

# ISSUE BRIEF

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## The Dangers of Drones Were Regulated Before the FAA Noticed Them

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In December, 2015, the Federal Aviation Administration (FAA) issued a new rule criminalizing the flight of recreational drones and model aircraft unless the owner first registers with the federal government.<sup>1</sup> As of February 19, 2016, any unregistered drone owner operating a craft that weighs more than 0.55 pounds is committing a federal felony punishable by up to three years' imprisonment and \$277,500 in civil and criminal fines. This is an alarming instance of overcriminalization,<sup>2</sup> made all the worse because it is unnecessary—drones may be relatively new, but the same cannot be said for their known harms or risks. A plethora of existing laws lay out criminal and civil penalties that adequately address these harms. Drones should not be treated as categorically different than other devices and objects capable of inflicting injury or violating privacy, and policymakers should resist the temptation to treat them so.

### The Harms of Drones

When the FAA rushed its recreational drone-owners' registry into effect over a two-month period, it did so largely based on the determination that “the risk [from rapidly proliferating drones] to manned aviation or people and property on the ground was immediate.”<sup>3</sup> “Reports of potentially

unsafe [drone] operations [had] more than doubled” over the course of the year, with incidents ranging from unconfirmed close encounters with manned aircraft to interference with disaster relief operations.<sup>4</sup> As laid out by federal aviation officials, drones are a nascent, severe, and unique threat to the national airspace, as well as a significant source of risk to individuals on the ground, to private property, and to personal privacy.

There is reason to doubt these claims.<sup>5</sup> Not only are the threats posed by quadcopters largely hypothetical, they are also not unique to drones. For example, aviation officials cite the threat to property and people if a drone were to fall out of the sky, yet drones are not the only objects subject to the effects of gravity. Anything that goes up, must come down.

The FAA also claims that a drone flying into an aircraft at speed could cause significant damage. To date, there have been no documented collisions between drones and manned aircraft.<sup>6</sup> Even if a collision were to occur, there is scant evidence to suggest it would be any more dangerous than an impact with a bird of comparable weight.<sup>7</sup> Bird strikes are relatively common events, with thousands reported to the FAA each year. Most are inconsequential; indeed, between 1990 and 2014, only 12 such strikes have resulted in human fatalities across all civil aviation in the United States.<sup>8</sup> Even the agency's own drone task force report notes that “fatal aircraft accidents [caused by bird strikes] are extremely rare.”<sup>9</sup> Moreover, solitary bird strikes are considerably less dangerous than encounters with flocks of birds, and drones are not known to frequently fly in swarms. Finally, there are perhaps a million registry-eligible drones in consumer hands today, compared with *billions* of birds in the lower atmosphere,

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making a chance drone collision even less likely than a bird strike; to arrive at any other conclusion, one would have to assume that the average drone operator is deliberately malicious or extremely negligent.<sup>10</sup> The threat to stationary buildings is, likewise, likely no different than an errant bird haplessly flying into the brickwork.

Officials have been sensitive to the concerns of property owners and citizens who fear that drones may ultimately allow for frequent invasions of their property and privacy. Yet, the same argument can be leveled against smartphones, which are so small and light that they can be carried anywhere. It has never been easier for a peeping Tom to climb a tree and capture a video or photograph of a family's private moments, since they no longer have to carry heavy or specialized equipment. Nevertheless, society does not demand laws treating invasions of privacy differently when the images are captured on a smartphone rather than a Leica. The same logic ought to be applied to drones.

This is not to suggest that drones are entirely harmless inventions, or that safety in the drone

space is not a paramount concern. Rather, the aim is to make clear that the dangers and risks, while perhaps more salient in the drone context, are not unique to drones, and therefore do not merit new laws or regulations that single them out, much less a sudden regulatory act criminalizing their use. Existing laws adequately cover the government's hypothesized harms. In fact, most, if not all, of the relevant potential harms—many of which are heretofore uninflicted by recreational drone operators—are already criminalized several times over.<sup>11</sup>

### State Laws Addressing Drone Harms

Under existing state law, the collision scenario that the FAA warns would-be recreational drone operators about as part of the registration process could be an indictable criminal offense or compensable private harm at civil law. Serious offenses to person and property—including murder, manslaughter, and arson—are prohibited and routinely prosecuted in virtually every state. Personal injuries of “harmful or offensive contact” from a drone collision could

1. See FED. AVIATION ADMIN., REGISTRATION AND MARKING REQUIREMENTS FOR SMALL UNMANNED AIRCRAFT, INTERIM FINAL RULE (Dec. 14, 2015), [https://www.faa.gov/news/updates/media/20151213\\_IFR.pdf](https://www.faa.gov/news/updates/media/20151213_IFR.pdf); Jason Snead & John-Michael Seibler, Purposeless Regulation: The FAA Drone Registry, HERITAGE FOUNDATION ISSUE BRIEF No. 4514 (Feb. 4, 2016), <http://www.heritage.org/research/reports/2016/02/purposeless-regulation-the-faa-drone-registry>; Jason Snead & John-Michael Seibler, *The FAA Drone Registry: A Two-Month Crash Course in How to Overcriminalize Innovation*, HERITAGE FOUNDATION ISSUE BRIEF No. 4525 (Mar. 8, 2016), <http://www.heritage.org/research/reports/2016/03/the-faa-drone-registry-a-two-month-crash-course-in-how-to-overcriminalize-innovation>.
2. Paul J. Larkin, Jr., The Extent of America's Overcriminalization Problem, HERITAGE FOUNDATION LEGAL MEMORANDUM No. 121 (May 9, 2014), <http://www.heritage.org/research/reports/2014/05/the-extent-of-americas-overcriminalization-problem>.
3. FED. AVIATION ADMIN., *supra* note 1, at 12.
4. *Id.*, at 12-13.
5. See, *The FAA Drone Registry*, *supra* note 1.
6. There have been more documented collisions between turtles and planes (112 since 2010) than between drones and aircraft (0). See, Chris Perkins, *Airplanes Have Hit More Turtles than Drones*, MASHABLE, Dec. 18, 2015, <http://mashable.com/2015/12/18/turtles-vs-drones-airplane-hit/#GQdVx1Uoqiqr>.
7. See Kelsey Atherton, *Could Drones Pose a Threat to Airplanes?*, POPULAR SCIENCE, Mar. 13, 2015, <http://www.popsci.com/could-drones-pose-bird-risk-planes>.
8. *Wildlife Strikes to Civil Aircraft in the United States, 1990-2014*, FEDERAL AVIATION ADMINISTRATION NATIONAL WILDLIFE STRIKE DATABASE SERIAL REPORT No. 21 (July 2015), [http://www.faa.gov/airports/airport\\_safety/wildlife/media/Wildlife-Strike-Report-1990-2014.pdf](http://www.faa.gov/airports/airport_safety/wildlife/media/Wildlife-Strike-Report-1990-2014.pdf).
9. FED. AVIATION ADMIN., UNMANNED AIRCRAFT SYSTEMS (UAS) REGISTRATION TASK FORCE (RTF) AVIATION RULEMAKING COMMITTEE (ARC), TASK FORCE RECOMMENDATIONS FINAL REPORT (Nov. 21, 2015), [https://www.faa.gov/uas/publications/media/RTFARCFinalReport\\_11-21-15.pdf](https://www.faa.gov/uas/publications/media/RTFARCFinalReport_11-21-15.pdf).
10. In addition to the simple numbers, drones are greatly limited in terms of flight time and range compared to birds, and their operators have all the benefits of human intelligence and foresight. See Eli Dourado and Samuel Hammond, *Do Consumer Drones Endanger the National Airspace? Evidence from Wildlife Strike Data*, MERCATUS (Mar. 2016), <http://mercatus.org/sites/default/files/Dourado-Wildlife-Strikes-MOP-v2.pdf>.
11. Prosecutors are sometimes faced not with the task of deciding whether or not any law applies in a given situation, but which of several applicable laws to apply in a given situation, whereupon prosecutors are instructed to apply the law with the greatest applicable penalty without regard to the gravity of the offense. “[T]he U.S. Attorney's Manual generally advises prosecutors to charge the applicable offense that is most severe.” The late Supreme Court Justice Antonin Scalia once suggested that “the Department of Justice's position may [have] cause[d] him to read expansive criminal statutes more narrowly in the future.” *What a Fishy Case Tells Us About How the Supreme Court Views Criminal Law*, BRACEWELL BLOG (Mar. 17, 2015), <http://www.bracewellllaw.com/blog/2015/03/17/what-fishy-case-tells-us-about-how-supreme-court-views-criminal-law>.

amount to battery.<sup>12</sup> Mere threats of collision could conceivably amount to an assault: “Intentionally putting another person in reasonable apprehension of an imminent harmful or offensive contact. No intent to cause physical injury needs to exist, and no physical injury needs to result.”<sup>13</sup> The civil law also affords private redress of violations of privacy rights (e.g., a drone taking pictures through a second-floor bedroom window or even of a private act caught in a public domain, like a picture of a person visiting a cancer clinic).<sup>14</sup> Every state has some form of voyeurism or “peeping Tom” law to punish invasions of privacy or the release of images or descriptions of private facts into public fora without consent.<sup>15</sup>

### Federal Laws Addressing Drone Harms

Federal statutes also criminalize the types of harms that FAA authorities have alluded to in the justifications for, and materials associated with, the FAA drone registration requirement. Those concerns focus on harms associated with collisions or threats of collisions to persons and other

aircraft, and invasions of privacy and property interests. Chapter 7 of Title 18 of the U.S. Code covers federal jurisdiction over crimes of assault,<sup>16</sup> including assaults within the special maritime and territorial jurisdiction of the United States,<sup>17</sup> and any interference with “a Federal law enforcement agent”<sup>18</sup> or assaults against “any officer or employee of the United States or of any agency in any branch of the United States Government...while such officer or employee is engaged in or on account of the performance of official duties.”<sup>19</sup> Intimidation is also a conceivable harm that has been criminalized many times under multiple federal laws and which could be applied to a wide range of factual scenarios, including an improper use of drones.<sup>20</sup> Federal statutes also criminalize a broad array of particularized offenses including the destruction of any aircraft or aircraft facilities,<sup>21</sup> trespass onto federal land,<sup>22</sup> disturbing wildlife,<sup>23</sup> or interfering with an “animal enterprise.”<sup>24</sup>

Privacy interests are also protected under the federal video voyeurism statute, which imposes

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12. “In criminal law, a physical act that results in harmful or offensive contact with another’s person without that person’s consent. In tort law, the intentional causation of harmful or offensive contact with another’s person without that person’s consent.” Battery, WEX LEGAL DICTIONARY, at CORNELL LEGAL INFORMATION INST., <https://www.law.cornell.edu/wex/battery> (last accessed Mar. 3, 2016).
  13. Assault, WEX LEGAL DICTIONARY, at CORNELL LEGAL INFORMATION INST., <https://www.law.cornell.edu/wex/assault> (last accessed Mar. 3, 2016).
  14. See, e.g., Bernard W. Gerdelman, *Legal Issues in Photographing People*, PAULE, CAMAZINE & BLUMENTHAL, P.C. (Oct. 15, 2013), <http://www.pcbllawfirm.com/legal-issues-photographing-people/>, and David Streitfeld, Court Says Privacy Case Can Proceed vs. Google, N.Y. TIMES (Sept. 10, 2013), [http://www.nytimes.com/2013/09/11/technology/court-says-privacy-case-can-proceed-vs-google.html?\\_r=0](http://www.nytimes.com/2013/09/11/technology/court-says-privacy-case-can-proceed-vs-google.html?_r=0).
  15. See NATIONAL DISTRICT ATTORNEYS ASSOCIATION, VOYEURISM STATUTES 2009, (2009), [http://www.ndaa.org/pdf/voyeurism\\_statutes\\_mar\\_09.pdf](http://www.ndaa.org/pdf/voyeurism_statutes_mar_09.pdf) (compiling all state and U.S. territory jurisdictions voyeurism statutes). Note that these laws are mirrored in provisions of the common law, defining various offenses related to invasions of privacy, and many state legislatures also passed or considered drone-specific legislation before the FAA took up the issue. See NATIONAL CONFERENCE OF STATE LEGISLATURES, *State UAS Legislation* (Feb. 26, 2016), <http://www.ncsl.org/research/transportation/current-unmanned-aircraft-state-law-landscape.aspx#1>. If any body is to regulate recreational drones, it should be the state legislatures. See generally Charles Cooper, *Reserved Powers of the States*, in THE HERITAGE GUIDE TO THE CONSTITUTION 479 (2014).
  16. 18 U.S.C. §§ 111-19.
  17. 18 U.S.C. § 113 (1948).
  18. 18 U.S.C. § 118 (2007). See also 18 U.S.C. § 231(a)(3) (making it a crime to interfere with “any fireman or law enforcement officer” in the performance of their duties during a civil disorder).
  19. 18 U.S.C. § 111 (1988).
  20. See, e.g., 18 U.S.C. § 594 (1948) (criminalizing intimidation of voters) and FED. BUREAU OF INVESTIGATION, *Federal Civil Rights Statutes*, <https://www.fbi.gov/about-us/investigate/civilrights/federal-statutes> (last accessed Mar. 3, 2016) (criminalizing diverse modes of interference with enjoyment of civil rights).
  21. 18 U.S.C. § 32 (1956). See also 49 U.S. Code § 46504 (2001). Interference with flight crew members and attendants, <https://www.law.cornell.edu/uscode/text/49/46504>. “A violation of 49 U.S.C. § 46504 is a general intent crime; it does not require any specific intent to intimidate or to interfere with the flight crew member or attendant.” UNITED STATES ATTORNEY’S MANUAL § 1411. <https://www.justice.gov/usam/criminal-resource-manual-1411-interference-flight-crew-members-or-flight-attendants-49-usc>.
  22. See, e.g., 18 U.S.C. § 1863 (1949).
  23. 18 U.S.C. § 41 (1948).
  24. 18 U.S.C. § 43 (1992).
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criminal fines and up to a one-year prison sentence for “videotape[ing], photograph[ing], film[ing], record[ing] by any means, or broadcast[ing]” “a private area of an individual without their consent, and knowingly does so under circumstances in which the individual has a reasonable expectation of privacy,” anywhere “in the special maritime and territorial jurisdiction of the United States.”<sup>25</sup>

## Conclusion

Mass-market recreational drones are relatively new, but their potential harms and risks—whether to one’s person, property, or privacy—are neither unique nor novel. Federal statutes and regulations, as well as numerous state criminal and civil laws, can adequately redress these harms without the need for new, drone-specific laws in most circumstances. The FAA’s drone owners’ registration requirement is, in actuality, little more than an unjustified solicitation and publication of personal information, with draconian civil and criminal penalties for non-compliance.

A better path forward would be to let drone technology evolve. As new use problems and situations develop, lawmakers can evaluate their impact. Local, state, and federal policymakers should promulgate new regulations or enact new laws only where truly novel harms arise.

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25. 18 U.S.C. § 1801 (2004), <https://www.law.cornell.edu/uscode/text/18/1801>.