

# Ghost Guns

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*In May 2013, an American law student, through his company, Defense Distributed, posted instructions online for making a gun with a 3D printer. The instructions were downloaded at least 100,000 times in a matter of two days. The horrifying prospect of the rapid proliferation of untraceable weapons that could evade metal detection—“ghost guns”—unleashed an immediate government reaction that is still playing out. In the short history of 3D-printed guns, government documents present a complex and evolving picture of the interplay among the three branches of government and between the states and federal government. Initially, the U.S. State Department tapped export control regulations to force Defense Distributed to take the instructions off its webpage. A long, complex legal battle ensued. By 2018, with a new presidential administration in place, the State Department abruptly stopped opposing the online posting of 3D-printed gun instructions. With the State Department and Defense Distributed suddenly aligned, twenty state attorneys general took up the legal fight against 3D-printed guns. At the collective states’ request, a federal court issued a temporary restraining order and then a preliminary injunction to keep the 3D-printed gun instructions off the internet, but the case is ongoing. Meanwhile, bills have been introduced in Congress to criminalize the online publication of instructions for 3D-printed guns, and some states are pursuing their own legislative measures against 3D-printed guns. This article discusses the timeline of the story and the key legal and political issues at play.*

In May 2013, an American law student named Cody Wilson successfully test fired a 3D-printed handgun and proceeded to publish the computer-assisted design (CAD) files online through his business, Defense Distributed.<sup>1</sup> These instructional files were downloaded at least 100,000 times in a mere two days, at which point the U.S. State Department tapped export control regulations to force Defense Distributed to take the instructions off its webpage.<sup>2</sup> A long, complex legal battle proceeded regarding Wilson’s rights to publish such information online, which eventually morphed into the State Department and Defense Distributed actually becoming co-defendants in the matter.<sup>3</sup> To date, the issues are still not settled. Meanwhile,

bills have been introduced in Congress to criminalize the online publication of instructions for 3D-printed guns, and some states are pursuing their own legislative measures as well. These guns have become known as “ghost guns” because of their ability to be printed without any supplemental metal parts or a serial number, and therefore without government or any other detection.

## Ghost Guns—The Story

Homemade guns are not new, and 3D-printing technology has been around for a while. For better or worse, it was only a matter of time until someone combined the two ideas effectively. A Texas law student and self-proclaimed “crypto-anarchist” named Cody Wilson and his friend John were the first to successfully test fire a firearm fully fabricated by a 3D printer on May 6, 2013.<sup>4</sup> While others had purported earlier success, all efforts had thus far required a supplemental internal metal piece in order to be fully functional. Wilson’s version did not require any metal. This was groundbreaking, and he wanted share it with others. Doing so, it turns out, has not been as easy as he had hoped.

Wilson immediately published the blueprints for his 3D-printed gun on his business’s website, Defense Distributed.<sup>5</sup> The material proved enormously popular. As previously mentioned, the blueprints had already been downloaded over 100,000 times by the time the State Department stepped in two days later and required Wilson to take the blueprints down from the Defense Distributed website, citing the Arms Export Control Act (AECA) and the International Traffic in Arms Regulations (ITAR).<sup>6</sup> At the time, there was a flurry of attention from the news media about Wilson’s invention and the government response, but the letter itself was not public.<sup>7</sup>

## The AECA, USML, ITAR, and the DDT—A World of Acronyms

The AECA is a federal statute that authorizes the president to govern the import and export of defense articles and services on a United States Munitions List (USML) and to promulgate

regulations concerning the same. Pursuant to this authority, the president validly delegated this authority to the State Department, which in turn promulgated the ITAR. The State Department's Directorate of Defense Trade Controls (DDTC) administers these regulations. Any defense articles on the USML cannot be legally exported without a license issued by the DDTC. If there is doubt as to whether an item falls under the jurisdiction of these regulations, a vendor/exporter may file a "commodity jurisdiction" request with the DDTC, which makes a determination about the item.<sup>8</sup>

Among other things, the ITAR specifically restrict the export of "'technical data recorded or stored in any physical form, models, mockups, or other items that reveal technical data directly relating to items' on the USML."<sup>9</sup> According to the State Department's letter, blueprints for 3D-printed guns falls into this category of technical data. Consequently, as outlined in the State Department's letter, Defense Distributed would need to follow the commodity jurisdiction request process to seek approval before posting the blueprints online.

It is important to note that while the State Department letter required Defense Distributed to take down all blueprints for 3D-printed guns from their website pending commodity jurisdiction review—if Defense Distributed chose to request such review—removal of the blueprints from the internet did not preclude Defense Distributed from disseminating the 3D-printing plans by other means. This is because the AECA and ITAR regulations only governed the international dissemination of the information, not domestic distribution. Defense Distributed was and still is free to sell and disseminate their 3D-printing blueprints by other means, as long as it is domestic.<sup>10</sup>

## The Court Battle Begins

The ghost guns narrative quieted down for a couple of years after the State Department's action in 2013. Some legislative measures were introduced, but no significant legislation emerged at the federal level.<sup>11</sup> It was reported that the Department of Homeland Security circulated a bulletin to federal and state law enforcement warning about the dangers of 3D-printed guns and expressing doubt about whether the government could effectively limit access, but this document was not made public.<sup>12</sup> Behind the scenes, Wilson petitioned the State Department for approval to post his controversial material online, but he was denied.

Then, in 2015, two years after posting the instructions online and then taking them down, Wilson and Defense Distributed finally turned to the courts for relief. They filed a lawsuit against the State Department in Texas, seeking a declaratory judgment that the State Department's interpretation of the

export control regulations was unconstitutional.<sup>13</sup> The main thrust of Defense Distributed's argument was that the State Department's prohibition on Defense Distributed violated the First, Second, and Fifth Amendments of the U.S. Constitution. More specifically, Defense Distributed argued that the prohibition was (a) an unconstitutional prior restraint on protected First Amendment speech; (b) a violation of the right to bear arms, which Defense Distributed argued inherently includes the right to acquire or make arms; and (c) the prepublication "review" requirement on Defense Distributed's blueprints was vague and overbroad, and the government's untimely review of continued publication approval requests constituted a violation of the Fifth Amendment's Due Process Clause.<sup>14</sup>

After filing this federal court action, Defense Distributed moved for a preliminary injunction against the State Department to stop it from using the ITAR regulations to block the posting of 3D-printed gun blueprints.<sup>15</sup> The district judge denied this request, and Defense Distributed appealed that determination to the U.S. Court of Appeals for the Fifth Circuit.<sup>16</sup> The Fifth Circuit agreed with the district court and sided with the government.<sup>17</sup> Unhappy with this result, Defense Distributed appealed to the U.S. Supreme Court, which denied review of the matter.<sup>18</sup> The government was on a winning streak, but the underlying case was still not over, and the parties began to prepare for trial before the district court for a determination on whether the State Department's prohibition on Defense Distributed is constitutional.

Meanwhile, states had begun to take action against 3D-printed guns. In 2016, the California legislature enacted a statute requiring anyone who builds a gun to obtain an identification number from the U.S. Department of Justice.<sup>19</sup> This went into effect July 1, 2018. By that point in time, Donald J. Trump had been inaugurated as the forty-fifth president of the United States.

At first, the State Department under President Trump continued to vigorously defend itself in the litigation brought by Defense Distributed. In April 2018, the State Department filed a motion to have the case dismissed on the ground that Defense Distributed's constitutional arguments failed as a matter of law.<sup>20</sup> But then, just a few weeks later, the State Department and Commerce Department quietly published proposed rules which, while they did not specifically mention or name 3D-printed guns, would have the effect of excluding them from export regulations.<sup>21</sup> This would render null and void the State Department's May 2013 letter to Defense Distributed that the State Department had so far fought hard to successfully have upheld. Even more astonishingly, on June 29, 2018, the State Department "surprised the plaintiffs by suddenly offering

them a settlement with essentially everything they wanted.”<sup>22</sup> The settlement became public the day after the notice period expired on the State Department and Commerce Department proposed rule changes.<sup>23</sup> The State Department’s settlement with Defense Distributed in Texas litigation is an inexplicable reversal of its prior interpretation of export regulations. In effect, this settlement would allow Defense Distributed to publish ghost gun printing plans as of August 1, 2018. On top of this strange change of tune, the State Department also agreed to pay \$40,000 of Defense Distributed’s legal fees.<sup>24</sup>

## Checking and Balancing

What had been until then a relatively slow-moving narrative blew up on July 31, 2018, the day before Defense Distributed’s internet ban was to be lifted. That day saw activity from all three branches of the federal government, and several states as well.<sup>25</sup>

First, a federal court in Seattle, Washington, at the request of a group of state attorneys general, issued a Temporary Restraining Order (TRO) against Defense Distributed, once again blocking internet publication of the ghost gun blueprints. This marked the initiation of another round of litigation for Defense Distributed that remains ongoing. In short, the state attorneys general have taken up the mantle in the battle against 3D-printed guns, and are now fighting Defense Distributed and, oddly enough, the U.S. State Department. The states are arguing that the manner in which the State Department reversed itself on its export control regulations violated the Administrative Procedures Act because the agency failed to provide thirty days’ advance notice to Congress.<sup>26</sup> In addition, the states contend that the State Department’s newfound tolerance for the online publication of 3D-printed gun plans infringes on states’ rights to exercise police power pursuant to the Tenth Amendment of the U.S. Constitution.<sup>27</sup> On August 27, 2018, the court converted the TRO into a preliminary injunction against Defense Distributed.<sup>28</sup> Therefore Defense Distributed may not publish their 3D-printed firearm CAD files online pending the resolution of the litigation in Washington.

Also on July 31, 2018, the same day the TRO was issued, Senate Bill 3304, the 3D Printed Gun Safety Act of 2018 was introduced in Congress. That bill proposed amending Title 18 § 44 of the United States Code to prohibit the online “publication of 3D printer plans for the printing of firearms, and for other purposes.”<sup>29</sup> The 3D Printed Gun Safety Act of 2018 was introduced to the House a few days later on August 3, 2018.<sup>30</sup> On August 1, 2018, New York’s Senate introduced a bill that would make it illegal to distribute instructions for ghost guns.<sup>31</sup> The New York State bill, like both federal bills from 2018, died

in committee but has been reintroduced in the current legislative session.<sup>32</sup>

Adding to the action on July 31, 2018, President Trump weighed in on the issue that same day, issuing a tweet that read in full, “I am looking into 3-D Plastic Guns being sold to the public. Already spoke to the NRA, doesn’t seem to make much sense!”<sup>33</sup> It is difficult to discern much from this short message. It would seem that President Trump harbors concerns about 3D-printed guns, but it is not clear what his stance is on the posting of instructions online for them. Moreover, it is unclear whether President Trump knew of his State Department’s about-face on the issue. In any event, despite coming straight from the president, the tweet certainly fails to shed any light on the State Department’s export control regulation strategy or the reasons for its recent reversal on the issue of online plans for 3D-printed guns.

## Conclusion (Or Not)

While the legal issues embedded in this currently unsettled dispute are interesting, their consequential outcomes are unknown. Some argue that this legal battle is only prolonging the inevitable, because illegal online publication of pretty much anything is unstoppable.<sup>34</sup> Moreover, Defense Distributed is still able to disseminate the controversial 3D printing plans by other means, and so it can be argued that the horse is already out of the barn. While these views and questions may have merit, the current legal dispute is exploring novel legal issues that could set precedent for future, analogous situations, and it is buying Congress and other government entities time to figure out how to better address the dangers that widespread 3D-printed guns might pose. This includes perhaps focusing on regulation of ammunition and gun ownership, rather than the firearms themselves. Penalizing unlawful gun ownership instead of trying to track the now infamous ghost guns may prove more effective.

At any rate, even as this story marches forward, as a narrative of government documents the ongoing ghost gun saga highlights the important roles played by each branch of government and the relevance of different levels of government. The issue here is quite narrow: whether someone may post online instructions for making a 3D-printed gun. But the government response is fascinatingly far-ranging. Much of the information now publicly available only came to light as a result of court cases or diligent efforts by journalists. Yet questions remain unanswered. It will be interesting to see, as the case continues to unfold, what additional government documents will surface and what they will add to the story and shape its conclusion.

## References and Notes

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2. German Lopez, "The Battle to Stop 3D-Printed Guns, Explained," *Vox*, updated August 29, 2018, <http://tinyurl.com/y9kfkzqv>; First Amended Complaint for Declaratory & Injunctive Relief at Ex. 5 (Letter from Glenn E. Smith, Chief, Enforcement Division, Office of Defense Trade Controls Compliance, U.S. Dep't of State to Cody Wilson, Defense Distributed (May 8, 2015)), *Washington v. U.S. Dep't of State*, No. 18-cv-1115 (W.D. Wash. filed July 30, 2018).
3. *Washington v. U.S. Dep't of State*, 315 F. Supp. 3d 1202 (W.D. Wash. 2018) (order granting temporary restraining order).
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6. Payne, "Texas Company Cleared to Put 3D-Printed Gun Designs Online"; First Amended Complaint for Declaratory & Injunctive Relief at Ex. 5.
7. Emi Kolawole, "Plans for 3D-Printed Gun Downloaded 100,000 Times; State Department in Contact with Defense Distributed," *Washington Post*, May 9, 2013, <http://tinyurl.com/yxgr3y3f>.
8. U.S. Library of Congress, Congressional Research Service, *Legal Sidebar*, 1–2.
9. U.S. Library of Congress, Congressional Research Service, *Legal Sidebar*, 1.
10. Lopez, "The Battle to Stop 3D-Printed Guns, Explained."
11. Susan Davis, "Congress Extends Plastic Gun Ban," *USA Today*, December 9, 2013, <http://tinyurl.com/ytytp8je>. In 2013, Congress extended the Undetectable Firearms Act for another ten years, but made no enhancements to specifically address 3D-printed guns. (However, some local jurisdictions have been more proactive. In late 2013, Philadelphia enacted an ordinance that made it illegal to use a 3D printer to make a gun unless you have a federal license to manufacture firearms. Phila., Pa., Code § 10-2000).
12. Alexis Kleinman, "Homeland Security Is Worried Limiting 3D-Printed Guns May Be Impossible: Report," *Huffington Post*, May 24, 2013, <http://tinyurl.com/y54bylup>.
13. Complaint, *Def. Distributed v. U.S. Dep't. of State*, 15-cv-372 (W.D. Tex. filed May 6, 2015).
14. Complaint, *Def. Distributed v. U.S. Dep't. of State*, 15-cv-372 (W.D. Tex. filed May 6, 2015).
15. *Def. Distributed v. U.S. Dep't of State*, 121 F. Supp. 3d 680 (W.D. Tex. 2015) (order denying preliminary injunction).
16. *Def. Distributed v. U.S. Dep't of State*, 838 F. 3d 451 (5th Cir. 2016).
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19. Cal. Penal Code §§ 11106, 16520, 23910, 29180-84, 30105.
20. Defendants' Motion to Dismiss Second Amended Complaint, *Def. Distributed v. U.S. Dep't of State*, 15-cv-372 (W.D. Tex. filed Apr. 6, 2018).
21. U.S. Department of State, Proposed Rule, "International Traffic in Arms Regulations: U.S. Munitions List Categories I, II, and III," 83 *Federal Register* 24198-24205 (May 24, 2018), <http://tinyurl.com/y63ea3r2>.
22. Andy Greenberg, "A Landmark Legal Shift Opens Pandora's Box for DIY Guns," *Wired*, July 10, 2018, <http://tinyurl.com/yd55hq3>.
23. First Amended Complaint for Declaratory & Injunctive Relief at ¶ 63, *Washington v. U.S. Dep't of State*, No. 18-cv-1115 (W.D. Wash. filed July 30, 2018).
24. Lopez, "The Battle to Stop 3D-Printed Guns, Explained."
25. The litigation discussed in the following paragraph was initiated on July 30, 2018, complaint filed in Federal court in the Western District of Washington. At this time, there were eight states and the District of Columbia party to the suit. Later, by the time that Motion for Summary Judgment was filed in February 2019, there were nineteen states and the District of Columbia.
26. *Washington v. U.S. Dep't of State*, 315 F. Supp. 3d 1202 (W.D. Wash. 2018) (order granting temporary restraining order); First Amended Complaint for Declaratory & Injunctive Relief at ¶ 231, *Washington v. U.S. Dep't of State*, No. 18-cv-1115 (W.D. Wash. filed July 31, 2018).
27. *Washington v. U.S. Dep't of State*, 315 F. Supp. 3d 1202 (W.D. Wash. 2018) (order granting temporary restraining

- order); First Amended Complaint for Declaratory & Injunctive Relief at ¶¶ 242-45, *Washington v. U.S. Dep't of State*, No. 18-cv-1115 (W.D. Wash. filed July 30, 2018).
28. *Washington v. U.S. Dep't of State*, 318 F. Supp. 3d 1247 (W.D. Wash. 2018) (order granting preliminary injunction).
  29. 3D Printed Gun Safety Act of 2018, S. 3304, 115th Cong. (2018).
  30. 3D Printed Gun Safety Act of 2018, H.R. 6649, 115th Cong. (2018). Neither this act nor its counterpart, S. 3304, made it past introduction. However, the subject of 3D guns is still being addressed in the 116th Congress. On February 8, 2019, the House introduced H. R. 1134 which would disallow the President to unilaterally remove anything from the United States Munitions List, as published on August 31, 2017 (including “technical data” under which category 3D-printed guns fall). On February 12, 2019 the Senate introduced S. 459, the Stopping the Traffic in Overseas Proliferation of Ghost Guns Act.
  31. New York Congress, Senate, Relates to the manufacture, assembly, possession, license and disposal of ghost guns, S. 9145, 2017-2018 Leg. Sess. (N.Y. 2018).
  32. New York Congress, Senate, Relates to the manufacture, assembly, possession, license and disposal of ghost guns, S. 2143, 2019-2020 Leg. Sess. (N.Y. 2019). Other state legislatures are also considering bills to outlaw ghost guns, e.g., Massachusetts Gen. Court, S. 1361, 191st Gen. Court (Mass. 2019); Rhode Island Gen. Assembly, S. 464, Jan. 2019 Sess. (R.I. 2019) (being studied by Senate Judiciary Committee).
  33. Donald J. Trump (@realDonaldTrump), “I am looking into 3-D Plastic Guns being sold to the public. Already spoke to NRA, doesn't seem to make much sense!” Twitter, July 31, 2018, 5:03 a.m., <http://tinyurl.com/y3tsukjx>.
  34. Lopez, “The Battle to Stop 3D-Printed Guns, Explained.”