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HB 638 and SB 624  
OPPOSE

I am a defense contractor whose current and prior employers include one of the top research laboratories in the United States and one of the leading aerospace corporations in the world. In my spare time I enjoy shooting sports, 3D printing, and amateur machinist work. Similarly, many of my coworkers share the same passions for designing and engineering work, shooting sports, hunting, and outdoor pursuits. When it comes to our firearms, we will not settle for an off the shelf gun, we like to tinker and at times engineer entirely new parts and mechanisms to reach our goals. I write in opposition to HB638 and SB624, bills that place undue burden on the owners of existing lawfully made firearms, including those owned for the purpose of self-defense in the home as well as adds contradictions to federal law. Maryland residents have always had the right to make their own firearms since before the founding of this nation. Many of the colonial era gunsmiths who made the very arms our nation won independence with were little more than men and women in a shed making their own firearm, much like today's firearm enthusiasts making their own firearms. This bill also serves to add yet another opportunity for selective enforcement in a time when police reform has taken front and center stage, all in the idea of an over-hyped threat of home manufactured firearms potentially being used in crimes.

### **Serial Numbers**

The majority of my home manufactured firearms are polymer framed firearms with a metal plate molded into the plate for identification. With the small real estate of these plates I have stamped unique serial numbers for my own use and for registration with Maryland State Police (in the case of handguns) in case of loss, theft, or an insurance claim in case they are destroyed in a disaster. This bill, however, would require I engrave my "full legal name" as well as my city on this small plate in addition to the serial number that already takes up the entire space for engraving. This contrasts to existing federal law (ATF regulations, 27 C.F.R. 497.92(a)(1)(ii)(C)) require, for a domestically made firearm, "your name (or recognized abbreviation)". These same federal regulations also allow the manufacturer to use a "recognized abbreviation" for a city and allows information to be "engraved, casted, stamped (impressed) or placed on the frame, receiver or barrel." This is much easier to comply with given the extra real estate on the firearm when using these federal regulations that current manufacturers are held to when compared to the proposed regulation that would require I fit my full

legal name, city of residence, and serial number on a metal plate that measures less than one square inch.

### **The marking requirements would be prohibitively expensive**

These extremely technical marking requirements are not only traps for those who are unwary, but they require fine engraving possible only with specialized, computer controlled engraving/machining equipment costing thousands of dollars. Take, for example, the products made by Able Engravers (<https://www.able-engravers.com/computerized-machines.htm>). Their least expensive offering that could physically fit a firearm receiver starts at \$6,500 (<https://www.able-engravers.com/de-3.htm>) for the machine itself, not taking into account the expense of the software to control the device.

The way I marked my home manufactured firearms was with a set of steel letter and number punches costing under \$50. However, these markings do not comply with the proposed bill in that they do not include my city of residence or full legal name. Only the serial number that I registered with Maryland State Police. This marking already stands to create a record with the State Police establishing the appearance, serial number, make, model, and caliber of my firearms, but under the wording of the proposed bill I would be afoul of the law since there is no room to further engrave or stamp more information.

### **The bill is ambiguous**

The bills define an “unfinished frame or receiver” to mean “a product that is intended or designed to serve as the frame or receiver, including the lower receiver, of a firearm, but is in an unfinished state of manufacture.” The bills also define “unfinished frame or receiver” as including (but is not limited to) “a blank, casting, or machined body that requires modification, such as machining, drilling, filing, or molding, to be used as part of a functional firearm.” These definitions are ambiguous in nature since the wording would also cover something as “unfinished” as a block of metal without a single step of machining or milling applied. While I highly doubt Maryland State Police will be dispatched to all of the metal suppliers and materials stores in the state of Maryland, all of these facilities would house pieces of metal that fall under the definition of an “unfinished frame or receiver” per the bill text.

To show how I, as an average Maryland resident, would be effected by this ambiguous wording, since I enjoy 3D printing and woodworking, would a spool of unused 3D printing filament or a block of rough wood constitute an “unfinished firearm receiver” under the text of this bill? Yes it would. As would the steel pipe that carries natural gas to my homes appliances since one could fashion it into a firearm receiver. The bill doesn’t take into account the intent of the end user and I feel this is a fatal oversight that will lead to innocent people being charged for possessing chunks of metal and plastic with zero intent to create a firearm and serves to add yet another opportunity for selective enforcement, arrest, and prosecution in a time when police reform has taken front and center stage.

### **The question of costs and why someone would want to make their own gun**

Many firearm makers in the state of Maryland have taken to customizing and making their own firearms. Be it for tailoring to individual needs, making an otherwise out of production firearm where costs of an original copy are a tremendous burden, or simply for the pride and satisfaction of making something with your own two hands and the know-how to work with them. Make no mistake, there is value not only in individual parts, but also in the time and effort that goes into the making of the gun. This bill threatens to deprive Maryland residents of property, not only the value of materials but the value of time invested, sometimes many times over in the case of serious collectors.

Cost arguments aside, I have been a firearm owner for a few years now, the clear message I've received from bills like this is one of disdain and animosity toward those with an interest in owning a firearm for self defense, sport shooting, or hunting. This bill is no different, the bill is arbitrarily picking the origin of a firearm and attempting to deprive Maryland residents of their property with no justification and no compensation for their hard work, time, and materials.

The Do-It-Yourself attitudes that have become prevalent in our culture, be it home gardening, working on your own automobile, or even brewing your own fine wine or craft beer, also exist in the firearm community. Many Maryland residents like to tailor the things they use. In the case of a firearm, that thing is used for anything from self defense, hunting, or competition shooting. If the store doesn't provide it or charges unreasonably for it, they may wish to make it themselves. Take for instance, the case of me trying to find just the right grips for a handgun I enjoy shooting. I purchased a very nice CZ-75 handgun from a Maryland gun dealer, went through the MD State Police 77R process, but found when shooting that the grips simply didn't fit my hands or grip very well. Due to the company designing the handgun to fit a diverse base of customers, an active aftermarket exists for grip panels fitting this off the shelf gun. In essence, however, it's a guess and test system for what overpriced piece of plastic will fit your hands the best when it's bolted to the grip of the handgun. As I have a fair background in Computer Aided Design (CAD) and 3D printing, I decided to design and print grip panels for this handgun until I arrived on ones that fit my hand and afforded me the best grip, control, and accuracy with that firearm. Commercial grip panels for this firearm are essentially \$50-75 pieces of plastic, imagine having to try three different sets before you find one that fits you.

Lets take another example of why one might want to build their own firearm. In the case of Glock brand handguns, a common complaint is the ergonomics of the grip not fitting most hands very well. One option is to buy the Glock handgun, send it off to a custom gunsmith, wait weeks or even months, and pay in upwards of \$1,000 to have a handgun that fits your hand well. Another option is to manufacture your own. In the case of a Polymer 80 handgun frame, the ergonomic enhancements are already there from the factory but you still have to use commercial, off the shelf, Glock brand parts. The frame itself is where you must do the manufacturing yourself. It would be a violation of federal law to manufacture a firearm for another person, after all, so the burden of manufacture is on you, the ultimate owner of the firearm. When all is said and done, a handgun manufactured on a milling machine (often costing upwards of \$10,000 for even a used machine) will cost about \$650. Cheaper than the custom shop option, but still more expensive than an off the shelf Glock costing approximately \$400-500. Once again, the purpose of manufacturing this handgun yourself can be summarized with cost savings, ergonomics, and satisfaction in knowing *you* made the firearm you're depending on.

**What does this bill mean to furthering the interest of public safety?**

The rationale for this bill is weak, the only people who would comply are those who actively follow developments in Maryland law and have an interest in staying on the right side of the law. Criminals, by definition, do not follow these laws and will continue to ignore them. This law will not hurt criminals, but only those who chose to engineer firearms to meet their specific interests and needs, all while these Maryland residents did painstaking research into state and federal law to ensure they don't violate existing laws.

For these reasons, I must urge you give an unfavorable report to this bill. If it were enacted into law, the State will be prosecuting inevitable violations by otherwise law-abiding citizens of Maryland, destroying reputations and inflicting legal and economic ruin on these individuals, all for continuing to own a firearm that was legal the night before. Jobs will be lost, security clearances revoked, and families broken. Whatever public safety rationale is hollow, as criminals aren't going to invest the time, research, and effort into manufacturing their own firearm when a stolen handgun can be purchased in a back alley of Baltimore. Instead of muzzling the creativity, skill, and curiosity of Maryland residents by taking their property, it would better serve public interest to instead focus on those who have demonstrated a willful disregard for the lives and safety of others, the very people harming innocent people right now.

Sincerely yours,



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