

# ISSUE BRIEF

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## Purposeless Regulation: The FAA Drone Registry

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Economist Milton Friedman was onto something when he said that “[o]ne of the great mistakes is to judge policies and programs by their intentions rather than their results.”<sup>1</sup> Because of its severe criminal penalties and dubious purpose, the Federal Aviation Administration’s new drone owners’ registry might become a classic example of an administrative rule with lofty intentions but too much potential for pernicious results.

### Overview of the Registry

On December 14, 2015, as a result of mounting concern over a growing number of dangerous “close encounters” between drones and manned aircraft, the Federal Aviation Administration (FAA) announced the establishment of a new recreational drone-owners’ registry.<sup>2</sup> The new rule, promulgated less than two months after the FAA first announced to the public that it was developing such a registry, mandates that any owner of a drone weighing between 0.55 pound and 55 pounds at takeoff must provide FAA officials with his or her name, address, and contact information.<sup>3</sup> The owner must also provide credit card information and pay a \$5 registration fee.<sup>4</sup>

Once the registration process is completed, the FAA issues the owner a unique identification number, valid for three years, which must be affixed to

each drone in his or her possession that meets the weight threshold. Failure to comply carries stiff civil and criminal penalties: An individual found to be flying an unregistered quadcopter faces up to three years’ imprisonment, a \$250,000 criminal fine, and a \$27,500 civil fine.

In general, Congress and the Supreme Court of the United States have authorized federal agencies to issue regulations that carry criminal penalties when Congress has provided implementing legislation that gives an agency sufficient guidelines for doing so.<sup>5</sup> However, Congress must first enact the legislation that enables a regulatory agency to adopt rules and calls for criminal penalties. Here, no such grant of authority occurred. Quite the opposite, in fact: Congress explicitly forbade the FAA from creating this registry in Section 336(a) of the FAA Modernization and Reform Act of 2012.<sup>6</sup> The FAA nevertheless promulgated new rules, and as a result of this regulatory overreach, its registry requirement is being challenged in federal court.<sup>7</sup>

### Why a Registry?

Legal questions aside, the FAA’s drone registry deserves analysis on policy grounds. Aviation officials insist that a recreational drone owners’ registry will aid in efforts to combat the alarming upward trend in reports of near-collisions and violations of restricted airspace. On December 14, while announcing the new regulatory action, FAA Administrator Michael Huerta declared: “Registration gives us the opportunity to educate these new airspace users before they fly so they know the airspace rules and they are accountable to the public for flying responsibly.”<sup>8</sup>

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In the FAA's view, then, the drone registry furthers three principal policy objectives: educating new drone owners, deterring dangerous drone operations, and holding bad actors accountable. Although all are noble goals, the drone registry fails on all three counts.

## Education

The FAA has stated that it is combatting two potential harms: the possibility that a drone may suddenly fall from the sky in mid-flight and the possibility of midair collisions with planes and other objects. The idea that a registry has inherent educational value because of either harm is questionable. These harms are so obvious that it begs the question: Is the anticipated expenditure of \$56 million to establish this registry really necessary?<sup>9</sup>

The registry's educational component consists of eight common-sense bullet points.<sup>10</sup> As part of the online registration process, the FAA website provides an "Acknowledgement of Safety Guidance" page that provides the following restrictions: "I will fly below 400 feet," "within visual line of sight," "aware of FAA airspace requirements [weblink

provided]," "not...directly over people," "over stadiums and sports events," "near emergency response efforts such as fires," "near aircraft, especially near airports," or "under the influence."<sup>11</sup>

If the FAA wants to educate people about those types of dangers, it should have mandated warning labels on packaging just like the ones you see on cigarettes:

WARNING: SUBJECT TO GRAVITY. THIS PRODUCT MAY FALL.

WARNING: THIS THING MAY COLLIDE WITH OTHER THINGS.

While the pledge to be aware of "FAA airspace requirements" may theoretically have some educational potential, we can empirically surmise that the *actual* educational value is likely to equal that of the warnings in cell-phone and computer game contracts: zero because no one reads them.

Second, the registry creates another problem for the FAA because there is no way to guarantee that

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1. Interview with Richard Heffner on The Open Mind (Dec. 7, 1975).
  2. See FED. AVIATION ADMIN., REGISTRATION AND MARKING REQUIREMENTS FOR SMALL UNMANNED AIRCRAFT, INTERIM FINAL RULE (Dec. 14, 2015), available at [https://www.faa.gov/news/updates/media/20151213\\_IFR.pdf](https://www.faa.gov/news/updates/media/20151213_IFR.pdf).
  3. Per the FAA, drones purchased before December 21 must be registered by February 19, 2016. Those purchased after that date must be registered before the first flight. *Id.*
  4. The FAA is effectively preventing anybody who lacks a credit card from flying a drone. At present, some 29 percent of the American people do not own a credit card. The FAA has therefore essentially decreed that one in three Americans may not fly a drone if it weighs more than 0.55 pounds. See Art Swift, *Americans Rely Less on Credit Cards Than in Previous Years*, GALLUP (Apr. 25, 2014), <http://www.gallup.com/poll/168668/americans-rely-less-credit-cards-previous-years.aspx>.
  5. The Supreme Court has long held that agencies have the authority to write regulations with criminal penalties and has only twice decided that an agency took a rulemaking too far. See, e.g., *Mistretta v. United States*, 488 U.S. 361, 372 (1989). Those two instances were *Panama Refining Co. v. Ryan*, 293 U.S. 388 (1935), and *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935).
  6. H.R. 658, 112th Cong. (2012). The FAA cannot "promulgate any rule or regulation regarding a model aircraft...if...the aircraft is flown strictly for hobby or recreational use," does not interfere with other aircraft, weighs less than 55 pounds, and operates "in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization."
  7. John Taylor, a resident of Silver Spring, Maryland, filed a lawsuit with the U.S. Court of Appeals for the District of Columbia Circuit on December 24, 2015, challenging the FAA's authority to require recreational drone owners to register. Taylor's challenge is based on the text of Section 336 of the FAA Modernization and Reform Act of 2012, in which Congress specified that the FAA "may not promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft" so long as it is flown for hobby or recreational purposes and meets a variety of other safety guidelines. See Pub. L. 112-95, <https://www.gpo.gov/fdsys/pkg/PLAW-112publ95/pdf/PLAW-112publ95.pdf>. See also John Goglia, *FAA Sued in Federal Court Over Drone Registration Rules*, FORBES (Jan. 4, 2015), <http://www.forbes.com/sites/johngoglia/2016/01/04/faa-sued-in-federal-court-over-drone-registration-rules/>.
  8. Bart Jansen, *FAA Begins Drone Registry Dec. 21*, USA TODAY (Dec. 14, 2015), <http://www.usatoday.com/story/news/2015/12/14/drone-registry-faa/77275676/>.
  9. The FAA anticipates that the total cost of the registry through 2020 will be \$56 million. FAA, *supra* note 2, at 9.
  10. For a video walk through the registry process, see ATx RC Productions, *FAA How to Register Your Drone Website Walkthrough*, YouTube (Dec. 21, 2015), <http://youtu.be/YWKWzfOixwY>.
  11. *Id.*
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everyone who flies a drone will even have heard of it, much less read the warnings that it contains. After all, is a toy drone something you would intuitively think to register with a federal agency? Consumers who enter the market to buy a drone are probably in the latter category regarding the FAA registry *unless* they have heard about it, *can* access it, *do* access it, and complete it. That doesn't sound like a particularly onerous obligation, but weigh it against a child's eagerness to get outside with his freshly unwrapped Christmas toy, and you might have a young criminal in the making.

One might also consider the problem of this regulation to be not an absence of information, but information overload. The 2015 *Federal Register*—the place where agencies publish their rules—has a total of 82,035 pages: more than the annual total for *every registry since 1936*.<sup>12</sup> It contains 3,408 regulations, or 39 times the number of bills passed by Congress.<sup>13</sup> Without knowing that the FAA's registry exists, how could the average drone consumer be expected to find it? There is simply no way to guarantee that every drone consumer will be aware of the registration requirement and the criminal consequences for noncompliance.

## Deterrence

Another questionable premise of this regulation is that it will deter wrongdoing. Individuals who plan to use a drone to accomplish criminal conduct will probably not register, although parents of a child who might accidentally fly their drone into someone's bushes probably will. Understandably, then, the 56th "Frequently Asked Question" on the FAA drone registration website is: "Someone intent on harm will not register a drone, so doesn't this requirement just penalize responsible people who are excited about [Unmanned Aircraft Systems]?" The FAA answers:

Although no system or requirement is 100 percent effective against people intent on doing harm, registration heightens public awareness about what safe UAS operations look like. In addition, *registration establishes a shared understanding that operating this type of aircraft for business or pleasure comes with certain responsibilities and expectations and that the public will be watching for and reporting bad actors*, just as they do today for other safety and security-related concerns. Registration also enables us to educate UAS owners on safe operations.<sup>14</sup>

The FAA ignores the fact that the public would watch for and report bad actors without the registry. Individuals across the country, from California to New Jersey,<sup>15</sup> have reported suspicious or criminal behavior perpetrated by use of a drone, just as they report other suspicious or criminal behavior without use of a drone. When a father in Kentucky saw a drone hovering over his property and didn't know whether it was looking at his daughters through a camera, he shot it down, believing "it was the same as trespassing."<sup>16</sup> That incident was quickly reported to police just as if it had been a murder, arson, theft, or any other "human on human" crime.

The only novel thing among otherwise common-sense notions advertised on the FAA's website (don't fly near planes, while intoxicated, over sports stadiums, etc.) is the mandate to write the individually assigned ID number on the drone. Otherwise, existing legal norms, community morals, and common sense inform the best practices the FAA outlines: Don't run into anything or anybody, don't spy on people, don't fly directly over a crowd, and so forth. There are many genuine safety concerns associated with drones,<sup>17</sup> but the registry fails to educate operators and the general public about what those

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12. Ryan Young, *Reforming Regulation in 2016*, REAL CLEAR POLICY (Jan. 7, 2016), [http://www.realclearpolicy.com/blog/2016/01/07/reforming\\_regulation\\_in\\_2016\\_1512.html](http://www.realclearpolicy.com/blog/2016/01/07/reforming_regulation_in_2016_1512.html).

13. By comparison, Congress passed 87 bills in 2015. *Id.*

14. FED. AVIATION ADMIN., UAS Registration Q&A, <https://www.faa.gov/uas/registration/faqs/>, last visited Jan. 13, 2016 (emphasis added).

15. See, e.g., John-Michael Seibler, *Is It Legal to Shoot Down a Drone Hovering Over Your Property?* NEWSWEEK (Aug. 15, 2015), <http://www.newsweek.com/it-legal-shoot-down-drone-hovering-over-your-property-362878>.

16. *Id.*

17. For a more detailed look at many of the safety, legal, and national security concerns surrounding the use of drones by both government and recreational operators, see Paul Rosenzweig, Steven P. Bucci, Charles D. Stimson, and James Jay Carafano, *Drones in U.S. Airspace: Principles of Governance*, HERITAGE FOUNDATION BACKGROUNDER NO. 2732 (Sept. 20, 2012), <http://www.heritage.org/research/reports/2012/09/drones-in-us-airspace-principles-for-governance>.

concerns are, thereby largely nullifying any deterrent value it might otherwise have.

Thus, the registry itself claims no inherent deterrent value. It serves only to place drone owners “on notice” that they are being monitored by the community—a fact about which they already are probably keenly aware.

### Accountability

Federal officials claim that requiring drones to be marked will enable law enforcement officials to trace them back to their ill-intentioned owners, ensuring that they are held accountable for their actions. Indeed, accountability is perhaps the one goal of the registry that may prove successful, though not in the way the FAA intends.

Unfortunately for regulators, the registry will not make it more likely that bad actors will be caught after flying drones into restricted areas or in dangerous manners. Despite steep criminal penalties, the registry is effectively voluntary. Neither the FAA nor local law enforcement agencies are capable of tracking drone purchases en masse or policing every drone flight in the country. Someone who intends to operate his or her drone in a dangerous manner therefore has little incentive to comply and in all probability will not do so. The anonymity of bad actors is all but guaranteed. Registering and marking a drone destroys that anonymity, in effect signing a bad actor’s own arrest warrant. Consequently, drones operated by these individuals are and will continue to be as untraceable as they were before the registry went into effect.

The individuals who *will* be caught are otherwise law-abiding citizens who register and mark their drones but who fly them negligently, perhaps

by accidentally flying too close to an airport.<sup>18</sup> Such incidents may be dangerous—physics, after all, cares little about intent—but common sense, to say nothing of the FAA’s educational materials, tells good-faith drone owners to avoid airports, wildfires, and highly populated areas. It is likely, then, that while negligence accounts for only a minority of unsafe drone flights, it will account for the vast majority of arrests and fines.

Another category of individual is likely to be caught up in this regulatory mess: otherwise innocent drone owners who do not register because they do not know about the requirement in the first place. This is hardly a far-fetched concern given that the rule went into effect a mere seven days after it was announced and drone manufacturers and distributors are not required to notify purchasers of the registry mandate. Federal officials insist that the registry’s criminal penalties are intended to secure compliance, not to imprison drone owners.<sup>19</sup> Such bureaucratic benevolence is little comfort, especially in an age of overcriminalization.<sup>20</sup>

Ironically, then, those who are most likely to be “held accountable” by the FAA’s registry are those who are least likely to contribute to the dangerous close encounters that aviation officials point to in justifying the new mandate. Unfortunately, history provides few examples of bureaucratic agencies that issue one rule or regulation and then recant it. The reality is that criminal liability for drone operation is likely to increase, not decrease, over time.

### Alternative Approaches

There are a number of alternatives to the FAA’s approach that might be more effective at deterring unsafe operations and holding bad actors accountable,

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18. See, e.g., Mariel Garza, *How I Bought a Drone and Immediately Became a Danger to Society*, L.A. TIMES (Dec. 14, 2015), <http://www.latimes.com/opinion/opinion-la/la-ol-i-bought-a-drone-danger-to-society-20151208-story.html>.

19. “Our real challenge is to get them to understand the rules and get them to comply,” [Deputy FAA Administrator Michael] Whitaker said. “The goal is not to be punitive, but to get people into compliance with the regulations.” Jansen, *supra* note 8.

20. A hapless drone owner arrested for failing to register would hardly be the first victim of overcriminalization. Abner Schoenwetter, for instance, served more than eight years in U.S. federal prison for packaging lobsters in plastic rather than cardboard boxes. See Brian Walsh, *The Worst Thing that Anybody Can Do to You Is Take Away Your Freedom*, THE DAILY SIGNAL (Aug. 8, 2011), <http://dailysignal.com/2011/08/08/the-worst-thing-that-anybody-can-do-to-you-is-take-away-your-freedom/>. Racecar driver Bobby Unser was prosecuted for snowmobiling onto federal land, despite the fact that the infraction occurred during a life-threatening blizzard in which Unser was struggling to find shelter and stay alive. Conn Carroll, *Bobby Unser vs the Feds*, THE DAILY SIGNAL (Mar. 14, 2011), <http://dailysignal.com/2011/03/14/bobby-unser-vs-the-feds/>. The problem is so immense that Justice Elena Kagan wrote in her dissenting opinion in *Yates v. United States*, 135 S. Ct. 1074, 1100 (2015), that “overcriminalization and excessive punishment” are not only a “real issue,” but also a “pathology in the federal criminal code.” The same is true of state and local rules. See, e.g., *USA vs You: The Flood of Criminal Laws Threatening Your Liberty*, THE HERITAGE FOUNDATION, <http://www.heritage.org/usavsyoudownload.html>, last accessed Jan. 15, 2016.

but carry potentially larger costs or are more intrusive. For instance, requiring registration at the point of sale would make it more difficult for bad actors to avoid while also removing the risk of inadvertent violation by good-faith operators. But, this would be a costly, cumbersome, and burdensome regulatory action, and would require considerable resources on the part of the FAA to properly execute.

Drones could be equipped to carry some form of transponder that broadcasts a unique ID. The current marking requirement is utterly useless in this respect since drones are so small that any ID numbers affixed to their hulls will be minuscule—if they are even visible at all. (The FAA permits marking inside the battery compartment, and even the most eagle-eyed observers lack X-ray vision.) The registry essentially requires a drone to crash in an area that is inaccessible to its owner in order to be of any use to investigators. A transponder would make identifying unsafe drones possible in mid-flight, but would be a costly mandate on manufacturers, and would likely raise prices on consumers.

Drones could also be made GPS-capable so that programmers can bar them from flying above certain altitudes or into certain restricted areas. Geofencing may hold promise, but it would no doubt present operationalization difficulties as the FAA and others work out how to keep their systems updated with real-time flight restrictions.

Finally, airports could invest in anti-drone defenses. Japan is currently testing drones with nets, designed to intercept and take down recreational drones found to be intruding into restricted airspace.<sup>21</sup> Additionally, several U.S. companies are developing the means to disrupt drone control signals.<sup>22</sup>

This is all provided that the FAA can convince Congress that regulating recreational drones is something it ought to be authorized to do. However, before pursuing any future regulatory action, the FAA should first rescind its current, ill-considered registry rule and conduct a thorough cost-benefit analysis of proposed alternatives. It should also solicit public comment through the normal notice-and-comment period under the APA.

## Conclusion

In its present form, the FAA's regulation of hobby and recreational drone use fulfills none of the agency's stated objectives. It is clear that this regulatory response was rushed and arbitrary, but there is also a pernicious side effect to this purposeless regulation: Otherwise innocent people are now exposed to criminal liability for no valid purpose.

As Congress prepares to consider the issue of recreational drone regulation,<sup>23</sup> it should bear in mind the burdens imposed on drone enthusiasts by the FAA's registry, combined with the policy's woeful inability to deliver meaningful improvements in public safety. A new path is clearly needed in the recreational drone space.

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21. See James Vincent, *Tokyo Police Unveil Net-Wield Gin Interceptor Drone*, THE VERGE (Dec. 11, 2015), <http://www.theverge.com/2015/12/11/9891128/tokyo-interceptor-net-drone>.

22. See Zach Epstein, *New Rifle Shoots Drones Out of the Sky Without Firing a Single Bullet*, BGR (Oct. 16, 2015), <http://bgr.com/2015/10/16/drone-defender-rifle-radio-wave-gun/>.

23. See Cecilia Kang, *Drone Lobbying Heats Up on Capitol Hill*, N.Y. TIMES (Jan. 24, 2016), <http://mobile.nytimes.com/blogs/bits/2016/01/24/drone-lobbying-turns-to-capitol-hill/?referrer=http://techmeme.com/m/>.