

THE STATE DEPARTMENT CAN GUN DOWN 3-D PRINTED
FIREARMS

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ABSTRACT

In 1976, Congress enacted the Arms Export Control Act (“AECA”), giving the President broad power to control imports and exports of defense articles. At the time, defense articles included any “technical data” relating to weapons, such as the manufacturing blueprints of a firearm. Generally, this technical data was only in the hands of weapon manufacturers. After forty years of technological advances, however, this “technical data” can now be accessed by anyone in the world in a matter of seconds. Thanks to 3-D printing, a person can use this data to personally manufacture a fully functional plastic weapon within a few hours, for just a few hundred dollars. This same plastic weapon could slip past an airport security metal detector without triggering an alarm. Within a few minutes, a user could melt the weapon down to destroy any evidence of its use.

This article explores the limits that the First and Second Amendments place on regulating 3-D printed weapons. Additionally, this article explores how the current regulations would pass a Constitutional challenge based on the First or Second Amendment.

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INTRODUCTION

Technological advances have given rise to a new industrial age: 3-D printing. With 3-D printing, people can make parts for all sorts of products with the touch of a button.¹ 3-D printing has removed the skill and expertise typically required for manufacturing, allowing anyone with a computer and 3-D printer to produce a part in the comfort of their home.² The flexibility and low cost of 3-D printing has led to many improvements in society, such as in the medical field where custom made 3-D printed casts can be perfectly

¹ *What is 3D printing?*, 3DPRINTING.COM, <http://3dprinting.com/what-is-3d-printing/> (last visited Jan 2, 2017).

² *Id.*

fitted to a patient's body.³

While many consider the changes brought on by 3-D printing to be beneficial, some advances are more controversial, such as 3-D printed firearms.⁴ In 2013, Cody Wilson of Defense Distributed fired the first gun made from nearly all 3-D printed parts.⁵ Within a few weeks, Defense Distributed posted the design model online, which was downloaded over 100,000 times in two days.⁶ The model allowed anyone in the world with the right 3-D printer to create a fully functional firearm within a few hours.⁷

Concerned over regulatory issues, the State Department quickly stepped in and required the model be immediately taken offline.⁸ The State Department asserted that Defense Distributed needed a license under the International Traffic in Arms Regulations ("ITAR") to be able to post their gun models online for download.⁹

Defense Distributed contested the State Department's position and argued that the State Department infringed on two discrete Constitutional rights.¹⁰ First, Defense Distributed believed the model available online was speech, and thus, the State Department

³ Sarah Buhr, *A 3D Printed Cast That Can Heal Your Bones 40–80% Faster*, TECHCRUNCH (May 29, 2014), <https://techcrunch.com/2014/05/29/a-3d-printed-cast-that-can-heal-your-bones-40-80-faster/>.

⁴ Adam Gabbatt, *Shots fired from world's first 3D-printed handgun*, GUARDIAN (May 6, 2013), <https://www.theguardian.com/world/2013/may/06/3-handgun-fired-cody-wilson>.

⁵ *Id.*

⁶ Andy Greenberg, *3D-Printed Gun's Blueprints Downloaded 100,000 Times In Two Days (With Some Help From Kim Dotcom)*, FORBES (May 8, 2013), <https://www.forbes.com/sites/andygreenberg/2013/05/08/3d-printed-guns-blueprints-downloaded-100000-times-in-two-days-with-some-help-from-kim-dotcom/#17f834db10b8>.

⁷ *See id.*

⁸ Andy Greenberg, *State Department Demands Takedown Of 3D-Printable Gun Files For Possible Export Control Violations*, FORBES (May 9, 2013), <https://www.forbes.com/sites/andygreenberg/2013/05/09/state-department-demands-takedown-of-3d-printable-gun-for-possible-export-control-violation/#401b0cf375ff>.

⁹ *See id.*

¹⁰ Andy Greenberg, *3-D Printed Gun Lawsuit Starts the War Between Arms Control and Free Speech*, WIRED (May 6, 2015), <https://www.wired.com/2015/05/3-d-printed-gun-lawsuit-starts-war-arms-control-free-speech/>.

restrictions had to overcome a First Amendment challenge.¹¹ Second, Defense Distributed believed the State Department's restrictions improperly regulated guns for American citizens, and thus, implicated the Second Amendment.¹²

This article explores the arguments of both Defense Distributed and the State Department. First, this article examines the background behind 3-D printed firearms. Second, the article explores the case law on First and Second Amendment challenges as they relate to 3-D printed firearms. Third, the article explores the State Department's arguments that its regulations were constitutionally sound, and how the State Department's regulations overcame the First and Second Amendment challenges. Finally, the article discusses whether the current regulations are adequate, or if they need to be expanded.

I. BACKGROUND

A. *The Basics of 3-D Printing*

3-D printing is an additive manufacturing process that creates three-dimensional solid objects from a digital file.¹³ The printer creates an object by repeatedly laying down successive layers of material.¹⁴ Each successive layer is a cross-section of a three-dimensional digital object.¹⁵ The object is finished when the printer lays down every cross-section.¹⁶

To print an object, users must first create or download a three-dimensional model of the desired object she would like to print.¹⁷ These three-dimensional models are known as computer-aided design models, or CAD models.¹⁸ Next, the CAD model needs to be prepared for printing by determining each layer needed for

¹¹ *Id.*

¹² *Id.*

¹³ *What is 3D printing?*, *supra* note 1.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*; see generally <https://grabcad.com/library/software/solidworks> for a website that offers CAD files.

¹⁸ *Id.*

printing.¹⁹ Once the model is prepared and uploaded, the printer begins laying down material.²⁰

B. What it Takes to Print the Liberator

The Liberator is the first fully functional pistol assembled from nearly all 3-D printed parts.²¹ Only two out of eighteen parts are not plastic, which is for functionality and legal reasons.²² The creator of the Liberator, Cody Wilson, uploaded a printable CAD model of the pistol online, along with instructions for how to assemble the pistol.²³ With the CAD model online, all that is required to make the gun is a 3-D printer, 3-D printing ink, a firing pin, and the downloaded model.²⁴ To make the gun legal, the design also requires placing a six-ounce steel block into the trigger guard so the gun comports with The Undetectable Firearms Act of 1988.²⁵

C. Benefits of 3-D Printed Firearms

Creating firearms with a 3-D printer lowers the access barrier to obtaining a gun.²⁶ Prior to 3-D printing, a person looking to build their own firearm from scratch would need to know how to use the

¹⁹ *Id.*

²⁰ *Id.*

²¹ Kelsey D. Artherton, *How the world's first 3-D printed gun works*, POPULAR SCIENCE, <http://www.popsci.com/technology/article/2013-05/worlds-first-fully-3-d-printed-gun-here> (last visited Jan 2, 2017).

²² *Id.*

²³ Sebastian Anthony, *The Liberator: The first downloadable 3D-printed gun gets test fired*, EXTREME TECH, <https://www.extremetech.com/extreme/155084-the-liberator-the-first-downloadable-3d-printed-gun-gets-test-fired> (last visited Jan 2, 2017) (pending litigation, the design has been removed from online).

²⁴ John Biggs, *What you need to know about the Liberator 3D-Printed Pistol*, TECHCRUNCH, <https://techcrunch.com/2013/05/06/what-you-need-to-know-about-the-liberator-3d-printed-pistol/> (last visited Jan 2, 2017).

²⁵ See 18 U.S.C. § 922(p).

²⁶ Clay Dillow, *Q+A: Cody Wilson of the wiki weapon project on the 3-D printed future of firearms*, POPULAR SCIENCE, <http://www.popsci.com/technology/article/2012-12/qa-cody-wilson-wiki-weapons-project-3-d-printed-future-firearms> (last visited Jan 2, 2017).

machinery required for gunsmithing, like a mill or lathe.²⁷ But with 3-D printing eliminating the difficulty to “machine” parts for a firearm, a person now needs only to know how to download and print a file on a 3-D printer to own a gun.²⁸

3-D printing firearms are also opening the door to technological innovation.²⁹ To some, 3-D printed weapons seemed like science fiction a few years ago.³⁰ Now that the first 3-D printed weapons have arrived, people are beginning to ask where else this technology can take us.³¹ Allowing 3-D printed weapons to continue to grow unrestricted may cause others to push the boundaries of this technology through further development and innovation.³²

D. The State Department’s Concerns with 3-D Printed Firearms

The State Department’s concerns surrounding 3-D printed firearms stemmed from what Cody Wilson believes is one of the greatest benefits of the technology: lowering the access barrier to owning a gun.³³ Placing the designs online allows anyone with an internet connection and 3-D printer to download the files and begin manufacturing weapons.³⁴ While this technology improves access to firearms, critics focus on the fact that these weapons can be manufactured in a way that allows for the weapon to be undetectable by conventional security measures.³⁵ This scenario could allow a person to sneak past an airport security checkpoint with a gun intact.³⁶

The State Department is concerned not only with the

²⁷ *Id.*

²⁸ *Id.*

²⁹ Clay Dillow, *supra* note 26.

³⁰ Andy Greenberg, *This is the world’s first entirely 3D-Printed gun*, FORBES, <http://www.forbes.com/sites/andygreenberg/2013/05/03/this-is-the-worlds-first-entirely-3d-printed-gun-photos/#39038c816c18> (last visited Jan 2, 2017).

³¹ Clay Dillow, *supra* note 26.

³² *See id.*

³³ Brief for Federal Appellees at 13, *Defense Distrib. v. United States Dep’t of State*, 838 F.3d 451 (5th Cir. 2016) (No. 15–50759), 2016 WL 614088 at *13.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *See id.*

implications 3-D printed weapons will have in the United States, but also in countries abroad.³⁷ The State Department has stated that 3-D printed CAD models of firearms are “defense articles” and placing a downloadable model online is an act of exporting the model abroad.³⁸ With Congress granting the President authority to regulate firearm exportation, the State Department believes anyone who wants to place CAD models of a firearm online will first need an export license.³⁹

II. INFRINGEMENT OF RIGHTS

The regulation of 3-D printed firearms implicates First Amendment rights. Congress granted the President authority to regulate the export of defense articles and services with the Arms Export and Control Act.⁴⁰ These defense articles could include 3-D printable CAD models of firearms, which is where the free speech issues arise. Restricting CAD models from being spread arguably restricts speech, as CAD models are a form of technical information. Section A will explore the First Amendment’s protective reach into 3-D printed firearms.

Second Amendment rights are also implicated when attempting to regulate 3-D printed firearms. Individual rights for gun ownership were established in *District of Columbia v. Heller*⁴¹ and *McDonald v. Chicago*.⁴² However, with 3-D printed firearms emerging shortly after these decisions, the law has yet to clarify the extent of the individual rights as applied to 3-D printed weapons.⁴³ Section B will explore the Second Amendment’s protective reach into 3-D printed firearms.

³⁷ *See id.* at 17.

³⁸ *Id.* at 13.

³⁹ *Id.*

⁴⁰ 22 U.S.C. § 2778 (2012).

⁴¹ 554 U.S. 570 (2008).

⁴² 562 U.S. 742 (2010).

⁴³ *See* Michael L. Smith, *The Second Amendment Implications of Regulating 3d Printed Firearms*, 31 SYRACUSE J. SCI. & TECH. L. REP. 60 (2015).

A. First Amendment

The First Amendment protects different types of expressions from regulation by the government.⁴⁴ Regulations may violate the First Amendment in primarily two ways: by involving content-based restrictions or prior restraints.⁴⁵ Regulations that impose these restrictions or restraints must pass strict scrutiny in order to be upheld.⁴⁶

Content-based restrictions prevent the government from restricting expression based on message, ideas, or, content.⁴⁷ These restrictions prevent the government from prohibiting the exchange of specific ideas or viewpoints in the marketplace.⁴⁸ To avoid viewpoint discrimination, government regulations must be content-neutral.⁴⁹

Regulations are content-neutral when both the viewpoint and subject matter restrictions are neutral.⁵⁰ Viewpoint neutrality requires that the restriction cannot be aimed at a particular view expressed.⁵¹ Subject matter neutrality prohibits regulations based on a topic of the speech.⁵² A law is content-neutral if it applies to all speech regardless of the message being conveyed.⁵³ Content-neutral laws are generally subject to an intermediate scrutiny test.⁵⁴

What actions constitutes a prior restraint is not completely clear.⁵⁵ Generally, prior restraints on speech are a government order

⁴⁴ U.S. CONST. amend I.

⁴⁵ Anthony M. Masero, *I Came, Itar, I Conquered: The International Traffic in Arms Regulations, 3d-Printed Firearms, and the First Amendment*, 55 B.C. L. Rev. 1291 (2014).

⁴⁶ See *R.A.V. v. City of St. Paul*, 505 U.S. 377 (1992).

⁴⁷ See *Police Dep't of Chicago v. Mosley*, 408 U.S. 92, 95–96 (1972).

⁴⁸ *Simon & Schuster, Inc. v. Members of the N.Y. State Crime Victims Bd.*, 502 U.S. 105, 116 (1991).

⁴⁹ See *Perry Educ. Assn. v. Perry Local Educators' Assn.*, 460 U.S. 37, 45 (1983).

⁵⁰ See *id.*

⁵¹ See *Boos v. Berry*, 485 U.S. 312, 320 (1988).

⁵² See *Carey v. Brown*, 447 U.S. 455 (1980).

⁵³ See *Turner Broad. Sys. v. FCC*, 512 U.S. 622, 643 (1994).

⁵⁴ See *id.*

⁵⁵ See, e.g., CHEMERINSKY ERWIN, CONSTITUTIONAL LAW: PRINCIPLES AND

that forbids a specific communication before the communication is made.⁵⁶ However, even if a government order restricts a message before a person can bring that message, courts seem to shy away from calling the restriction a prior restraint, if the person can bring that message in another forum.⁵⁷ Regardless, prior restraints on speech are the most serious and least tolerable infringements on First Amendment rights.⁵⁸ Any system deemed a prior restraint of expression has a heavy presumption against its constitutional validity.⁵⁹

A classic example of prior restraint is a government licensing scheme that prevents speech from taking place prior to obtaining a license.⁶⁰ In order for licensing schemes to pass a constitutional challenge, the government must have an important reason for licensing, clear standards that virtually eliminate government discretion, and certain procedural safeguards to mitigate the danger of censorship.⁶¹

Regulating 3-D printed firearms implicates First Amendment protections due to the Arms Export and Control Act of 1976.⁶² This act gives the President authority to regulate exports of defense articles.⁶³ Through the International Traffic in Arms Regulations (“ITAR”), the President delegated his authority to the Deputy Assistant Secretary of State for Defense Trade Controls.⁶⁴ Under ITAR, any item deemed a defense article cannot be exported without a license.⁶⁵ Exporting a defense article includes transmitting the article outside of the United States in any form.⁶⁶ If the Deputy Assistant Secretary of State for Defense Trade Controls determines 3-D CAD models for firearms are defense articles under ITAR,

POLICIES 996 (5th ed. 2015).

⁵⁶ See *Alexander v. United States*, 509 U.S. 544, 550 (1993).

⁵⁷ See e.g., *Madsen v. Women’s Health Center*, 512 U.S. 753 (1994).

⁵⁸ *Nebraska Press Assn. v. Stuart*, 427 U.S. 539, 559 (1976).

⁵⁹ *New York Times v. United States*, 403 U.S. 713, 714 (1971).

⁶⁰ *City of Lakewood v. Plain Dealer Publ’g Co.*, 486 U.S. 750 (1988).

⁶¹ Masero, *supra* note 45, at 1302.

⁶² See 22 U.S.C. § 2778.

⁶³ *Id.*

⁶⁴ 22 C.F.R. § 120.1.

⁶⁵ 22 C.F.R. § 120.6.

⁶⁶ 22 C.F.R. § 120.17(a)(1).

anyone wishing to publish the files online would need to first obtain an export license.⁶⁷ Thus, the First Amendment is implicated at two points: designating the CAD models as defense articles and requiring a license to publish the models online.

Though arguments can be made that ITAR's effects on speech are content-based restrictions,⁶⁸ ITAR's effects on 3-D printed firearms will likely be scrutinized as a content-neutral restriction.⁶⁹ ITAR's regulations center on controlling weapon exports; these regulations are not centered on controlling aspects of speech.⁷⁰ Regulations that target conduct but incidentally impinge on speech are required to pass the O'Brien Test set forth in *United States v. O'Brien*.⁷¹ Each of ITAR's regulations will be justified if, under the O'Brien Test: (1) it is within the constitutional power of the Government; (2) it furthers an important or substantial governmental interest; (3) the governmental interest is unrelated to the suppression of free expression; and (4) the incidental restriction on First Amendment freedoms is no greater than is essential to the furtherance of that interest.⁷²

In addition to the content-based challenge, ITAR regulations may also have to pass a prior restraint challenge due to the licensing scheme. If deemed a prior restraint, the licensing scheme must serve an important governmental interest, virtually eliminate official discretion, and provide procedural safeguards against censorship to survive a constitutional challenge.

B. Second Amendment

In *District of Columbia v. Heller*, the Court held that a ban on possessing a handgun at home was a violation of the Second Amendment.⁷³ Shortly after *Heller* was decided, the Court applied

⁶⁷ *See id.*

⁶⁸ *See* *Bernstein v. U.S. Dep't of State*, 945 F. Supp. 1279, 1288 (N.D. Cal. 1996).

⁶⁹ *See* *United States v. Chi Mak*, 683 F.3d 1126, 1135 (9th Cir. 2012).

⁷⁰ *See generally* 22 C.F.R. § 120.

⁷¹ 391 U.S. 367, 377 (1968).

⁷² *Id.*

⁷³ 554 U.S. at 635.

the same standards set forth in *Heller* to the states.⁷⁴ These cases stand for the proposition that the Second Amendment protects an individual's right to own a firearm.⁷⁵

Nevertheless, while there is a right to possess a handgun, this is not an unrestricted right.⁷⁶ The Constitution allows for regulating guns, so long as the regulations do not become an absolute ban on weapons used for self-defense in the home.⁷⁷ Thus, it is possible for a law regulating 3-D printed firearms to pass a Second Amendment challenge.⁷⁸

Although the Supreme Court did not set forth a constitutional test for laws challenged under the Second Amendment, the federal courts of appeals have generally been uniform in their approach to a challenge.⁷⁹ Regulations that are deemed longstanding are presumed not to infringe on Second Amendment rights.⁸⁰ Regulations that do not severely restrict the core right of self-defense are subject to intermediate scrutiny.⁸¹ Regulations that severely restrict the core right of self-defense are subject to strict scrutiny.⁸²

In the case of 3-D printed firearms, regulations limiting access to the CAD models for printing will likely be subject to intermediate scrutiny. As people can still acquire other guns to protect themselves inside a home, regulating 3-D printed firearms will not severely restrict the core right of self-defense. Yet, these regulations will not be deemed longstanding. Because any regulation would not restrict the core right of self-defense and would not be longstanding, a challenge would be subject to intermediate scrutiny. Thus, these regulations will pass a challenge under the Second Amendment if the regulations further an important governmental interest and the means are substantially related to that interest.⁸³

⁷⁴ See *McDonald*, 561 U.S. at 750.

⁷⁵ See *Heller*, 554 U.S. at 577.

⁷⁶ See *id.* at 636.

⁷⁷ *Id.*

⁷⁸ See *id.* at 636.

⁷⁹ Nelson Lund, *Second Amendment Standards of Review in A Heller World*, 39 *FORDHAM URB. L.J.* 1617 (2012).

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ See *United States v. Virginia*, 518 U.S. 515, 570–71 (1996).

III. THE STATE DEPARTMENT'S DEFENSES

The State Department advanced a number of different arguments denying their licensing scheme infringes on First and Second Amendment rights.⁸⁴ This section discusses those arguments advanced on appeal in the Fifth Circuit.

A. *The First Amendment Defenses*

The State Department first asserted its regulations avoid content-based restrictions and prior restraint issues altogether.⁸⁵ The State Department claimed these regulations do not target the ability to express ideas, but rather apply only because the computer files at issue direct a computer to produce firearm components.⁸⁶ In other words, there was no expression taking place because the computers were exchanging information that the user never saw.⁸⁷ Because this content is never examined by a user, the State Department believed a First Amendment assertion was misplaced.

If the court disagreed and were to find a prior restraint due to the licensing scheme, the State Department asserted its scheme properly met the required standards.⁸⁸ First, the State Department asserted that preventing firearm exports from falling into the wrong hands by using a licensing scheme is an important governmental interest.⁸⁹ Next, the State Department asserted there is no ambiguity in the licensing scheme that would lead to undue discretion on behalf of the State Department.⁹⁰ The statute at issue describes the scheme in plain and objective terms, which would offer no room for discretion.⁹¹ Finally, the State Department argued the licensing

⁸⁴ See Brief for Appellees at 13, *Defense Distrib. v. United States Dep't of State*, 838 F.3d 451 (5th Cir. 2016) (No. 15-50759), 2016 WL 614088 at *13.

⁸⁵ *Id.* at 14.

⁸⁶ *Id.*

⁸⁷ See *id.*

⁸⁸ See *id.* at 14-15.

⁸⁹ See *id.* at 14.

⁹⁰ *Id.* at 15.

⁹¹ *Id.*

scheme does not censor the dissemination of scientific ideas.⁹² The State Department asserted the regulations contain exceptions that allow for scientific discourse.⁹³ The State Department further asserted that these exceptions were unnecessary because there is no dissemination of ideas between two people, but rather, two computers.⁹⁴

B. The Second Amendment Defenses

The State Department argued its regulations do not implicate the Second Amendment.⁹⁵ The State Department claimed “nothing in the statute or regulations prevents American citizens from obtaining [CAD] files. . . .”⁹⁶ This claim is centered on the current licensing procedures, which are in place to prevent foreigners from gaining access to firearm blueprints. By denying foreigners access to 3-D printed firearms, this procedure does not stand in the way of American citizens getting access to the firearms, nor does the procedure severely impair any core right of self-defense.⁹⁷ Thus the State Department believed any Second Amendment challenge was misplaced.⁹⁸

Arguing in the alternative, if the Second Amendment is implicated, the State Department asserted the government has an important interest in the export licensing scheme, and that restrictions upon this scheme were justified intrusions on the Second Amendment.⁹⁹ The State Department argued the license restrictions did not impose a burden on anyone from using a handgun in defense of their home.¹⁰⁰ With their interest in regulating arms exports, the State Department contended this interest combined with a very

⁹² *Id.* at 14.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ See Brief for Federal Appellees at 15, *Defense Distrib. v. United States Dep’t of State*, 838 F.3d 451 (5th Cir. 2016) (No. 15–50759), 2016 WL 614088 at *15.

⁹⁶ *Id.*

⁹⁷ See *id.* at 15.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 39.

modest reach into the Second Amendment would pass a challenge under the Second Amendment.¹⁰¹

IV. THE STATE DEPARTMENT'S RESTRICTIONS DO NOT VIOLATE THE FIRST AND SECOND AMENDMENT

The Fifth Circuit did not rule on the merits of the State Departments arguments.¹⁰² However, the Fifth Circuit specifically noted the legal questions presented by the parties were novel, and that the trial court will have to address these questions on remand.¹⁰³ This section covers how the State Department's arguments will hold up against First and Second Amendment challenges.

A. *The State Department's Restrictions Likely Pass a First Amendment Challenge*

Though the State Department's licensing scheme would struggle to pass a prior restraint test under strict scrutiny,¹⁰⁴ the current licensing scheme will likely avoid being deemed a prior restraint. ITAR's regulations do not forbid CAD models from being shared or discussed – the regulations only forbid the models from being exported. In this sense, the licensing scheme doesn't require state approval before any speech takes place; the licensing scheme restricts only one avenue through which the discussion can take place. Courts have been hesitant in the past to call schemes a prior restraint when there are other avenues where the speech can take place. As such, the State Department will likely overcome a prior restraint challenge.

The next challenge the regulation will have to pass is the O'Brien Test. Here, the government has the constitutional power to regulate the exports of firearms. There are a number of important governmental interests being advanced with this regulation, such as national security and complying with treaties. These interests are

¹⁰¹ See *id.* at 40.

¹⁰² *Defense Distrib. v. United States Dep't of State*, 838 F.3d 451, 461 (5th Cir. 2016).

¹⁰³ *Id.* 461.

¹⁰⁴ See *New York Times Co.*, 403 U.S. at 714 (invalidating a prior restraint on speech despite the national security concerns advanced by the government).

unrelated to suppressing speech and any incidental restriction on speech is no greater than what is essential to the furtherance of the interest. Thus, the regulation will pass the O'Brien Test and a First Amendment challenge.

B. The State Department's Restrictions Pass a Second Amendment Challenge

The State Department's restrictions will pass a Second Amendment challenge. Despite the State Department's contentions, the licensing scheme implicates the Second Amendment. However, because the licensing scheme does not target the core right of self-defense in the home, the scheme will only have to survive an intermediate scrutiny test. The governmental interest in national security will be more than enough to pass an intermediate scrutiny test. Thus, a Second Amendment challenge will not bar the licensing scheme.

V. ARE THESE REGULATIONS ENOUGH?

If the ITAR regulations withstand a Constitutional challenge, questions about whether these regulations are doing enough will remain. Currently, Defense Distributed is barred from posting the CAD models online. While online download is likely the preferred way to access the model, it is not the only way. Theoretically, people can still gain hard copies of the model through offline sources. Furthermore, it likely won't be long before Defense Distributed obtains a license, allowing them to post the model online. Thus, many of the original concerns people had about this weapon are still present and unaddressed.

For now, it seems many of these concerns are being exaggerated. At this stage, the 3-D printed pistol itself is still somewhat primitive – in many cases the weapon can only fire one round before becoming unusable. In addition, 3-D printed technology is still not far enough along to massively lower the access barrier to a firearm. 3-D printers are still fairly expensive and require some advanced knowledge on how to operate them. Because of where 3-D printing technology is at today, leaving the current regulations as they are will not cause the widespread issues that many fear.

However, 3-D printing technology is rapidly growing. Costs of printers are decreasing. It is possible to 3-D print metal, instead of plastic. Engineers are constantly improving upon previous designs. Though the technology does not yet exist, it may not be long before 3-D printed weapons are just as common as weapons manufactured in a factory. Regulations will have to change to match the changing landscape.

CONCLUSION

While there are First and Second Amendment concerns about ITAR's regulations, the State Department regulations will likely pass a constitutional challenge. Though this seems like a victory for those who want more gun regulations, it won't be long before these weapons are back online and available for anyone to download. The concerns that many have about 3-D printed weapons still have yet to be fully addressed. If these concerns are to be put to rest, more regulations will be needed.

PRACTICE POINTERS

- If a court does not deem ITAR's regulations as a prior restraint, the government can likely avoid First Amendment issues when regulating 3-D printed weapons
- 3-D printed weapons are still an obscure way for people to own a weapon. Until this process becomes more mainstream, regulating 3-D printed weapons will not violate the Second Amendment.