gov, prior to initiating the assault weapon registration process.

(a) A Department-provided serial number shall be issued and applied as follows:

- (1) The Department shall issue a unique serial number to the applicant. The serial number issuance is a separate process and must be done before the assault weapon application will be accepted by the Department. Applicants seeking a FMBUS related serial number shall complete a New Serial Number Application, Form BOF 1008, (Rev. 07/2017) hereby incorporated by reference, and submit it to the Department prior to the initiation of the registration of this type of firearm.
- (2) Once the applicant has received a Department issued serial number, the applicant may contact a Federal Firearms Licensed Manufacturer (type 07) to have the serial number applied in a manner consistent with this section and federal law. However, a Federal Firearms Licensee is under no obligation to perform this work. Persons who have manufactured their own firearm may also use non-licensed parties to apply the serial number and other required markings; however, the owner of the weapon must not leave the firearm unattended with an unlicensed party in violation of firearms transfer and/or lending laws. Proof of the serial number being applied to the firearm shall be given to the Department in the form of one or more digital photographs of the newly serialized firearm being submitted in accordance with the photo requirement noted in section 5474 (c).
- (3) An unlicensed manufacturer of firearms must legibly and uniquely identify each firearm manufactured as follows:

 - (A) By engraving, casting, stamping (impressing), or otherwise conspicuously placing or causing to be engraved, cast, stamped (impressed) or placed on the frame or receiver thereof an individual serial number. The serial number must be placed in a manner not susceptible of being readily obliterated, altered, or removed, and must not duplicate any serial number placed by the unlicensed manufacturer on any other firearm. The engraving, casting, or stamping (impressing) of the serial number must be to a minimum depth of .003 inch and in a print size no smaller than 1/16 inch; and
 - (B) By engraving, casting, stamping (impressing), or otherwise conspicuously placing or causing to be engraved, cast, stamped (impressed) or placed on the frame, receiver, or barrel thereof certain additional information. This information must be placed in a manner not susceptible of being readily obliterated, altered, or removed. The additional information must include:

 - (i) The model of the firearm, if such designation has been made;
 - (ii) The caliber or gauge of the firearm;
 - (iii) The manufacturer's first and last name as provided to the Department for

registration purposes, when applicable; and

(iv) The city and state (or recognized abbreviation thereof) where the manufacturer made the firearm.

(4) Measurement of height and depth of markings. The depth of all markings required by this section will be measured from the flat surface of the metal and not the peaks or ridges. The height of serial numbers required by paragraph (a)(3)(A) of this section will be measured as the distance between the latitudinal ends of the character impression bottoms (bases).

(5) The Department shall deny assault weapon registration applications if it determines the above described marking requirements have not been met.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5475. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Fees.

(a) The fee to register an assault weapon is \$15.00 per person, per transaction. There is no limit to the number of assault weapons a person can register in a single transaction.

(b) The fee must be paid by debit or credit card at the time the registration is submitted to the Department for processing. If the fee is not paid, the registration will not be processed.

(c) A \$5 fee is required to obtain a copy of the original registration disposition letter.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5476. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Processing of Applications

(a) Applications for assault weapon registration must be received between January 1, 2017, and June 30, 2018, and will be processed in the order in which they are received.

(b) Once the registration has been submitted electronically and fees have been paid, the Department will inform the applicant, via email, that the application: has been received and accepted for processing; is being returned as incomplete and specify what information is required; or has been rejected.

(c) If the Department deems an application incomplete and notifies the applicant via email of

the incomplete determination, the applicant shall provide the requested information or documentation within 30 days. If the Department does not receive the additional information or documentation within 30 days, the application will be rejected and the application fee will not be refunded. The applicant may complete a new application by June 30, 2018, subject to a new application fee.

- (d) Once the Department determines that all necessary information has been received and the firearm qualifies for registration, the firearms eligibility check shall commence. The Department will inform the applicant of the results of the check.
- (e) If the firearms eligibility check is successful, the registrant shall receive an assault weapon registration disposition letter via U.S. mail.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515, 30900 and 30950, Penal Code.

§ 5477. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Post-Registration Modification of Registered Assault Weapons, Prohibition.

- (a) The release mechanism for an ammunition feeding device on an assault weapon registered pursuant to Penal Code section 30900, subdivision (b)(1) shall not be changed after the assault weapon is registered. A weapon's eligibility for registration pursuant to Penal Code section 30900, subdivision (b)(1) depends, in part, on its release mechanism. Any alteration to the release mechanism converts the assault weapon into a different weapon from the one that was registered.
- (b) The prohibition in subdivision (a) does not extend to the repair or like-kind replacement of the mechanism.
- (c) This prohibition in subdivision (a) does not extend to a firearm that is undergoing the deregistration process pursuant to section 5478. Written confirmation from the Department that acknowledges the owner's intent to deregister his or her assault weapon pursuant to section 5478 shall be proof the deregistration process has been initiated.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

§ 5478. Registration of Assault Weapons Pursuant to Penal Code Section 30900(b)(1); Voluntary Deregistration.

- (a) The Department will accept voluntary deregistration requests for assault weapons that are no longer possessed by the registrant, in the form of a completed Form BOF 4546, "Notice of No Longer in Possession," (Rev. 07/2017) hereby incorporated by reference.

Deregistration requests will also be accepted for assault weapons, as defined in Penal Code section 30515, that have been modified or reconfigured to no longer meet that definition. Deregistration requests must be in writing, signed, dated, and provide the following information:

- (1) Registrant's full name, telephone number, and current address; make, model, and serial number of the assault weapon; and the Department assault weapon registration number (as indicated on the registration confirmation letter provided to the registrant at the time of registration). If the Department assault weapon registration number is unknown, the request must be notarized.
- (2) If the firearm has been modified or reconfigured to no longer meet the definition of assault weapon, one or more photographs clearly depicting the firearm in its current configuration shall be attached to the written deregistration request. Additional information, photographs, or inspection may be requested by the Department before determining eligibility for deregistration.
- (3) If the registrant is no longer in possession of the firearm, proof of sale or transfer of the firearm shall be attached to the written deregistration request. Acceptable proof includes receipts from out-of-state gun stores, or law enforcement reports depicting the seizure and/or destruction of the firearm(s).
- (b) Upon determining eligibility for deregistration, the Department will delete the assault weapon registration for the specified firearm(s), and, if the weapon is still in the possession of the registrant, will convert the information to a BOF 4542A, "Firearm Ownership Report, (Rev. 07/2017), hereby incorporated by reference.
- (c) If the registrant has sold the weapon to a party outside of the State of California or otherwise lawfully disposed of the weapon, or if the weapon was seized by law enforcement, the Department will create a "No Longer In Possession" entry in the Automated Firearms System.
- (d) Upon completion of the assault weapon deregistration, the Department will mail confirmation of deregistration and updated firearm ownership information to the registrant at the address provided on the request.

Note: Authority cited: Section 30900, Penal Code. Reference: Sections 30515 and 30900, Penal Code.

EXHIBIT 6

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiff,

vs.

XAVIER BECERRA, in his
official capacity as Attorney
General of the State of
California et al.,

Defendants.

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) No. 8:17-cv-00746-JLS-JDE

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DEPOSITION OF MICHAEL MERSEREAU

Long Beach, California

Tuesday, December 4, 2018

Volume I

Reported by:

KATY BONNETT

CSR No. 13315

Job No. 3135706

PAGES 1 - 142

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiff,

vs.

XAVIER BECERRA, in his
official capacity as Attorney
General of the State of
California et al.,

Defendants.

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) No. 8:17-cv-00746-JLS-JDE

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Deposition of MICHAEL MERSEREAU, Volume I, taken
on behalf of Plaintiff, at 180 East Ocean Boulevard,
Suite 200, Long Beach, California, beginning at 1:12
p.m. and ending at 6:05 p.m. on Tuesday,
December 4, 2018, before KATY BONNETT, Certified
Shorthand Reporter No. 13315.

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14 STATE OF CALIFORNIA

15 DEPARTMENT OF JUSTICE

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20 (415) 510-3776

21 peter.chang@doj.ca.gov

1 A Yes.

2 Q How many times?

3 A Once.

4 Q When was that?

5 A In 2014.

6 Q Can you describe the circumstances?

7 A I was attacked off duty by a gun-welding gang
8 member, and I discharged my handgun twice at the
9 individual, knocking him down to the ground and causing
10 him to drop his weapon.

11 Q I assume you had a pistol?

12 A I did.

13 Q A semiautomatic pistol?

14 A Yes.

15 Q Does that semiautomatic pistol shoot at a
16 different rate than an assault rifle?

17 A I've never studied that.

18 Q Fair enough. But, generally, does a -- not
19 counting for nanoseconds or splitting hairs with slow
20 motion cameras, but generally, is it fair to say that a
21 semiautomatic firearm can be fired at the same rate as
22 any other semiautomatic firearm?

23 A For any given shooter and whatever their skill
24 levels are, I imagine they're pretty comparable.

25 Q Can you recall how quickly you discharged two

1 rounds at the assailant in the time you had to use your
2 weapon?

3 A I'd estimate maybe three to four seconds.

4 Q So you discharged one round, evaluated the
5 situation and discharged the second round?

6 A That's correct.

7 Q So we talked about pistol grips giving the user
8 more control, and I believe -- and correct me if I'm
9 wrong -- your testimony was that that control is a bad
10 thing in the hands of somebody misusing the firearm, but
11 is a good thing in the hands of somebody properly using
12 that firearm; is that fair to say?

13 A I don't know if that accurately reflects what I
14 said, but yes, that's fair to say.

15 Q So the next feature that you discussed in your
16 report as being problematic is an adjustable stock; is
17 that correct?

18 A Yes.

19 Q And what is your concern about adjustable stocks?

20 A It's the same concern as with the pistol grips --

21 Q And what concern?

22 A -- that hold stocks, the increased control of the
23 firearm.

24 Q So, again, it's control?

25 A Yes.

1 Q How does a telescoping stock increase control?

2 A Everybody's built differently. They have
3 different arm lengths. If you took a given shooter and
4 handed him a fixed stock rifle, it might not be optimum
5 for their particular physical build. And that could
6 reduce their control, thus their ability to fire
7 accurately and rapidly. The adjustable stock allows the
8 shooter to adjust that stock to the optimum length of
9 the rifle, so that they can more comfortably and more
10 accurately control the firearm, and fire it with more
11 rapidity.

12 Q And that's bad thing?

13 A Again, it depends on who's shooting it, why
14 they're shooting it.

15 Q So then, again, proper stock fit on the shooter's
16 shoulder is a bad thing if a -- for a bad guy, but a
17 good thing for somebody who's properly using the
18 firearm. Is that fair to say?

19 MR. CHANG: Objection. Vague and ambiguous as to
20 properly.

21 BY MR. BRADY:

22 Q Not trying to kill anybody.

23 MR. CHANG: Improperly using.

24 BY MR. BRADY:

25 Q Who has no ill intent, a person who has no ill

1 intent, there is -- is there any reason why a person who
2 has no ill intent should not have a firearm that
3 properly fits their shoulder?

4 A I think it's more than that, and this goes back
5 to my previous answer in regards to the pistol grips.
6 Even if you have no bad intent, on the one hand
7 increased control sound reasonable, you want that, but
8 it also allows you to fire more rapidly. And that can
9 lead to all kinds of issues. If you're cranking out
10 rounds at a rapid rate, you're going to eventually come
11 off target and send those rounds down range to hit
12 whoever.

13 So even if they're not, you know, they don't have
14 evil intention when they fire their -- their rifle, just
15 given that few people have the kind of training and
16 experience to manipulate those firearms properly under
17 different circumstances, particularly under rapid fire
18 circumstance, that's a bad thing.

19 Q So how does stock fit, does how the stock fits
20 somebody's shoulder affect the rate of fire of the
21 firearm?

22 A If you take a rifle and you fire it, and it's not
23 at your optimal position of your hand to the trigger, to
24 the pistol grip, it's going to affect your ability to
25 control that firearm.

1 Q Okay. So I want to just wrap up the discussion
2 about adjustable stocks by asking you, essentially, your
3 concern about adjustable stocks is with respect to
4 concealability. Not the -- not the control factor, but
5 with respect to concealability, your concern with the
6 adjustable stock is that a -- an evildoer might be able
7 to somewhat better conceal the firearm to go undetected;
8 is that accurate?

9 A Yes.

10 MR. CHANG: If you're moving to another subject,
11 can we go off the record for a second?

12 MR. BRADY: Sure.

13 (Interruption in the proceedings.)

14 MR. BRADY: We're back on the record.

15 Yeah. We are back on the record after a short
16 water break.

17 Q So moving on down your report to paragraph 11, it
18 talks about flash suppressors. You state, "Flash
19 suppressors also contribute to the potential lethality
20 of the rifle. Flash suppressors function to reduce the
21 flash signature in the shooter's field of vision in low
22 light conditions." Is that accurate?

23 A Yes.

24 Q You go on to say, "By reducing the effect of the
25 muzzle flash on the shooter's night vision, the shooter

1 can get back on target quicker." Is that accurate?

2 A Yes.

3 Q So is it your position that a flash suppressor is
4 only relevant in low light situations?

5 A I believe that that's the purpose of it, yes. I
6 don't know how effective it would be in daylight.

7 Q And a flash suppressor -- does a flash suppressor
8 hide the flash from -- from the viewpoint down range?
9 In other words, does somebody on the wrong end of the
10 muzzle, does it change their view of the flash?

11 A It depends on the particular flash suppressor and
12 how it functions, but not to any great degree, I don't
13 think.

14 Q So the purpose of a flash suppressor is not to
15 hide the flash from somebody on the wrong end of the
16 gun, it is to divert the flash from the shooter's field
17 of vision; is that correct?

18 A Yes.

19 Q And that is, like you say in your report, to
20 lessen the impact of the flash on the person's night
21 vision in low light conditions, because their pupils
22 will be dilated, right?

23 A Yes.

24 Q Does a flash suppressor affect a rifle's rate of
25 fire at all?

1 A No.

2 Q Does it --

3 A Only -- only -- excuse me. Only to the degree
4 that the shooter is trying to reacquire their target
5 without the flash suppressor might take them longer.

6 Q In low light conditions?

7 A Yeah. And that would reduce their -- either
8 reduce their rate of fire or reduce the accuracy of --

9 Q Okay. So if somebody -- so if somebody
10 discharges a firearm in low light conditions in self-
11 defense, would it be a good thing that they not lose
12 their night vision if, like you said, they wouldn't be
13 able to stay on target?

14 A I don't know how you're defining self-defense.

15 Q A legitimate self-defense shooting.

16 A In a legally justifiable use of that firearm in
17 self-defense, a flash suppressor may provide some degree
18 of increased accuracy for them, which would, presumably,
19 be a good thing.

20 But I don't know, in an enclosed environment
21 where -- such as a house, where your typical self-
22 defense scenario for civilians occurs, at least legally
23 justifiable ones, I'm not sure it would benefit them
24 that much.

25 Because you're -- you've got the flash bouncing

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4
5 I, MICHAEL MERSEREAU, do hereby declare under
6 penalty of perjury that I have read the foregoing
7 transcript; that I have made any corrections as appear
8 noted, in ink, initialed by me, or attached hereto; that
9 my testimony as contained herein, as corrected, is true
10 and correct.

11 EXECUTED this ____ day of _____,
12 2015, at _____, _____.
(City) (State)

13
14
15
16
17
18 _____
MICHAEL MERSEREAU
Volume I
19
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25

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby certify:

3 That the foregoing proceedings were taken
4 before me at the time and place herein set forth; that
5 any witnesses in the foregoing proceedings, prior to
6 testifying, were administered an oath; that a record of
7 the proceedings was made by me using machine shorthand
8 which was thereafter transcribed under my direction;
9 that the foregoing transcript is a true record of the
10 testimony given.

Further, that if the foregoing pertains to the
11 original transcript of a deposition in a Federal Case,
12 before completion of the proceedings, review of the
13 transcript [] was [] was not requested.

14 I further certify I am neither financially
15 interested in the action nor a relative or employee
16 of any attorney or any party to this action.

17 IN WITNESS WHEREOF, I have this date subscribed
18 my name.

19 Dated: December 19, 2018
20
21

22 
23

24 KATY BONNETT

25 CSR No. 13315

INSTRUCTIONS FOR READING/CORRECTING YOUR DEPOSITION

To assist you in making corrections to your deposition testimony, please follow the directions below. If additional pages are necessary, please furnish them and attach the pages to the back of the errata sheet.

This is the final version of your deposition transcript.

Please read it carefully. If you find any errors or changes you wish to make, insert the corrections on the errata sheet beside the page and line numbers.

If you are in possession of the original transcript, do NOT make any changes directly on the transcript.

Do NOT change any of the questions.

After completing your review, please sign the last page of the errata sheet, above the designated "Signature" line.

ERRATA SHEET

Page Line

35 5

Change: "IN 2014" TO "IN 2016"

Reason: _____

15 7

Change: "OPERATE IN SEMI-AUTOMATIC OR FULL AUTO MOD"

Reason: FOR CLARITY

17 13

Change: "INTERNET SEARCHES PRIMARILY, YOUR BALLISTIC..."

Reason: FOR CLARITY

42 24

Change: "IT ALLOWS GREATER CONTROL OF A WEAPON SYSTEM..."

Reason: FOR CLARITY

_____	_____	Change: _____
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_____	_____	Change: _____
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MM Subject to the above changes, I certify that the transcript is true and correct.

_____ No changes have been made. I certify that the transcript is true and correct.

Michael Mercereau
Signature

1/18/19
Date

EXHIBIT 7

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

STEVEN RUPP, et al.,

Plaintiffs,

vs.

XAVIER BECERRA, in his official capacity as Attorney General of the State of California,

Defendant.

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) Case No.:

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DEPOSITION OF BLAKE GRAHAM

Sacramento, California

Wednesday, December 19, 2018

Volume I

Reported by:

Kaitlyn B. Houston, CSR No. 14170

Job No. 3135718

PAGES 1 - 223

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

STEVEN RUPP, et al.,

Plaintiffs,

vs.

XAVIER BECERRA, in his official
capacity as Attorney General of
the State of California,

Defendant.

Case No.:

8:17-cv-00746-JLS-JDE

Deposition of BLAKE GRAHAM, Volume I, taken on behalf of
Plaintiffs, at 1300 I Street, Sacramento, California,
beginning at 10:53 a.m. and ending at 5:57 p.m. on
Wednesday, December 19, 2018, before Kaitlyn B. Houston,
Certified Shorthand Reporter No. 14170.

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11 --o0o--

1 make an arrest that's sort of gun show related, the
2 person is either a prohibited person or a non-prohibited
3 person and they have bought something at the show that
4 caused us to make a contact, maybe a traffic stop or do a
5 later search warrant on them. And we will probably find
6 an assault weapon of some kind involving -- in those
7 events.

8 I would say more recently since 2012 to present,
9 we're getting more people assembling guns because of the
10 knowledge of how to do that with YouTube and other
11 things. It's just more prevalent. And the home-built
12 guns now, those are getting easier and easier for people
13 to make again with, you know, social media if you include
14 YouTube in there. The internet has various step-by-step
15 guides. People can build stuff.

16 Q. So do you see the parts that are used to build
17 AR platform rifles at gun shows fairly frequently?

18 A. Oh, yeah.

19 Q. And in California gun shows -- because you
20 attend both California and Nevada gun shows, correct?

21 A. Mostly California. Maybe once or twice a year
22 do we go to an out-of-state show.

23 Q. Okay.

24 A. And it's getting less and less common that we go
25 to the out-of-state shows.

1 Q. Got it. Prior to the recent -- the most recent
2 change to the assault weapon act -- the Assault Weapon
3 Control Act, essentially making bullet-button rifles into
4 assault weapons, were you -- were bullet-button AR-15
5 rifles fairly prevalent at these gun shows?

6 A. Yes.

7 Q. Would -- what percentage -- or rather than
8 percentages, because that's kind of hard to do, I admit.
9 If you were to rank the most common firearms at these gun
10 shows going around looking at all the booths, you know,
11 your hunting shotguns or your bolt-action rifles,
12 handguns, AR platform rifles, what have you, what would
13 you think if you had to -- based on your experience, what
14 would you say is the most prevalent, most ubiquitous
15 firearm at these gun shows?

16 A. My answer is going to be based on Northern
17 California shows. I don't get to a lot of Southern
18 California shows. I'd say the most common two groups
19 that we would have seen since 2004 or '05 would have been
20 a semiautomatic handgun or probably an AR platform of
21 some kind.

22 Q. Okay.

23 A. And when I say the platform, it might just be a
24 lower receiver sitting there. Because you'll see
25 sometimes dozens of those available for sale, and then at

1 the various accessories so somebody could build up their
2 own, you know, version of whatever they want.

3 Q. Got it. And at the Nevada shows, same or
4 different?

5 A. I'd say at the Nevada shows we see a lot more of
6 the curio and relic antiques, lever-action, bolt-action,
7 pump-action. There seems to be a big collector market.
8 I know a lot of California residents will go up there and
9 find stuff that they can't find here for whatever reason.
10 I think part of it is because a lot of the gun show
11 promoters are on a circuit, so they'll bring -- the
12 vendors also are kind of on the same circuit. They'll
13 bring weapons from other states.

14 And Reno, specifically where we work a lot or
15 used to, that's sort of a hub for different guns to, you
16 know, kind of get in one spot and people from various
17 states can come to.

18 Q. Okay. So you were noticing that those shows
19 were more focused on collectible guns or older guns more
20 so than the modern stuff?

21 A. No, the modern stuff is present. But I'd say a
22 -- if I had to, like, put a percentage on it, there's
23 definitely more tables for sure. The shows are bigger
24 over there than in Northern California right now, and I
25 would say a higher percentage of non-assault weapons and

1 non-AR platforms over there.

2 See, it's kind of the same with the number of
3 handguns at the Reno shows. There's certainly the
4 older -- older technology, bolt-action, lever-action,
5 etcetera, here at the California shows. But it's just a
6 little bit different feel when you're at one of these
7 shows.

8 Q. So it next says that you conduct surveillance of
9 gun dealers suspected of illegal activity.

10 Do these -- obviously without divulging
11 specifics about, you know, specific investigations or
12 your tactics, how often do these -- this surveillance
13 involve assault weapons?

14 A. Speaking broadly over the -- I guess the current
15 part of my career within firearms, the most -- I would
16 say the most common -- one of the two most common crimes
17 we're investigating is possession or manufacturer of
18 assault weapons when it applies to a dealer.

19 The other side of what we do with a dealer is if
20 they're basically doing phoney paperwork, you know, not
21 filling out the stuff correctly and fudging intentionally
22 the data on this stuff, which then goes into the
23 databases.

24 So it's sort of maybe like a half and half on
25 the type of crime in general that we're looking at on the

1 dealer. The California dealer is what I'm speaking of.
2 Not an out-of-state or something.

3 Q. When you say "half and half," it's half and half
4 of that type of crime or half and half involved assault
5 weapons?

6 A. I'd say, like, 50/50. It's the -- the guns
7 specifically that we're seizing are more likely than not
8 -- an unregistered assault weapon and a dealer doesn't
9 have a dangerous weapons permit, so there's no way that
10 they can legally be in possession of it. And then we
11 have paperwork violations, which might involve perjury or
12 something else on behalf of the dealer. That kind of
13 thing.

14 Q. Are you inspecting gun stores generally? Not
15 just those that are suspected of illegal activity, but
16 going in and monitoring -- checking -- doing check-ups on
17 gun stores?

18 A. I personally do not get involved in the
19 day-to-day inspection process. There are times when the
20 folks that do the inspections will say, "Hey. We think
21 we have a problem at this store. Would you mind coming
22 along?" In those cases, I will come out. But that's, I
23 would say, very rare.

24 Q. Do you have a reason to go into gun stores
25 throughout California or in your region for other

1 reasons? Do you find yourself in gun stores often?

2 A. For a noncriminal investigation, meaning; or
3 what do you mean?

4 Q. In any capacity. Whether it's professional or
5 personal, do you find yourself in gun stores frequently?

6 A. Yes. Yes, I do.

7 Q. Okay. The same one or two, or various ones?

8 A. Various.

9 Q. Okay. And prior to this change in the law,
10 change in the definition of assault weapon to include
11 bullet-button rifles, at those gun stores that you
12 frequented, were AR-15 platform rifles, non-assault
13 weapons at that time, bullet-button rifles, prevalent at
14 those gun stores?

15 A. Yes.

16 Q. Would you say it would be more likely than not
17 that if you were to go into a random gun store, there
18 would be AR platform rifles?

19 MR. CHANG: Objection. Calls for speculation.

20 BY MR. BRADY:

21 Q. At that time?

22 MR. CHANG: Same objection.

23 THE WITNESS: When you say "at that time" --

24 BY MR. BRADY:

25 Q. Just so we're clear -- because I'm going to ask

1 you in a second -- maybe there's a not a distinction --
2 or let me ask you now. Let me rephrase. Sorry.

3 The -- at that time, I was referring to prior to
4 the new law changing. So when bullet-button rifles could
5 be sold with all the other features, okay?

6 Now, right, it's changed so that you have -- you
7 have to have a bullet button and no features, right?
8 Or -- or no bullet button and no features?

9 A. So -- yeah. After Senate Bill 880 or Assembly
10 Bill 1135, as soon as that changed, there was a shift in
11 the marketplace as far as what -- how weapons could be
12 configured if it was an AR platform and some of the other
13 platforms, too.

14 There are still AR platform weapons being sold
15 in California. I would say if you go to a corporate
16 store -- Big 5 or maybe some of the other chains --
17 you're less likely to see the AR platforms unless it's
18 maybe like a .22 version or something. Turners, which is
19 down south, I think you're more likely to -- you're not
20 more likely. But there's a greater chance than a Big 5
21 that you're going to see a centerfire version of some
22 kind down there.

23 The -- I would say, like, the mom-and-pop kind
24 of stuff where there's one or two dealerships owned by
25 the same person or couple of people, that's where you're

1 going to find the prevalent -- the prevalence of the AR
2 family, if you will.

3 Q. And that's still happening today post SB880
4 you're talking about?

5 A. Yes.

6 Q. And now, prior to SB880, were there more or less
7 AR platform rifles than there are now in these gun stores
8 you frequent?

9 A. I would say towards the end of 2016, there was a
10 huge surge. So I don't know if that was a true -- or if
11 you just notice, that's a spike. The numbers that -- of
12 the guns in the stores now, I would say overall, all gun
13 sales have dipped a little bit. I'm not sure by what
14 percentage, but I'm just hearing people talk around the
15 office. There's less DROSeS happening right now -- maybe
16 10 percent less or something like that -- than before
17 that spike. Late 2016.

18 So we might be back at a time where maybe we're
19 mirroring the numbers from 2014, 2015 possibly, and I
20 haven't done a -- any kind of analysis on, like,
21 large-sale DROS numbers or anything like that, but
22 typically we notice that handguns are about 50 percent of
23 the sales and long guns are about 50 percent of the
24 sales. AR platforms are typically rifles. And over a
25 long period of time, those 50/50 numbers have held true.

1 I don't know what's -- what we're on pace for this year,
2 though, for example.

3 Q. Okay. But prior to SB880, is it fair to say
4 that you would see AR platform rifles at gun stores
5 frequently?

6 A. Yes.

7 Q. Moving onto paragraph 8 of your report. So we
8 already talked about gun shows. You said you've attended
9 at least 40.

10 Would it be less than 100?

11 A. Honestly, I stopped counting after about 40. No
12 one really asks me, "Hey. How many have you been to?"
13 At some point doing some mental math in my career, I came
14 up with, oh, at least 40 at some point, and then I just
15 didn't see any reason to keep counting after that.

16 As far as 100 or less, it could be close to
17 the -- to that number, maybe. Close to 100.

18 Q. So let's -- actually, before we go on to your
19 training, I want to ask you about back in paragraph 6,
20 you talk about what you're doing today. You're
21 investigating the illegal trafficking of firearms,
22 manufacturing of assault weapons.

23 Do you do any investigation of the violent use
24 of firearms?

25 A. Are you speaking about like do I work involved

1 in murder cases right now, or...

2 Q. So, for example, it looks like these crimes that
3 you are investigating are violations of the AWCA such as
4 illegal possession, making, importing, of an assault
5 weapon; is that right?

6 A. For the most part, yes. But also like 29800,
7 which is felony possession. It doesn't necessarily just
8 limit to the AWCA. There are other statutes in play.

9 Q. So -- but it's enforcement of illegal possession
10 statutes, right?

11 A. Possession, manufacture, or trafficking, or
12 sales. I don't typically get involved in -- me
13 personally. Our bureau might have -- depending on the
14 month, might have some involvement in a home invasion, or
15 we might provide expertise about, you know, something to
16 someone else's case.

17 Q. So you don't get involved in shooting crimes?

18 A. I personally do not. We have, overtime, gotten
19 involved in someone that was making statements about
20 wanting to shoot -- shoot up a school, that kind of
21 thing.

22 Q. Uh-huh.

23 A. I -- and I can say I personally have been
24 involved in two of those in the last year.

25 Q. Okay. Moving on, then, to your training.

1 By in and of itself, you could probably -- with
2 a lot of training, you could probably overcome like my --
3 if I train a lot with one -- like you brought up the
4 MonsterMan. If I trained a ton and that's all I used, I
5 could probably get to the point where I'd be comfortable
6 with it and it wouldn't affect my score if I was shooting
7 on a paper target.

8 But what I've used since -- I don't know -- the
9 year 2000 is a pistol grip, so that's what I'm most
10 comfortable with. I believe my score would drop if I had
11 to use that only.

12 Q. Do you believe comfort when shooting is a
13 positive thing?

14 A. Yes.

15 Q. Okay. Moving on to adjustable stocks.

16 A. Do you have a page?

17 Q. Sure. Let me -- so you state on page 8 in
18 paragraph 27 that "folding or" -- "folding or telescoping
19 stocks and a rifle with overall length under 30 inches
20 aid in the concealability of the weapon;" is that right?

21 A. Could you give me the paragraph again?

22 Q. 27.

23 A. "Folding or telescoping stock and a rifle with
24 an overall length under 30 inches aid in the
25 concealability."

1 Okay. I see what you're speaking of.

2 Q. Now, back on page 6, you discuss telescoping
3 stocks.

4 A. Do you have a line?

5 Q. So paragraph 21. So you say, "Telescoping stock
6 is a stock that is shortened or lengthened by allowing
7 one section to telescope into another portion."

8 Is that right?

9 A. Yes.

10 Q. And on AR-15-style firearms, the buffer tube or
11 receiver extension acts as the fixed part of the stock on
12 which the telescoping butt stock slides or telescopes; is
13 that right?

14 A. Yes.

15 Q. On an AR-style rifle, how -- how much does it --
16 a stock telescope generally in your experience?

17 A. Three or four inches.

18 Q. Three or four inches?

19 A. Yeah.

20 Q. So could -- are you familiar with short barrel
21 rifle laws?

22 A. Somewhat.

23 Q. Do you know the definition of a short barrel
24 rifle under California law?

25 A. I can give it a shot if you want me to.

1 Q. Sure. I can assist you if you want. I'm not
2 trying to quiz you.

3 A. Sure. No. I've testified as an expert at least
4 once on one of the cases --

5 Q. Okay. Go ahead while I look for it to confirm.

6 A. So generally on the short barrel rifle, the
7 things you're going to evaluation: Is the barrel less
8 than 16 inches? Is the overall length less than 26
9 inches?

10 Q. That's my understanding.

11 A. Yeah. So those are the rough parameters that
12 state and federal law would kick in if something like
13 that was found.

14 Q. And that's Penal Code Section 17170.

15 A. The definition, yes. The charging section is
16 possibly 33210.

17 Q. Okay.

18 A. Somewhere around there.

19 Q. Okay. So why couldn't somebody with an AR -- or
20 strike that.

21 So an AR must have at least a 16-inch barrel in
22 order to be legal, correct?

23 A. AR rifle.

24 Q. An AR rifle must have at least a 16-inch barrel,
25 correct?

1 Q. Yes.

2 A. The department issued me that rifle, and it had
3 it when I got it.

4 Q. Would you prefer a rifle that did not have an
5 adjustable stock?

6 A. No. I'm happy with it having an adjustable one
7 because I have different levels of body armor, thickness
8 levels. So between the heaviest armor that I wear for
9 search warrants, it's definitely thicker, and I have to
10 put it on a different setting. Otherwise it causes me
11 problems.

12 Q. Okay. And why -- why do you need different --
13 different lengths of the rifle? Why do you need to
14 change the stock to accommodate the body armor? Why
15 can't it just be a fixed stock?

16 A. Ergonomics because sometimes I have a helmet on.
17 Sometimes I have Level 4 body armor on with a rifle
18 plate. I'm very -- my girth increases, if that makes
19 sense. So I need to shorten the stock so I can have the
20 same sight picture, the same eye relief, etcetera.

21 So if I have a T-shirt on, I might change the
22 position because I don't have, you know, two or
23 three inches of body armor on.

24 Q. So you're saying that the length of stock can
25 affect your ability to -- to effectively use the firearm?

1 A. In an ergonomic sense, yeah. You're better off
2 customizing the length of the stock to fit your body
3 type. You might have somebody that has really short
4 arms, and they may need to go as short as they legally
5 can go. Somebody that's really long, over six-foot
6 something, they're going to probably want that stock
7 backed out because they're likely to have longer arms,
8 and that's just what fits their body type better.

9 Q. So stock fit is important in being able to shoot
10 properly?

11 A. Yes.

12 Q. And if a rifle does not have an -- an adjustable
13 stock is meant to, like you just said, fit a particular
14 shooter whether it be their standard arm length or if
15 they have a heavy coat on versus a T-shirt, right?

16 A. Yeah. Those things would be factors.

17 Q. Or teaching a younger person who's smaller or
18 teaching somebody else who's of a different size how to
19 use a firearm. That might be a factor in wanting an
20 adjustable stock?

21 A. Yeah. Versatility. Like I said, the department
22 issues us these weapons. We all get the same weapon
23 regardless of our height and weight and our length, so
24 it's a practical reason.

25 Q. Without an adjustable stock, a person who wants

1 to have the proper stock fit, what would they do to find
2 a rifle that has the proper stock fit?

3 A. They may try the one that came with it and see
4 if it -- if it's too long or too short for them, they may
5 add a pad to the end of their stock if their stock will
6 accept different thickness pads. They may just go
7 outside the box and buy a whole other company's stock
8 that fits their rifle.

9 I'll use an example of a company that a lot of
10 people use. MagPole. They make various stocks for the
11 AR platform. There's probably -- I don't know -- five or
12 six different variants of their stocks, and some of those
13 versions have different thickness. Buffers -- I'm sorry.
14 Not buffers, but pads for the end of the stock, and some
15 of those are fixed stocks. Some of them are telescoping
16 stocks.

17 Q. So you can change the length of your stock if
18 you want whether it has a telescoping stock or not?

19 A. Generally, there's some variation -- some --
20 there's a lot of options is what I'm trying to say, I
21 guess, for a person. If you want a fixed stock or a
22 telescoping stock, there are a ton of options out there
23 in the marketplace.

24 Q. Well, people can't have telescoping stocks under
25 the AWCA, so that's my question is: What are the

1 alternatives? And I think you just laid out some of
2 them. People can figure out certain -- they can put a
3 pad on or try to find a stock that fits them, buy a
4 custom stock.

5 Wouldn't it just be a whole lot easier to have a
6 stock that you can move around to adjust to your -- your
7 shoulder length?

8 A. A whole lot easier in what sense?

9 Q. When you're -- to get the proper shoulder fit.

10 A. If that was allowed by law, which in some cases,
11 it is. A .22 rifle that didn't have Category 1 or 30510
12 markings, .17 caliber, those are still allowed. But if
13 it's a centerfire without a fixed mag, it might get
14 classified as a 30515 or a Category 3 assault rifle.

15 Q. Because those three to four inches on an AR are
16 increasing its concealability.

17 Is that the sole reason that the telescoping
18 stock is --

19 MR. CHANG: Objection. Lacks foundation. Calls
20 for speculation.

21 MR. BRADY: Good objection, but I need to finish
22 my question.

23 MR. CHANG: I just wanted -- it looks like -- it
24 looked like the witness was about to answer, so I was
25 trying to thread the needle right there. Please finish.

1 bolt.

2 Q. And if an upper was off a lower, that would
3 basically cut the size of an AR in half, right?

4 A. Pretty close to it because you could lay it on
5 top of each other. You might be down to -- instead of
6 30 inches, you're going to be down to -- I don't know.
7 You could shave off 12 inches, maybe, or something from
8 the overall length and put it in a backpack or something.

9 Q. And when an upper is separated from the lower on
10 an AR, it is not considered an assault weapon; is that
11 correct?

12 A. Correct. For registration purposes right now.

13 Q. Well, if somebody was walking, you know -- for
14 registration purposes, if somebody has an upper separated
15 from the lower in their house, they are not in violation
16 of the AWCA; is that correct? Assuming it's not a Cat 1
17 or a Cat 2.

18 A. Right. Well, if their upper and lower are
19 separated, as I said earlier, the semiautomatic wouldn't
20 apply, right? So separate upper and lower shouldn't be
21 based on your receiver question. It's kind of the same
22 thing.

23 Q. 30515 also requires it be a semiautomatic rifle,
24 right?

25 A. Yes.

1 Q. Okay.

2 A. Yeah. So, yeah, separated upper and lower. I
3 wouldn't advise anybody to arrest a non-prohibited
4 person -- meaning an average citizen, gun store owner,
5 whatever -- for a separated upper and lower if it's a
6 16-inch barrel. And then when those things get
7 assembled, it's more than 26 inches; so there's no short
8 barrel rifle issues or any of that stuff.

9 Sean, can we do a five-minute break?

10 MR. BRADY: Any time you want. Off the record.

11 (Recess from 2:14 p.m. to 2:22 p.m.)

12 BY MR. BRADY:

13 Q. Go back on the record. We -- let's take a look
14 at page 8 of your report, paragraph 28.

15 You say, "Flash suppressor may increase
16 efficiency while the shooter is firing since the
17 shooter's vision is less likely to be impaired by excess
18 flash in low light settings."

19 Is that right?

20 A. Yes.

21 Q. So is a flash suppressor only relevant -- the
22 effect of a flash suppressor only relevant in low light
23 conditions?

24 A. I would say it's most relevant because the --
25 I'll call it the ball of fire at the end of the barrel is

1 most visible the darker things get.

2 And in terms of flash suppressor, the way the
3 definition has always sort of been focused, it's about
4 the shooter's vision being affected as opposed to someone
5 other than the shooter being able to see the shooter.
6 Like a muzzle blast from a distance. It's more about
7 what can the shooter see or not see because of the device
8 on the end of the barrel.

9 Q. So a flash suppressor under California law would
10 not necessarily, anyway, affect the muzzle -- the
11 visibility of the muzzle flash by people being shot at;
12 is that right?

13 A. Could you rephrase that question?

14 Q. Sure. If you're downrange on the wrong end of
15 the gun --

16 A. Okay.

17 Q. -- okay, a flash suppressor will not make the
18 muzzle flash less visible to you, right?

19 A. Depending on your angle to the shooter, it may.
20 If you're off to the side, you're probably going to be
21 able to still see the shooter a bit. If you're dead on,
22 it may be less of -- I don't know how to explain this.
23 It may not matter if there's a device on the end of the
24 barrel or not.

25 Q. Because it's dead on.

1 be legitimate or illegitimate, the shooter is going to
2 have probably a better chance of hitting what they're
3 shooting at. Regardless if it's a civilian -- you know,
4 non-prohibited citizen or a criminal. There's an
5 advantage to it at the end of the day.

6 Q. All right. So in paragraph 24, you say that the
7 challenge features described in Penal Code Section 30515
8 on assault rifles, and those features are the ones we
9 just went through as far as the pistol grip, the
10 adjustable stock, and the flash suppressor, right? And
11 granted, there's others; but those are the three that
12 we're mostly talking about here.

13 A. Right. You called it adjustable. I would call
14 it telescoping stock.

15 Q. Correct. Well, there's telescoping and folding,
16 right?

17 A. Correct.

18 Q. And those are two different animals, if you
19 will, with respect to your -- well, I guess even
20 telescoping can be broken into two categories as we
21 already found: One that will allow the rifle to be
22 shortened down to the receiver and then the AR
23 telescoping stock which cannot be as shortened. And so
24 those are sort of two different types of concerns; is
25 that fair to say?

1 A. Yes.

2 Q. So we're talking about those -- we're talking
3 about those features when in paragraph 20, you say that
4 they may, quote, aid -- sorry. Let me rephrase that.
5 That, quote, "May aid the shooters in being potentially
6 more effective and efficient while shooting people."

7 Is that correct?

8 A. Yes.

9 Q. Okay. So as we just went through, and I believe
10 you said with respect to the -- all of those things --
11 the flash suppressor in low light, the adjustable stock
12 for proper shoulder fit, the pistol grip for the
13 ergonomics and control -- those things would also aid a
14 person shooting people legitimately in self-defense,
15 right?

16 A. Potentially, yeah.

17 Q. You have these features on your rifle, right?

18 A. Right.

19 Q. And you are only shooting people in legitimate
20 self-defense, right?

21 A. Yeah. It might be a dog or it might be a person
22 that has a weapon. Something like that.

23 Q. You're only taking life if there is a legal,
24 justified reason to do so, right?

25 A. Correct.

1 Q. And your department use of force policy is -- is
2 what? Can you explain?

3 A. Yeah. I'll give it a shot. I'm not the
4 department's expert.

5 Q. What is your understanding of when you are able
6 to use up to deadly force?

7 A. If you boil it down, it's basically to prevent
8 serious bodily injury to myself, other law enforcement,
9 or other members of the public that might be subject to
10 an immediate attack. Somebody may be swinging a weapon
11 or throwing a brick or shooting at one of us, and there's
12 nothing else that can potentially stop that from
13 happening. So you have to stop the threat by potentially
14 using lethal force against the aggressor.

15 Q. Is that standard any different than for a
16 non-law enforcement member of the public, to your
17 knowledge?

18 A. There's -- there's a specific Penal Code that
19 breaks down justified homicide, and there might be a
20 separate exemption that is carved out for law enforcement
21 versus civilian. I'm not an expert on that area, so I
22 don't want to comment, but I think there might be some
23 differentiation, at least a separate exemption broken
24 down there.

25 Q. Generally, you're only using lethal force to

1 sounds of certain weapons if they're fired at you.

2 Submachine guns, machine guns, etcetera.

3 So our agents -- we try to train them so that
4 they can safely -- when they recover weapons, they're
5 making sure they're clearing the chamber, making sure
6 we're not taking loaded guns home -- or back to the
7 office for our evidence technicians to have an accidental
8 discharge or things like that. So there's a good reason
9 to have these out there and shoot various ones.

10 We have a -- one that looks a lot like Rifle B,
11 and then there's a one that looks a lot like Rifle A, and
12 I think there's one or two other variants that are sort
13 of in between with, like, a flash suppressor attached,
14 and then there's another version that has some other
15 change to it. I think it might be stainless or
16 something.

17 Q. And you shot those side by side on the same day
18 at the same targets?

19 A. Yeah. Yeah.

20 Q. And what was the difference in your groupings?

21 A. It was -- I don't know that it was a groupings
22 difference. It was my speed to which -- it wasn't a
23 timed test, per se, but it was how quickly could I fire
24 enough rounds to stop the threat. That type of thing.

25 If I was doing two rounds, mag change, put the

1 new mag in, charge it, and then two more rounds, it was
2 three or four seconds slower with the rifle that was
3 similar to Rifle A.

4 Q. Okay. So then your effective rate of fire was
5 not as -- was slower than the actual rate of fire.

6 Is that fair to say with Rifle A versus Rifle B?

7 A. Yes. Rifle A, I was a little bit slower. The
8 distance in which we were shooting was seven yards.

9 Q. Okay.

10 A. So the distance -- it was negligible.

11 Q. So accuracy did not change between the two?

12 A. I didn't notice a much larger pattern.

13 Q. It was the magazine change that made the
14 difference there?

15 A. Yeah. The speed in which I could reload and
16 just do similar drills that we do with our M4s and stuff.
17 We were just having the agents mimic that.

18 Q. And that was because of the pistol grip, right?

19 A. That's what -- yeah. I found that to be more
20 similar to my M4 which I've used for many years, so it
21 just seemed more natural.

22 Q. Okay. So between Rifle A and Rifle B, when you
23 did a side-by-side comparison, you weren't really looking
24 for accuracy because you were at short distances, right?
25 But -- so accuracy was really -- couldn't be

1 distinguished at that...

2 A. Yeah. At that short range, seven yards, it's
3 not going to make a difference.

4 Q. So on what do you base your opinion that the
5 features on Rifle B increase accuracy on a rifle?

6 A. So I was in a -- I was in a scenario which I
7 didn't have people shooting back at me. I had -- I
8 basically could go as fast as I felt comfortable going.
9 I was at my own pace, in other words. So if I'm going to
10 be in a stressful situation trying to shoot, reload,
11 shoot again, and repeat that cycle as long as I needed
12 to, Rifle B would be my choice. I might be 10 percent
13 more effective because especially in low light with the
14 flash suppressor change. And when I say effective, I
15 mean quicker and potentially more accurate.

16 Another factor with Rifle B -- it wouldn't come
17 to play with a 50- to 100-yard or longer -- but if I'm up
18 close, say seven yards, I could probably even fire this
19 thing with no stock, meaning it's been folded to collapse
20 it down, and I could still probably hit the target with
21 all my rounds, and just coming up like this without
22 actually a brace or a sling on there.

23 I'm going to -- I may lose a little bit of
24 accuracy there, but the -- the difference being is I
25 would be sort of simulating coming out from maybe -- I

1 don't know -- a trench coat or some other -- maybe out of
2 a bag, and I didn't see the need at that point to flip
3 the stock out. I just wanted to start shooting. The
4 concealability factor there would override the accuracy
5 at a close range.

6 Does that make sense?

7 Q. Yeah. I believe so. It makes sense. I don't
8 know if it was completely responsive to my question about
9 why you think the features -- or what you base your
10 opinion that the features make Rifle B more accurate than
11 Rifle A, because that is your opinion in your report,
12 correct?

13 A. Right.

14 Q. So I'm just wondering, do you -- do you base
15 that opinion that Rifle B is going to be more accurate
16 than Rifle A on just your personal preference for these
17 features or on testing that you've seen? That's what I'm
18 trying to get at.

19 A. I would say, like, the only time I've done that
20 side by side with weapons similar to Rifle A and Rifle B
21 would be that one time. I've fired a weapon like Rifle A
22 a few other times, but we didn't have the Rifle B clone
23 out there, and it was sufficient. I was able to hit, you
24 know, things on target, but I just felt like I was
25 more -- when the stock would be extended, I was more

1 comfortable shooting Rifle B. And if I had to shoot for
2 some kind of a score between the two and a timed score, I
3 think I'm going to do better with Rifle B.

4 Q. Okay. How much better, do you think?

5 A. Perhaps 10 percent. Something like that. Each
6 of these features maybe is going to give you a few maybe
7 percentage points of improvement. Small little things.
8 The professional or semipro shooters out there, they do
9 all kinds of things to their guns, whether it be handgun
10 or long gun, from grip wraps so they get a perfect grip
11 and different, you know, carvings on the wood stocks and
12 all this other stuff.

13 So little ergonomic differences make a
14 difference if you're really into having a high score if
15 it's a, you know, paper target scenario where you're
16 shooting metal plates and, you know, things like that at
17 a competition.

18 Q. And accuracy is a good thing, right?

19 A. Yes.

20 Q. You train to be accurate, right?

21 A. Yeah. You want to have the highest score
22 possible if you're shooting for a qualification, for
23 example.

24 Q. And that's because -- well, also, you want to
25 hit your target in the real world if you need to, right?

1 A. Uh-huh. Same thing would apply.

2 Q. And we would want somebody who is shooting
3 somebody in self-defense to hit their target and not miss
4 and hit something else, right?

5 A. Legitimate --

6 Q. Yeah, we're assuming legitimate.

7 A. Yes.

8 Q. Yes. Bad guys coming down the hallway with the
9 knife in hand. You want the homeowner to put two in his
10 chest and not two over his shoulder into the neighbor,
11 right?

12 A. Yeah. You want responsible gun owners to --
13 and/or law enforcement, if that's what's going on in the
14 shooting, to hit what they're shooting at and not have
15 rounds flying around.

16 Q. And control of the firearm assists with being
17 accurate, right?

18 A. I believe so.

19 Q. So you want a gun that fits well, right?

20 A. Yes.

21 Q. That's crucial for proper firearm -- safe
22 firearm use, right?

23 A. Depending on how your -- what your needs are,
24 you can get away with certain things that you -- some
25 people have multiple weapons, and they're all slightly

1 configured different ways. Rifle A and Rifle B can both
2 get the job done. But probably people with Rifle B,
3 you're going to end up with -- if you have had a lot of
4 training with an AR specifically and had to transition to
5 one of these two, I'm going to be most accurate, I
6 believe, with Rifle B.

7 Q. All right. Got it. We're going to talk a
8 little bit more about mass shootings in a second. But
9 while we're on the subject of accuracy, I just want to
10 ask what you think.

11 If a mass shooter -- because they're, by
12 definition, merely trying to kill people, I wouldn't say
13 the average criminal would do this. But in a mass
14 shooting situation, if a mass shooter hits somebody
15 they're shooting at, what do you think would be their
16 most likely response after they realize that they've hit
17 their target?

18 MR. CHANG: Objection. Calls for speculation.

19 THE WITNESS: I think the response might be
20 dependent upon what body part they hit on the victim, how
21 much ammunition they have left, are they seeking to flee,
22 or are they just going to stay and shoot it out until
23 they're out of ammunition.

24 BY MR. BRADY:

25 Q. Let's say they're at the beginning of their --

1 they don't anticipate any resistance yet. They're there.
2 They're just starting. Shot, they hit somebody, person
3 goes down, what do you think their reaction is going to
4 be?

5 A. They may move to another target unless they
6 perceive the person on the ground to be a threat.

7 Q. And if they realize that they completely missed
8 the person, what do you think their most likely reaction
9 is going to be?

10 MR. CHANG: Objection. Calls for speculation.

11 THE WITNESS: Unless they have some threat
12 approaching them or they get distracted, they may go back
13 and fire again at that person that they apparently
14 missed.

15 BY MR. BRADY:

16 Q. And granted, this is a hypothetical and anything
17 could happen. But I'm just asking what a reasonable
18 result would be, and I think that you provided your
19 answer.

20 A. Yes.

21 Q. And so based on that, could it be possible that
22 a less accurate weapon that a mass shooter is using could
23 result in more rounds being fired?

24 MR. CHANG: Objection. Calls for speculation.
25 Incomplete hypothetical.

1 I, BLAKE GRAHAM, do hereby declare under penalty
2 of perjury that I have read the foregoing transcript,
3 that I have made any corrections as appear noted, in ink,
4 initialed by me, or attached hereto; that my testimony as
5 contained herein, as corrected, is true and correct.

6
7
8 EXECUTED this 7th day of February, 2019, at
9 Sacramento, CA.
(City) (State)

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14 BLAKE GRAHAM

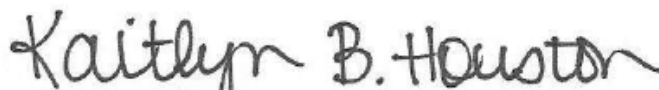
VOLUME I

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California do hereby certify:
3 That the foregoing proceedings were taken before me at
4 the time and place herein set forth; that any witnesses
5 in the foregoing proceedings, prior to testifying, were
6 duly sworn; that a verbatim record of the proceedings was
7 made by me using machine shorthand which was thereafter
8 transcribed under my direction; that the foregoing
9 transcript is an accurate transcription thereof.

10 I further certify I am neither financially
11 interested in the action nor a relative or employee of
12 any attorney or any of the parties.

13 IN WITNESS WHEREOF, I have this date subscribed
14 my name.

15
16 Dated: January 11, 2019
17

18 
19

KAITLYN B. HOUSTON

20 CSR No. 14170
21
22
23
24
25

EXHIBIT 8

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Attorney General of California
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Attorneys for Defendant Xavier Becerra

IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

**STEVEN RUPP; STEVEN
DEMBER; CHERYL JOHNSON;
MICHAEL JONES; CHRISTOPHER
SEIFERT; ALFONSO VALENCIA;
TROY WILLIS; and CALIFORNIA
RIFLE & PISTOL ASSOCIATION,
INCORPORATED,**

Plaintiffs,

v.

**XAVIER BECERRA, in his official
capacity as Attorney General of the
State of California; and DOES 1-10,**

Defendants.

8:17-cv-00746-JLS-JDE

**DEFENDANT'S RESPONSE TO
PLAINTIFF CHRISTOPHER
SEIFERT'S REQUEST FOR
ADMISSIONS**

Propounding Party: Christopher Seifert

Responding Parties: Defendant Xavier Becerra

SET No.: One

1 Defendant Attorney General Xavier Becerra (“Defendant”) responds and
2 objects to Plaintiff Christopher Seifert’s (“Plaintiff”) First Set of Requests for
3 Admission as follows:

4 **PRELIMINARY STATEMENT**

5 Defendant has not yet completed the investigation of the facts relating to this
6 case and has not yet completed discovery in this action. All of the responses
7 contained herein are based solely upon information and documents that are
8 presently available to and specifically known by Defendant, and disclose only those
9 contentions that presently occur to Defendant. It is anticipated that further
10 discovery, independent investigation, legal research, and analysis may supply
11 additional facts and lead to additions, changes, and variations from the responses
12 herein. Further, Defendant makes the following objections and responses without
13 agreeing or implying that any of the requests for admissions are relevant to the
14 subject matter of this case.

15 **OBJECTIONS TO INSTRUCTIONS AND DEFINITIONS**

16 1. Defendant objects to each instruction, definition, and request to the extent
17 that it purports to impose any requirement or discovery obligation greater than or
18 different from those under the Federal Rules of Civil Procedure and the applicable
19 Rules and Orders of the Court.

20 2. Defendant objects to each request that is overly broad, unduly
21 burdensome, or not relevant to any party’s claim or defense and proportional to the
22 needs of the case.

23 3. Defendant objects to the definition of “ASSAULT WEAPON” as
24 overbroad and unduly burdensome, and vague and ambiguous, as the definition and
25 scope of the term in California Penal Code section 30510 and/or section 30515 has
26 changed over time.

27 4. Defendant objects to each definition and request to the extent that it seeks
28 documents protected from disclosure by the attorney-client privilege, the

1 governmental deliberative process privilege, the law enforcement investigatory
2 privilege, the official information privilege, the common interest privilege, the
3 attorney work product doctrine, or any other applicable privilege or protection.
4 Should any such disclosure by Defendant occur, it is inadvertent and shall not
5 constitute a waiver of any privilege or protection.

6 5. To the extent that any individual Request for Admission purports to
7 impose on Defendant the burden of providing information which is not in
8 Defendant's possession, custody, or control, or is already in Plaintiffs' possession,
9 custody or control, or is not reasonably available to Defendant after a diligent
10 search and reasonable inquiry, Defendant objects on the grounds that the Requests
11 are overbroad, unduly burdensome, oppressive, and the burden, expense and/or
12 intrusiveness of the discovery clearly outweighs the likelihood that the information
13 sought will lead to the discovery of admissible evidence.

14 6. Defendant incorporates by reference every general objection set forth
15 above into each specific response set forth below. A specific response may repeat a
16 general objection for emphasis or some other reason. The failure to include any
17 general objection in any specific response does not waive any general objection to
18 that request.

19 7. Defendant objects to the Requests for Admission to the extent they
20 demand speculation or legal conclusions.

21 **RESPONSES TO REQUESTS FOR ADMISSIONS**

22 **REQUEST FOR ADMISSION NO. 1:**

23 Admit YOU do not know how many ASSAULT WEAPONS are possessed in
24 California.
25

26 **RESPONSE TO REQUEST FOR ADMISSION NO. 1:**

27 Admitted: Defendant does not know how many unregistered assault weapons
28 are possessed in California.

REQUEST FOR ADMISSION NO. 2:

Admit YOU do not know how many ASSAULT WEAPONS are possessed in the United States.

RESPONSE TO REQUEST FOR ADMISSION NO. 2:

Admitted.

REQUEST FOR ADMISSION NO. 3:

Admit that prior to January 1, 2014, the Department of Justice did not retain any information regarding non-ASSAULT WEAPON rifles upon their lawful transfer.

RESPONSE TO REQUEST FOR ADMISSION NO. 3:

Denied.

REQUEST FOR ADMISSION NO. 4:

Admit that there are peace officers employed at the California Department of Justice who are authorized by YOU to possess ASSAULT WEAPONS while discharging their official duties.

RESPONSE TO REQUEST FOR ADMISSION NO. 4:

Admitted.

REQUEST FOR ADMISSION NO. 5:

Admit that there are peace officers employed at the California Department of Justice who possess ASSAULT WEAPONS while discharging their official duties.

RESPONSE TO REQUEST FOR ADMISSION NO. 5:

Admitted.

REQUEST FOR ADMISSION NO. 6:

Admit that California peace officers can be authorized to acquire an ASSAULT WEAPON.

RESPONSE TO REQUEST FOR ADMISSION NO. 6:

Admitted.

REQUEST FOR ADMISSION NO. 7:

Admit that a California peace officer who is authorized to acquire an ASSAULT WEAPON can possess that ASSAULT WEAPON at the officer's home.

RESPONSE TO REQUEST FOR ADMISSION NO. 7:

Defendant has made a reasonable inquiry and the information Defendant possesses or can readily obtain is insufficient to enable Defendant to admit or deny.

Dated: September 14, 2018

Respectfully submitted,

XAVIER BECERRA
Attorney General of California
MARK R. BECKINGTON
Supervising Deputy Attorney General

/s/ Peter H. Chang

PETER H. CHANG
Deputy Attorney General
*Attorneys for Defendant Xavier
Becerra*

SA2017106868

CERTIFICATE OF SERVICE
IN THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

Case Name: *Rupp, et al. v. Becerra*
Case No.: 8:17-cv-00746-JLS-JDE

IT IS HEREBY CERTIFIED THAT:

I, the undersigned, am a citizen of the United States and am at least eighteen years of age. My business address is 180 East Ocean Boulevard, Suite 200, Long Beach, California 90802.

I am not a party to the above-entitled action. I have caused service of:

**DECLARATION OF SEAN A. BRADY IN SUPPORT OF PLAINTIFFS'
MOTION FOR SUMMARY JUDGMENT; EXHIBITS 1-8**

on the following party by electronically filing the foregoing with the Clerk of the District Court using its ECF System, which electronically notifies them.

Xavier Becerra
Attorney General of California
Peter H. Chang
Deputy Attorney General
E-mail: peter.chang@doj.ca.gov
John D. Echeverria
Deputy Attorney General
E-mail: john.echeverria@doj.ca.gov
455 Golden Gate Ave., Suite 11000
San Francisco, CA 94102

I declare under penalty of perjury that the foregoing is true and correct.

Executed March 25, 2019.

/s/Laura Palmerin
Laura Palmerin