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PUBLIC INTEREST COMMENT

FEDERAL AVIATION ADMINISTRATION INTERPRETATION OF THE SPECIAL RULE FOR MODEL AIRCRAFT DOCKET ID: FAA-2014-0396

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INTRODUCTION

As part of the FAA Modernization and Reform Act of 2012 (FMRA),[1] Congress ordered the Federal Aviation Administration (FAA) to integrate unmanned aircraft systems (UASs)—sometimes referred to as drones—into the National Airspace System by September 2015. As part of that effort, the FAA is currently accepting comments on its "Interpretation of the Special Rule for Model Aircraft" (Section 336 of the FMRA) and the FAA's enforcement authority over model aircraft as affirmed by the statute.[2]

The Technology Policy Program of the Mercatus Center at George Mason University is dedicated to advancing knowledge of the impact of regulation on society. As part of its mission, the program conducts careful and independent analyses employing contemporary economic scholarship to assess rulemaking proposals from the perspective of the public interest. Therefore, this comment on the FAA's "Interpretation of the Special Rule for Model Aircraft" does not represent the views of any particular affected party or special interest group but is designed to assist the administration as it carries out Congress's mandate to safely integrate UASs into the National Airspace System.

In this brief comment, we discuss the need for the agency to conduct a thorough review of the benefits and costs associated with this rule. We argue this is essential because airspace is poised to become a major platform for innovation if the agency strikes the right balance between safety and innovation. To achieve that goal, we stress the need for flexibility and humility in interpreting older standards, such as "line of sight" restrictions, as well as increasingly archaic "noncommercial" vs. "commercial" distinctions or "hobbyists" vs. "professional" designations. We also highlight the growing tension between the agency's current regulatory approach and the First

1. FAA Modernization and Reform Act of 2012, Pub L. No. 112-95, 126 Stat. 11 (hereinafter "FMRA").
2. Federal Aviation Administration, *Interpretation of the Special Rule for Model Aircraft,* June 18, 2014, http://www.faa.gov/about/initiatives/uas/media/model_aircraft_spec_rule.pdf (hereinafter "FAA *Interpretation of the Special Rule.*")

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Amendment rights of the public to engage in peaceful, information-gathering activities using these technologies. Finally, we close by noting the important role that voluntary self-regulation and codes of conduct already play in governing proper use of these technologies. We also argue that other "bottom-up" remedies are available and should be used before the agency imposes additional restrictions on this dynamic, rapidly evolving space.

BENEFIT-COST ANALYSIS NEEDED

Before addressing the substance of the rule at issue here, we wish to remind the agency that it is required to conduct a formal benefit-cost analysis (BCA) of any "significant regulatory action" it undertakes.[3] As defined by Executive Order 12866, a "significant regulatory action" includes rules or guidelines that "have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local or tribal government or communities."[4] A "significant regulatory action" can also include regulatory actions that "raise novel legal or policy issues."[5]

Although the exact economic ramifications of integrating commercial drones into the national airspace is uncertain, there have been numerous assessments of the potential impact this technology would have on the US economy. The Association for Unmanned Vehicle Systems International (AUVSI), for example, estimates that between 2015 and 2025, the integration of unmanned aerial systems into the national airspace "is expected to contribute $82.1 billion to the nation's economy by agriculture, public safety, and other activities." These benefits run the gamut from over 100,000 new high-paying ($40,000 or more per year) jobs created in aerospace manufacturing to almost 850,000 job years worked over that period.[6]

The FAA has not yet undertaken a comprehensive benefit-cost analysis of the rule in question. Such an analysis would help determine how new regulations in this space could affect the market for this evolving class of technologies as well as how these technologies might impact the broader economy or other important values. This is particularly true as the distinction between model aircraft and other types of unmanned aircraft systems is rapidly blurring.

The agency may believe that the matter under review is merely an interpretative exercise requiring no formal BCA review at this time. Nonetheless, as noted below, the agency's "Interpretation" could indeed result in the sort of significant economic impacts and novel legal issues contemplated by Executive Order 12866. Consequently, the agency should not avoid formal BCA but instead take this opportunity to consider the ramifications of its actions in this matter.[7]

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3. Office of Management and Budget, Office of Information and Regulatory Affairs, *Regulatory Impact Analysis: A Primer* (2011), http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/circular-a-4_regulatory-impact-analysis-a-primer.pdf; Richard Williams and Jerry Ellig, "Regulatory Oversight: The Basics of Regulatory Impact Analysis" (Mercatus Center at George Mason University, September 2011), http://mercatus.org/sites/default/files/Mercatus-Regulatory-Impact-Analysis-Toolkit.pdf.
4. Executive Order 12866, Sec. 2(f)(1).
5. Ibid., Sec. 2(f)(4).
6. Daryl Jenkins and Dr. Bijan Vasigh, "The Economic Impact of Unmanned Aircraft Systems Integration in the United States" (The Association for Unmanned Vehicle Systems International, Arlington, VA, March 2013), 20.
7. Regarding agency avoidance of BCA processes using guidance documents and interpretive rulings, *see* John D. Graham and James Broughel, "Stealth Regulation: Addressing Agency Evasion of OIRA and the Administrative Procedure Act," *Harvard Journal of Law and Public Policy: Federalist Edition* 1, no. 1 (June 4, 2014): 30–54; Nina A. Mendelson and Jonathan B. Wiener, "Responding to Agency Avoidance of OIRA," *Harvard Journal of Law and Public Policy* 37, no. 2 (Spring 2014): 447–521; John D. Graham and Cory R. Liu, "Regulatory and Quasi-Regulatory Activity without OMB and Benefit-Cost Review," *Harvard Journal of Law and Public Policy* 37, no. 2 (Spring 2014): 425–45; Stuart Shapiro, "Agency Oversight as 'Whac-a-Mole': The Challenge of Restricting Agency Use of Non-Legislative Rules," *Harvard Journal of Law and Public Policy* 37, no. 2 (Spring 2014): 523–52.

AN EVOLVING PLATFORM FOR INNOVATION

While the FAA is understandably concerned about the safety of the National Airspace System, it is vital that the agency not adopt an over-precautionary regulatory approach toward model aircraft or unmanned aerial systems since it could discourage the many benefits associated with this rapidly evolving class of aerial technologies.

As Mercatus scholars noted in an April 2013 filing to the FAA, "Like the Internet, airspace is a platform for commercial and social innovation."[8] Google,[9] Amazon,[10] and a host of other major Internet companies are already experimenting with UASs. But countless other commercial and noncommercial entrepreneurs are considering creative applications for UAS technologies as well and it is impossible to determine what additional innovations await.[11] "One has to wonder what great innovations in unmanned vehicles are taking shape in a garage near you," notes Ryan Davis, Dean of the Business and Workforce Education Department at Everett Community College.[12] Only time and the freedom to experiment with new and better ways of using these technologies will provide an answer to that question.

This is why humility and flexibility must be the touchstones of the FAA's approach to these issues. A recent Mercatus Center book highlighted the benefits of adopting a policy disposition of "innovation allowed" or "permissionless innovation" in this and other areas.[13] "Permissionless innovation" refers to the notion that experimentation with new technologies and business models should generally be permitted by default.[14]

Permissionless innovation has been the primary driver of entrepreneurialism and economic growth in many sectors of the economy, most notably the Internet and the digital economy.[15] As an open and lightly regulated platform, the Internet allows entrepreneurs to experiment with new business models and offer new services without seeking the blessing of regulators beforehand.

Generally speaking, this same model can and should guide policy decisions in other sectors, including the nation's airspace.[16] While safety-related considerations can merit some precautionary policies, it is important that those regulations leave ample breathing room for innovation opportunities.

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8. Jerry Brito, Eli Dourado and Adam Thierer, "Federal Aviation Administration: Unmanned Aircraft System Test Site Program Docket No: FAA-2013-0061" (Public Interest Comment, Mercatus Center at George Mason University, Arlington, VA, April 23, 2013), http://mercatus.org/publication/federal-aviation-administration-unmanned-aircraft-system-test-site-program; Eli Dourado, "The Next Internet-Like Platform for Innovation? Airspace. (Think Drones)," *Wired*, April 23, 2013, http://www.wired.com/opinion/2013/04/then-internet-now-airspace-dont-stifle-innovation-on-the-next-great-platform.
9. Alistair Barr and Greg Bensinger, "Google Is Testing Delivery Drone System," *Wall Street Journal*, August 29, 2014, http://online.wsj.com/articles/google-reveals-delivery-drone-project-1409274480; Thomas Claburn, "Google Has Plans For Titan Drones," *Information Week*, April 15, 2014, http://www.informationweek.com/mobile/mobile-devices/google-has-plans-for-titan-drones/d/d-id/1204456.
10. Harrison Weber, "Amazon Seeks Approval to Test Drone Deliveries in 30 Minutes or Less," *Venture Beat*, July 11, 2014, http://venturebeat.com/2014/07/11/amazon-seeks-approval-to-test-prime-air-drone-deliveries-in-30-minutes-or-less.
11. Dominic Basulto, "Graduates with Drone Skills Are Going to Be in Demand Soon. Here's Why," *Washington Post*, May 13, 2014, http://www.washingtonpost.com/blogs/innovations/wp/2014/05/13/graduates-with-drone-skills-are-going-to-be-in-demand-soon-heres-why.
12. Ryan Davis, "Drones Are Opportunity for Entrepreneurs," *HeraldNet*, June 2, 2014, http://www.heraldnet.com/article/20140602/BIZ/140609886.
13. Adam Thierer, *Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom* (Arlington, VA: Mercatus Center at George Mason University, 2014).
14. Adam Thierer, "Why Permissionless Innovation Matters," *Medium,* April 24, 2014, https://medium.com/challenging-the-status-quo/257e3d605b63.
15. Vinton Cerf, "Keep the Internet Open," *New York Times*, May 24, 2012, http://www.nytimes.com/2012/05/25/opinion/keep-the-internet-open.html.
16. L. Gordon Crovitz, "Drones Cleared for Takeoff," *Wall Street Journal,* March 16, 2014, http://online.wsj.com/news/articles/SB10001424052702304914904579441052310129582 ("Washington's refusal to allow drones to take off is a reminder that most industries in the U.S. remain hostage to slow-moving, risk-averse regulators. The freedom to innovate without asking permission should become the rule for all U.S. industries, not the rare exception."); Eli Dourado, "'Permissionless Innovation' Offline as Well as On," *Umlaut*, February 6, 2013, http://theumlaut.com/2013/02/06/permissionless-innovation-offline-as-well-as-on. ("Advocates of the Internet are right to extol the permissionless innovation model—but they are wrong to believe that it need be unique to the Internet. We can legalize innovation in the physical world, too. All it takes is a recognition that real-world innovators should not have to ask permission either.")

We concur, therefore, with analysts at the Information Technology & Innovation Foundation when they call upon the FAA to appreciate the concept of "hobbyists as innovators" and to protect their entrepreneurial endeavors by adopting a "bottom-up" approach to these issues.[17]

Thus far, unfortunately, the FAA has been preoccupied with a more top-down approach through a narrow construction of its model aircraft rule that focuses on how such technologies "need to be operated purely for recreational or hobby purposes, and within the visual line of sight of the operator."

This standard needs to evolve if the FAA is to accommodate and further incentivize the amazing opportunities that await if creative minds are given the freedom and flexibility to experiment using airspace as a platform for innovation.

Importantly, because technologies continue to evolve so rapidly in this arena, "there is no longer a sharp distinction between a drone and a model aircraft."[18] Thus, the FAA would be wise to embrace a holistic and principled approach to airspace innovation that clears the way for even more exciting future possibilities.

LINE OF SIGHT RESTRICTIONS

First, the FAA must take a more flexible approach regarding line-of-sight–based restrictions. The FAA states that "the aircraft must be visible at all times to the operator" and that "an operator could not rely on another person to satisfy the visual line of sight requirement."[19] Such a prescriptive regulatory approach ignores the way new technologies—such as first-person view (FPV) goggles that allow pilots to guide unmanned vehicles at a distance—might lessen the need for the aircraft to "be visible at all times to the operator" in order to ensure effective and safe operation. Moreover, the Academy of Model Aeronautics notes that the FAA's approach:

> is inconsistent with current two-pilot manned aircraft operations where one pilot is allowed to monitor the environment. . . while the second pilot is allowed to operate the aircraft under virtual instrument conditions by wearing a device that completely obstructs the second pilot's view of the external environment.[20]

Thus, as ITIF has noted in its comments, the FAA's "Interpretation" "would ban or severely limit use of these emerging technologies," and such restrictions would be outside of Congress's original intentions as laid out under the FMRA.[21]

COMMERCIAL RESTRICTIONS

Second, the FAA should not be preoccupied with the commercial nature of some of these new systems, nor should the agency take actions that penalize commercial aerial systems relative to noncommercial technologies.

In its "Interpretation," the FAA offers several examples of activities it would and would not consider to be "hobby or recreational."[22] Instead of offering clarity, however, the guidance only seems to raise more questions. For example, the agency says that "viewing a field to determine whether crops need water when they are grown for personal enjoyment," constitutes a hobby or recreational activity. By contrast, "Determining whether crops need to be watered that are grown as part of commercial farming operation," would not be. This puts the FAA in the

17. Robert D. Atkinson, Daniel Castro, and Alan McQuinn, Information Technology and Innovation Foundation, *Comments to the FAA Regarding Interpretation of the Special Rule for Model Aircraft*, July 24, 2014, http://www2.itif.org/2014-faa-comments.pdf.
18. David F. Carr, "FAA Rules On Drones Vs. Model Aircraft Protested," *Information Week*, July 28, 2014, http://www.informationweek.com/government/mobile-and-wireless/faa-rules-on-drones-vs-model-aircraft-protested-/d/d-id/1297572.
19. FAA, *Interpretation of the Special Rule*, 36173.
20. Academy of Model Aeronautics, "The Academy of Model Aeronautics' Areas of Concern FAA Interpretive Rule Regarding the Special Rule for Model Aircraft," *Comments to the FAA Regarding Interpretation of the Special Rule for Model Aircraft,* June 27, 2014, https://www.modelaircraft.org/files/AMAObjectionstoFAAInterpretiveRule614.pdf.
21. ITIF comments, 6.
22. FAA, *Interpretation of the Special Rule*, 36174.

business of regulating farmers. After all, many small farmers grow crops for personal consumption but then also sell some of their products to friends or at local farmer's markets. If model aircraft or UASs of any kind are used to monitor crops used for *both* purposes, it would seem illogical and costly for the FAA to pursue prohibitions against that class of activities.

Likewise, the agency states that "taking photographs with a model aircraft for personal use" qualifies as a hobby or recreation, but then it warns that "a person photographing a property or event and selling the photos to someone else" would not qualify as a hobby or recreation.[23] This, too, will prove challenging and costly to enforce while leaving the public with ambiguous guidance about the legality of various activities.

Consider wedding photography. Unmanned aerial systems are starting to become a popular choice for many couples looking to capture that perfect shot on their big day.[24] Under the FAA's guidance, if a couple asks a friend to take photographs of their wedding with a model aircraft or other aerial vehicle but does not compensate them, apparently that would qualify for a "recreational use" exemption. But what if family members or friends who attended the wedding requested a copy of the same video or pictures, yet the photographer needed to charge a small fee to cover the cost of production or redistribution? What if the photographer merely asked for a donation to cover their costs? What if the photographer used Kickstarter to have wedding guests kick in funds beforehand to cover those costs?

The question that continues to linger is whether these and other innovative uses of drones that blur the line between commercial and recreational use are violating FAA rules. These definitional ambiguities will continue to haunt the FAA's enforcement regime and sow confusion among the public.

The more general problem with the FAA's approach is that it essentially treats commercial activities as fundamentally riskier than noncommercial "hobby or recreational" activities, even though there is no reason to believe that is the case. Commercial operators face greater liability when things go wrong and, therefore, are more likely to carry insurance for their business operations. Moreover, commercial operators face strong reputational incentives to prioritize safety considerations and remain in good standing with the public and the press.

Thus, the "noncommercial" vs. "commercial" distinction will become increasingly difficult to enforce and, to the extent the FAA aggressively pursue enforcement actions against the latter class of activities, it will discriminate unfairly against many beneficial—and entirely safe—types of activities. The public clearly demands many of these innovations but will only be able to access them if producers are compensated for their entrepreneurial endeavors.

JOURNALISTIC PURSUITS AND FIRST AMENDMENT ISSUES

The FAA has also avoided any discussion of the thorny First Amendment-related issues in play here. In particular, restrictions on news-gathering uses by either commercial or noncommercial enterprises raises serious First Amendment concerns.[25] Sean Lawson, assistant professor in the Department of Communication at the University of Utah, has noted of the FAA's current approach that:

> First, as currently applied, model aircraft are specifically banned for journalists, even though they are legal for hobbyists. This is an unconstitutional content-based restriction on speech because it discriminates on the basis of the speaker's identity. Second, just because First Amendment activity is undertaken for compensation or commercial purposes does not mean it loses its protection. If it did, newspapers would have no more protections than beer companies, which is not the case. Third,

23. Ibid.
24. Marianne Rohrlich, "Bird? Plane? No, It's the Wedding Photographer," *New York Times,* August 1, 2014, http://www.nytimes.com/2014/08/03/fashion/weddings/bird-plane-no-its-the-wedding-photographer.html?ref=weddings&_r=0.
25. Rob Walker, "The U.S. Government Is Making It Very Difficult for Journalists to Use Drones. That's a Problem," *Yahoo News,* August 28, 2013, http://news.yahoo.com/drone-journalism-faa-restrictions-164543522.html.

> telling a news organization that they should not publish content obtained by someone else is a classic prior restraint on speech and is unconstitutional.[26]

The agency can expect more tension along these lines in the coming months and years. For example, when protests erupted in Ferguson, Missouri, following the police shooting of an unarmed 18-year-old black man, many were wondering how drone footage could have helped monitor developments on the ground.[27] By ordering the creation of a no-fly zone over Ferguson on August 12, the FAA made monitoring the situation in that fashion impossible.[28]

Had the FAA or any other agency proposed preemptively banning the use of any other journalistic tools like this (cameras or microphones, for example), it would have faced an immediate First Amendment challenge. Going forward, the FAA will face increased legal challenges, as well as enforcement challenges, as more citizens use such technologies to report during emergencies or other major events.[29] These are the sort of "novel legal or policy issues" that Executive Order 12866 spoke of that demand greater scrutiny and formal regulatory review.

BOTTOM-UP GOVERNANCE

In closing, we agree with ITIF analysts when they recommend that "the FAA should use bottom-up community guidelines, rather than top-down regulations" to address these issues.[30] Specifically, ITIF details how safety guidelines are already in place thanks to best practices developed by the Academy of Model Aeronautics and the Association for Unmanned Vehicle Systems International. "There exists little evidence to suggest that these voluntary guidelines have been ineffective," notes ITIF.

Indeed, there is a long history of safe operation of these systems. The letter sent to the FAA from almost 30 concerned university academics noted that "model aircraft have been safely used in education and research since the earliest days of flight" and that "some of our nation's top scientists, engineers, pilots, and astronauts furthered their careers experimenting with model aircraft."[31]

To the extent fears about safety and privacy persist, it also is important to remember that unmanned aerial devices are governed by more than just FAA regulation.[32] It may be the case that existing laws and policies—property rights, nuisance law, torts, "peeping Tom" laws, etc.—could cover many of the scenarios that concern the agency.[33]

If the agency adopts this more dynamic, bottom-up approach and devises a flexible policy for these technologies, it can achieve a sensible balance between safety and innovation and unlock the dynamic potential of this sector.

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26. Sean Lawson, "It's Time to Halt The FAA's Arbitrary and Expanding Domestic 'Drone' Ban," *Forbes,* April 8, 2014, http://www.forbes.com/sites/seanlawson/2014/04/08/its-time-to-halt-the-faas-arbitrary-and-expanding-domestic-drone-ban.
27. Jason Koebler, "When Will Someone Fly a Drone over Ferguson?" *Motherboard*, August 14, 2014, http://motherboard.vice.com/read/when-will-someone-fly-a-drone-over-ferguson.
28. Jeff John Roberts, "FAA Imposes No-Fly Zone Near St Louis, Where Civilian Drones Could Be Very Helpful Right Now," *GigaOm*, August 12, 2014, http://gigaom.com/2014/08/12/faa-imposes-no-fly-zone-near-st-louis-where-civilian-drones-could-be-very-helpful-right-now.
29. See Sean Lawson, Cynthia Love, and Avery Holton, "News from Above: First Amendment Implications of the Federal Aviation Administration Ban on Commercial Drones" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, September 2014), included as appendix A. It details the First Amendment-related issues associated with the FAA's current approach to private UAS regulation.
30. ITIF comment, 3–4.
31. Smith College, "Comment on FAA Notice of Interpretation FAA Docket No. FAA-2014-0396" (Picker Engineering Program, Smith College, Northampton, MA, July 25, 2014), http://www.kramerlevin.com/files/upload/UniversitiesSubmission.pdf.
32. See Thierer, *Permissionless Innovation*, 72–78.
33. Kenneth Anderson, "Domestic Drone Regulation for Safety and Privacy," *Volokh Conspiracy,* September 8, 2013, http://www.volokh.com/2013/09/08/domestic-drone-regulation-safety-privacy.

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APPENDIX A

NEWS FROM ABOVE: FIRST AMENDMENT IMPLICATIONS OF THE FEDERAL AVIATION ADMINISTRATION BAN ON COMMERCIAL DRONES

BY CYNTHIA D. LOVE, SEAN T. LAWSON, AND AVERY E. HOLTON

News from Above: First Amendment Implications of the Federal Aviation Administration Ban on Commercial Drones

Cynthia D. Love, Sean T. Lawson, and Avery E. Holton

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Abstract

Unmanned aircraft systems (UASs), commonly referred to as drones, have rocketed to public attention in the last decade, largely as a result of the U.S. military's use of this technology in the "War on Terror." As UASs have come home and have been put to a growing number of uses in domestic airspace, the Federal Aviation Administration has attempted to ban their commercial use. Efforts to enforce this ban have included sending dozens of cease-and-desist letters to UAS operators and even one attempt to levy a $10,000 fine. Most often, these UAS operators have been engaging in aerial photography, sometimes for news-gathering purposes. To date, little attention has been paid to the First Amendment implications of the ban. This article argues that aerial photography with UASs, whether commercial or not, is protected First Amendment activity, particularly for news-gathering purposes. The FAA must take First Amendment–protected uses of this technology into account as it proceeds with meeting its congressional mandate to promulgate rules for domestic UASs.

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Keywords: drones, unmanned aircraft systems, FAA, First Amendment, journalism, drone journalism

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News from Above:

First Amendment Implications of the Federal Aviation Administration Ban on Commercial Drones

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I. Introduction

In the last decade, unmanned aircraft systems (UASs), commonly referred to as drones, have captured the imagination of the news media, the public, and policymakers. This is largely the result of the United States' increasing reliance on UASs to carry out surveillance and targeted killings of suspected terrorists around the world. When news media, scholars, and policymakers have turned their attention to UASs, they have most often focused on the ethics, efficacy, and legality of using drones as a surveillance-strike platform against suspected terrorists.

But there also has been growing interest in the potential domestic use of UASs by both the public and private sectors. In the public sector, law enforcement agencies have shown the most interest. The Department of Homeland Security is already using UASs and even loans them to other federal, state, and local law enforcement agencies.[1] In the private sector, real estate agents have begun to use UASs to survey properties and to give prospective buyers a new perspective on their potential purchase.[2] Farmers are considering using UASs to survey crops and livestock,

[1] Craig Whitlock & Craig Timberg, *Border-Patrol Drones Being Borrowed by Other Agencies More Often Than Previously Known*, WASH. POST (Jan. 15, 2014), http://www.washingtonpost.com/world/national-security/border-patrol-drones-being-borrowed-by-other-agencies-more-often-than-previously-known/2014/01/14/5f987af0-7d49-11e3-9556-4a4bf7bcbd84_story.html; Jason Koebler, *Police to Use Drones for Spying on Citizens*, U.S. NEWS & WORLD REP. (Aug. 23, 2012), http://www.usnews.com/news/articles/2012/08/23/docs-law-enforcement-agencies-plan-to-use-domestic-drones-for-surveillance.

[2] *Bay Area Realtors Now Using Drones to Market High-End Properties*, CBS S.F. (Feb. 4, 2014, 8:33 AM), http://sanfrancisco.cbslocal.com/2014/02/04/bay-area-realtors-now-using-drones-to-market-high-end-property/; Winnie Hu, *Still Unconvinced, Home Buyer? Check Out the View from the Drone*, N.Y. TIMES (Dec. 23, 2013), http://www.nytimes.com/2013/12/24/nyregion/still-unconvinced-home-buyer-check-out-the-view-from-the-drone.html.

spray pesticides and fungicides, and monitor for disease outbreaks.[3] Environmental scientists and natural resources managers are using UASs for tasks such as mapping and monitoring watersheds.[4] China is even exploring the use of UASs to combat Beijing's notorious air pollution.[5] Various companies, large and small, are experimenting with using UASs for delivery, from Amazon and UPS package delivery to more novel potential services such as the Tacocopter and Lakemaid beer delivery service.[6] There is even a growing "DIY drone" hobbyist community with its own online social network.[7] Indeed, the list of potential uses of UASs seems to grow daily, with journalism, the focus of this article, being one of the most promising.

Scholars have long demonstrated the important role that the news media play in determining which issues are added to the agenda of public concerns and, in the process, priming citizens and policymakers to think about these issues only in certain ways.[8] This is often done via problem framing, that is, by framing a problem or issue in such a way that it raises fear of the

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[3] Gosia Wozniacka, *Drones Could Revolutionize Agriculture, Farmers Say*, HUFFINGTON POST (Dec. 14, 2013, 6:15 PM), http://www.huffingtonpost.com/2013/12/14/drones-agriculture_n_4446498.html; Rakesh Sharma, *Growing the Use of Drones in Agriculture*, FORBES (Nov. 26, 2013, 3:15 PM), http://www.forbes.com/sites/rakeshsharma/2013/11/26/growing-the-use-of-drones-in-agriculture/.

[4] Michael Belfiore, *Drones for Science: UAVs Map Terrain*, POPULAR MECHS. (Apr. 19, 2012, 2:25 PM), http://www.popularmechanics.com/technology/aviation/news/drones-for-science-the-first-step-in-a-civilian-uav-invasion-8210546.

[5] Victoria Woollaston, *China Successfully Clears Beijing Smog Using Drones*, DAILY MAIL (May 10, 2014, 8:12 AM), http://www.dailymail.co.uk/sciencetech/article-2577347/China-successfully-tests-smog-fighting-drones-spray-chemicals-capture-air-pollution.html.

[6] Alistair Barr, *Amazon Testing Delivery by Drone, CEO Bezos Says*, USA TODAY (Dec. 2, 2013, 1:32 PM), http://www.usatoday.com/story/tech/2013/12/01/amazon-bezos-drone-delivery/3799021/; Heather Kelly, *Beer-Delivery Drone Grounded by FAA*, CNN (Feb. 3, 2014, 10:03 AM), http://www.cnn.com/2014/01/31/tech/innovation/beer-drone-faa/index.html; Jason Gilbert, *Tacocopter Aims to Deliver Tacos Using Unmanned Drone Helicopters*, HUFFINGTON POST (Mar. 23, 2012, 5:33 PM), http://www.huffingtonpost.com/2012/03/23/tacocopter-startup-delivers-tacos-by-unmanned-drone-helicopter_n_1375842.html; Joanna Stern, *UPS Might Follow Amazon's Lead in Using Unmanned Flying Vehicles*, ABC NEWS (Dec. 3, 2013), http://abcnews.go.com/Technology/amazon-ups-drone-delivery-options/story?id=21086160.

[7] For insight into the drone hobbyist community, see http://www.diydrones.com; Heather Kelly, *Hobbyists Pilot Small Drones for Dogfights, Photography*, CNN (May 4, 2014, 6:15 AM), http://www.cnn.com/2014/01/24/tech/innovation/drone-hobbyists/index.html; Tara McKelvey, *Rise of the Drone Hobbyists*, BBC NEWS (Oct. 14, 2013), http://www.bbc.co.uk/news/magazine-24468422.

[8] David H. Weaver, *Thoughts on Agenda Setting, Framing, and Priming*, 57 J. COMM. 142 (2007); Dietram A. Scheufele & David Tewksbury, *Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models*, 57 J. COMM. 9 (2007); Robert M. Entman, *Framing Bias: Media in the Distribution of Power*, 57 J. COMM. 163 (2007).

issue and identifies it as a problem in need of a solution.[9] News media coverage and public policy discourse so often frame the adoption of new technologies as a problem to be feared and addressed through legislation or regulation that some observers have called the phenomenon a technopanic, a particular form of moral panic applied to technology.[10] Most recently, problem framing and fear appeals have been prominent in public discourse around both actual and potential threats in and through cyberspace.[11] The proliferation of problem framing and fear appeals concerning such cyber threats often relies on conflating a number of different technologies and their uses—most of which are not particularly frightening on their own—under a larger category more likely to evoke fear and a demand for action.[12]

We can observe a similar pattern with similar effects in the area of domestic UASs.[13] News media coverage often makes little distinction between the large UASs used by the military for surveillance and targeted killing overseas and the small UASs—amounting to little more than children's toys—used most often in the domestic applications mentioned above. The generic "drone," undifferentiated in its specific technological attributes or actual uses, becomes the protagonist in stories that most often focus on potential threats to privacy or safety.[14] It is not

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[9] David L. Altheide, *The News Media, the Problem Frame, and the Production of Fear*, 38 SOC. Q. 647 (1997).
[10] Adam Thierer, *Technopanics, Threat Inflation, and the Danger of an Information Technology Precautionary Principle*, 14 MINN. J. L. SCI. & TECH. 309 (2013).
[11] *Id.*; *see also* Myriam Dunn Cavelty, *Cyber-Terror—Looming Threat or Phantom Menace? The Framing of the US Cyber-Threat Debate*, 4 J. INFO. TECH. & POL. 19 (2007).
[12] Sean Lawson, *Motivating Cybersecurity: Assessing the Status of Critical Infrastructure as an Object of Cyber Threats*, *in* SECURING CRITICAL INFRASTRUCTURES AND CRITICAL CONTROL SYSTEMS: APPROACHES FOR THREAT PROTECTION 168 (Atta Badii & Paul Vickers eds., 2013); Sean Lawson, *Putting the "War" in Cyberwar: Metaphor, Analogy, and Cybersecurity Discourse in the United States*, 17 FIRST MONDAY (2012), *available at* http://first monday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3848/3270.
[13] Sean Lawson, *Domestic Drones Are the Next Object of Threat Inflation*, FORBES (Apr. 18, 2014, 3:09 PM), http://www.forbes.com/sites/seanlawson/2014/04/18/domestic-drones-are-the-latest-object-of-threat-inflation/.
[14] *See, e.g.*, *The Future of Drones: Technology vs. Privacy*, CBS NEWS (Mar. 16, 2014), http://www.cbsnews.com /news/the-future-of-drones-technology-vs-privacy/; Alan Levin, *Woman Runs with the Bulls but Gets Clobbered by Drone Aircraft*, STANDARD-EXAMINER (Feb. 15, 2014, 12:25 PM), http://www.standard.net/stories/2014/02/15 /woman-runs-bulls-gets-clobbered-drone-aircraft; Jim Hoffer, *Exclusive: Small Drone Crash Lands in Manhattan*, ABC 7 NEWS (Oct. 3, 2013), http://abclocal.go.com/wabc/story?section=news/investigators&id=9270668; Erica

surprising, therefore, to see that the public and policymakers increasingly have expressed concern about the domestic use of UASs. A September 2013 poll by the Associated Press found that a third of those polled expressed fear that law-enforcement use of UASs could lead to violations of individual privacy.[15] An April 2014 survey by the Pew Research Center found that sixty-three percent of respondents believed that "it would be a change for the worse if 'personal and commercial drones are given permission to fly through most U.S. airspace.'"[16] Policymakers have also begun to express concerns about the privacy implications of domestic UASs, sometimes calling for increased regulation.[17] Lawmakers at the state level have shown the most concern for the privacy implications of domestic UASs, with the result being legislation pending in forty-three states that seeks to limit the use of UASs, most often by law enforcement and other state agencies.[18] Finally, safety and privacy have also dominated concerns that the Federal Aviation Administration (FAA) has about domestic drones.[19]

We believe that these privacy concerns are legitimate and deserve the attention that they have received. Safeguards like those being explored in state legislatures are important for protecting people from possible government intrusions on privacy through the use of this new technology. Where privacy infringements by nongovernment actors are concerned, however, we

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Fink, *This Drone Can Steal What's on Your Phone*, CNNMONEY (Mar. 20, 2014, 8:10 AM), http://money.cnn.com/2014/03/20/technology/security/drone-phone/index.html.

[15] Joan Lowy, *AP-NCC Poll: A Third of the Public Fears Police Use of Drones for Surveillance Will Erode Their Privacy*, ASSOCIATED PRESS (Sep. 27, 2013), http://ap-gfkpoll.com/uncategorized/our-latest-poll-findings-13.

[16] Aaron Smith, *U.S. Views of Technology and the Future: Science in the Next 50 Years*, PEW RESEARCH CENTER (April 2014), *available at* http://www.pewinternet.org/files/2014/04/US-Views-of-Technology-and-the-Future.pdf.

[17] Andrea Drusch, *Dianne Feinstein Wants Drones Regulated*, POLITICO (Mar. 16, 2014, 8:26 PM), http://www.politico.com/story/2014/03/drone-regulation-dianne-feinstein-104718.html; Brendan Sasso, *Senators Fear Drones "Buzzing Overhead,"* THE HILL (Mar. 20, 2013, 7:06 PM), http://thehill.com/blogs/hillicon-valley/technology/289337-senators-worry-about-domestic-drone-surveillance.

[18] Allie Bohm, *Status of Domestic Drone Legislation in the States*, FREE FUTURE BLOG: AM. CIV. LIBERTIES UNION (Feb. 15, 2013, 12:21 PM), https://www.aclu.org/blog/technology-and-liberty/status-domestic-drone-legislation-states.

[19] NPR Staff, *FAA Head: Safety, Privacy Concerns Abound in Regulating Drones*, NAT'L PUBLIC RADIO (May 5, 2014, 3:01 PM), http://www.npr.org/blogs/alltechconsidered/2014/05/05/309746615/faa-head-safety-privacy-concerns-abound-in-regulating-drones.

believe that existing law provides adequate remedy in the form of privacy and trespass torts. Should these laws prove inadequate, it would be appropriate to enact new laws to protect individuals' privacy. In any case, more research should be conducted on the privacy implications of proliferating government and nongovernment use of UASs. But the focus of this article is the First Amendment implications of FAA attempts to ban the commercial use of UASs, an action that has received little attention to date. Additionally, as this article concerns First Amendment–protected uses of UASs in public spaces, where there is no expectation of privacy, we will leave discussion of privacy concerns for another article.

Five years before the passage of the FAA Modernization and Reauthorization Act of 2012 (FMRA 2012), and in response to these growing public concerns, the FAA released a notice of policy purporting to ban the use of UASs for commercial purposes. In doing so, the FAA fell victim to the kind of conflation of technologies and uses that so often drives technopanics. Technologically, the FAA did not differentiate between military UASs weighing thousands of pounds and radio-controlled children's toys weighing mere ounces. For example, the DJI Phantom has emerged as perhaps the most popular consumer-grade UAS and has been used often by those engaged in First Amendment–protected activity. This device can be obtained relatively inexpensively from online retailers like Amazon; it weighs approximately two pounds and is approximately eleven inches wide.[20] In fact, the FAA has said that a UAS can be as small as four ounces in weight and six inches wide, meaning that virtually any radio-controlled children's toy would now count as a UAS under the FAA definition and, therefore, be subject to the agency's purported regulations.[21] Similarly, in terms of use, the FAA has interpreted

[20] For specifications of the DJI Phantom, see *Phantom*, DJI, http://www.dji.com/product/phantom/spec (last visited July 26, 2014).
[21] Unmanned Aircraft Operations in the National Airspace System, 72 Fed. Reg. 6689 (2007) [hereinafter *2007 Notice*].

commercial activity broadly, such that any use of a UAS for profit or by a for-profit organization—even if the use of the UAS does not specifically generate profit—is considered commercial activity and therefore banned. These definitions have guided the agency's enforcement actions, which have included sending more than a dozen cease-and-desist letters since 2007 to individuals and organizations that it believes are violating the ban. In the most widely reported case of FAA enforcement to date, the agency attempted to fine Raphael Pirker $10,000 after he was paid to use a four-and-a-half-pound radio-controlled Styrofoam airplane with a camera on it to take aerial photography on behalf of the University of Virginia.[22]

This is not the first or only case of the FAA taking enforcement action against an individual engaged in aerial photography with a small UAS. In fact, as we will demonstrate, most of the agency's enforcement actions have been taken against individuals engaged in aerial photography. This article argues that aerial photography with UASs, whether commercial or not, is protected First Amendment activity, particularly when it is used for news-gathering purposes, as it has been in a number of instances where the FAA has taken enforcement action against domestic UAS operators. Though Congress has granted the FAA the power to regulate the integration of UASs into the domestic airspace, when those regulations apply to First Amendment–protected activity, they must comply with constitutional mandates. As currently formulated, the FAA's blanket ban on commercial use of UASs, which it asserts includes aerial photography and news gathering, constitutes an unconstitutional restriction on speech in a public forum.

The remainder of this article will explore the emerging uses of UASs for journalism, the current FAA policy on commercial use of UASs and how it has been enforced, and the First

[22] Huerta v. Pirker, No. CP-217 (NTSB Mar. 6, 2014), *available at* http://www.kramerlevin.com/files/upload/Pirker Decision.pdf.

Amendment implications of these. The article concludes by arguing that the FAA must do more to take First Amendment–protected uses of this technology into account as it proceeds with meeting its congressional mandate to promulgate rules for domestic use of UASs. We argue that where UAS restrictions in the name of safety potentially infringe First Amendment–protected uses, those restrictions must be narrowly tailored time, place, and manner restrictions. We provide general examples of what such restrictions might reasonably entail.

II. The Use of UASs for Aerial Photography and News Gathering

The use of UASs for the capture and sharing of information is nothing new, although the technology has evolved over time. Cameras mounted on hot air balloons captured images of American cities as early as 1858, and commercial photographer George R. Lawrence popularized the use of aerial photography at the turn of the twentieth century by using kites and balloons to lift a specially outfitted forty-nine-pound camera over cityscapes.[23] Lawrence, who made a name for himself photographing the devastation of the 1906 San Francisco earthquake from several hundred feet in the air, created the Lawrence Captive Airship, which relied on seventeen large kites and a series of stability weights to lift a camera up to several thousand feet. European photographers followed suit, employing kite cameras alongside camera-carrying pigeons for aerial shots and wartime surveillance.[24] While archaic by today's standards, these early uses of UAS technology demonstrated some of the unique benefits UASs offer journalists today, of which four are briefly examined here: unique perspectives, safety, cost reduction, and innovation.

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[23] *The Incredible Aerial Photographs of American Cities Taken by the World's First Drone*, DAILY MAIL (June 23, 2013), http://www.dailymail.co.uk/news/article-2347122/The-incredible-aerial-photographs-American-cities-taken-worlds-drone-Pioneer-took-images-1900s-cameras-attached-kites.html.

[24] Meghan Neal, *A Brief History of Pre-drone Vintage Aerial Photography*, MOTHERBOARD (Jan. 9, 2014, 11:42 PM), http://motherboard.vice.com/en_ca/blog/a-brief-history-of-pre-drone-vintage-aerial-photography.

A. UASs Provide Unique Perspectives Unattainable with Other Means of News Gathering

News organizations have relied on video footage captured by journalists and citizens, some of it with UASs in the form of lightweight quadcopters or hexacopters, in their coverage of difficult-to-reach spaces, such as human rights rallies and areas devastated by natural disasters. Consider the case of Typhoon Haiyan, which swept across the Philippines in November 2013, taking more than 6,000 lives and creating a natural disaster zone that was difficult for most journalists to reach.[25] With traditional journalistic resources, news organizations would have largely relied on eyewitness accounts and delayed dispatches from the area. Efforts to display images would have been hampered by a collapse in local infrastructure, including the loss of necessary resources to transmit photos and videos (i.e., power for equipment, Internet access for transmittal). Even when those resources were restored, journalists would have been encumbered by the inability to traverse a landscape ravaged by winds of more than 200 miles per hour and extensive flooding and mudslides. Yet images and videos of the devastation channeled across the globe with unexpected expediency, thanks in part to the use of UASs.[26] CNN was among the first news organizations to deploy a UAS in one of the more remote and devastated areas of the Philippines, Tacloban. Reporter Karl Penhaul used a drone to broadcast images of the devastation ten days after the typhoon struck, narrating as a UAS hovered above heaps of debris and rescue workers.[27]

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[25] *Typhoon Haiyan Devastates the Philippines*, NPR (Nov. 21, 2013), http://www.npr.org/series/244773443/typhoon-haiyan-devastates-the-philippines.

[26] BarcroftTV, *Drone Captures Devastation after Super-Typhoon*, DAILYMOTION (Nov. 18, 2013), http://www.dailymotion.com/video/x17c5ln_drone-captures-devastation-after-super-typhoon-haiyan_news; BarcroftTV, *Typhoon Haiyan: New Drone Footage Shows Destruction of Tacloban Phillipines*, YOUTUBE (Nov. 21, 2013), https://www.youtube.com/watch?v=hU_rw2j-CPk.

[27] *A Bird's Eye View of Haiyan Devastation*, CNN (Nov. 18, 2013), http://us.cnn.com/video/?/video/world/2013/11/18/philippines-drone-camera-penhaul.cnn&video_referrer=http%3A%2F%2Fwww.dronejournalism.org%2Fnews%2F2013%2F11%2Fcnn-deploys-drone-to-cover-typhoon-haiyan-devastation.

Citizen journalists, who play an increasingly critical role in the news process,[28] have made similar use of UASs. When a gas leak caused a major explosion in the East Harlem section of New York City in March 2014, business systems expert Brian Wilson was among the first at the scene. After asking responding authorities for permission to film, Wilson launched his quadcopter above the blast zone and captured more than thirty minutes of footage that was widely used among local and national news organizations.[29] Wilson was able to provide early coverage that showed the damage of the explosion and was also able to provide footage from a vantage point not even news helicopters could reach. News organizations have also relied on UASs to provide unique perspectives for rockslides in Italy,[30] devastating bushfires in New South Wales,[31] fiery Ukrainian uprisings beginning in February 2014,[32] tornado damage in Arkansas in April 2014,[33] and a display of dolphin megapods off the coast of California.[34] In each of these cases, journalists would otherwise have been limited to ground reporting without visual contextualization, given the inability to either reach the areas covered or complete their reporting outside harm's way.

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[28] Kevin DeLuca & Sean Lawson, *OWS and Social Media News Sharing after the Wake of Institutional Journalism*, *in* CITIZEN JOURNALISM: GLOBAL PERSPECTIVES, VOLUME 2 (Stuart Allan & Einar Thorsen eds., 2014); Andrea Caumont, *12 Trends Shaping Digital News*, PEW RES. CTR. (Oct. 16, 2013), http://www.pewresearch.org/fact-tank/2013/10/16/12-trends-shaping-digital-news/; Z. Papacharissi & M. de Fatima Oliveira, *Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt*, 62 J. COMM. 266 (2012).

[29] Bill Hutchinson, *Drone Captures Scene at East Harlem Explosion that Flattened Two Buildings*, N.Y. DAILY NEWS (Mar. 13, 2014, 12:02 AM), http://www.nydailynews.com/new-york/uptown/drone-captures-e-harlem-explosion-scene-video-article-1.1719988; Sandra Oshiro, *N.Y. Daily News Uses Drone Video in Harlem Explosion Coverage*, POYNTER (Mar. 13, 2014, 6:27 PM), http://www.poynter.org/latest-news/mediawire/243434/n-y-daily-news-uses-drone-video-in-harlem-explosion-coverage/.

[30] *Incredible Video Shows How Boulders Demolished a 300-Year-Old Italian Farmhouse*, YAHOO NEWS (Jan. 29, 2014, 3:23 PM), http://news.yahoo.com/blogs/trending-now/incredible-images-show-how-boulders-demolished-a-300-year-old-italian-farmhouse-202351467.html.

[31] Madame H, *VIDEO: Drone Films Lithgow Fire*, TRIPLEM (Oct. 24, 2013), http://www.triplem.com.au/melbourne/breaking-news/blog/2013/10/drone-footage-shows-bushfire-devastation-in-lithgow-blue-mountains/.

[32] *Ukraine: Dramatic Drone Footage Captures Battle for Central Kiev Square—Video*, GUARDIAN (Feb. 19, 2014), http://www.theguardian.com/world/video/2014/feb/19/ukraine-dramatic-drone-footage-captures-battle-kiev-square-video.

[33] *Aerial Drone Footage Shows Extent of Central U.S. Tornado Destruction*, sUAS NEWS (Apr. 28, 2014), http://www.suasnews.com/2014/04/28837/aerial-drone-footage-shows-extent-of-central-u-s-tornado-destruction/.

[34] Beth Buczynski, *Drone Captures Rare Footage of Dolphin Megapod Stampeding with Whales*, INHABITAT (Mar. 4, 2014), http://inhabitat.com/drone-captures-rare-footage-of-dolphin-megapod-stampeding-with-whales-video/.

B. UASs Are Safer Than Traditional Means of Aerial News Gathering

Many news organizations have begun relying on the public to contribute user-generated content (UGC) to their coverage, most notably in the form of breaking news through social networking services (SNSs) and through sharing photos and videos in those situations as well as in crises and otherwise potentially dangerous events.[35] Nearly ninety percent of Americans with smart phones have watched videos on these phones, and more than a third have used them to capture and share news-related videos.[36] News organizations have incorporated these videos and related SNS content into their news coverage of events such as the Tunisian and Egyptian Revolutions of 2011 and the Ukrainian protest rallies of 2014.[37] Rather than relying on untrained individuals to capture the most telling angles of hazardous news stories, news organizations could employ UASs in such areas, allowing them to control their coverage without endangering the lives of journalists (and without exploiting the free labor of individuals who *are* endangering their lives by capturing and sharing such content). Still, as the Professional Society of Drone Journalists points out, the use of UASs for news and information gathering is not without peril.[38] Indeed, UASs can navigate into dangerous spaces, such as active volcanoes, that most journalists and other individuals could never safely approach. But when UASs are operated in crowded areas or above active disaster scenes where rescuers are at work, their dangers should not be ignored. Strong wind gusts, radio

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[35] A. Hermida, *Twitter as an Ambient News Network*, *in* TWITTER AND SOCIETY 359 (K. Weller et al. eds., 2014); Papacharissi & de Fatima Oliveira, *supra* note 28; Justin Ellis, *New Technology, New Money, New Newsrooms, Old Questions: The State of the News Media in 2014*, NIEMAN JOURNALISM LAB (Mar. 26, 2014, 12:01 AM), http://www.niemanlab.org/2014/03/new-technology-new-money-new-newsrooms-old-questions-the-state-of-the-news-media-in-2014/.

[36] Amy Mitchell, *State of the News Media 2014: Overview*, PEW RES. JOURNALISM PROJECT (Mar. 26, 2014), http://www.journalism.org/2014/03/26/state-of-the-news-media-2014-overview/.

[37] G. Lotan et al., *The Arab Spring: The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions*, 5 INT'L J. COMM. 1375 (2011).

[38] Matthew Schroyer, *Two Recent, Very Different, Instances of Drones Deployed in Dangerous Situations*, PROF'L SOC'Y DRONE JOURNALISTS (Mar. 13, 2014), http://www.dronejournalism.org/news/rtg1a2tz552ojqg2n8p2y1sywl3thu.

interference, mechanical malfunction, and operator errors could bring down a UAS with potentially deadly force.[39]

Yet these same conditions could be even more catastrophic with current news-gathering technologies. Consider the case of a local television helicopter crash in a bustling part of Seattle in 2014 that claimed the lives of two individuals. The helicopter crashed while lifting off to cover a news story near the city's famous Space Needle, killing the pilot and a news photographer while injuring several people on the ground.[40] News organizations around the United States regularly employ such means of news coverage for traffic reports, crowd flyovers, and breaking news—all of which could be covered more safely, more cost efficiently, and less invasively with UASs. Indeed, helicopters rank among the most dangerous of transportation vehicles, recording a crash rate of 9.84 per 100,000 hours as compared to the crash rate of all general aircraft (e.g., airplanes, helicopters, balloons, blimps, etc.), which is approximately thirty-five percent lower than that of helicopters alone.[41] Similarly, *Slate* reported an annual rate of 1.44 fatalities per 100,000 flying hours for nonmilitary helicopters versus 0.017 fatalities per 100,000 driving hours, suggesting "helicopters are 85 percent more dangerous than driving."[42] In short, as one drone law expert observed, "When a fuel-filled, 1,500-pound JetRanger becomes controlled solely by gravity, the risks, in terms of loss of life, injury and property damage are vastly worse than if the same were to occur with a battery-powered, 3-pound model aircraft."[43]

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[39] *Id.*
[40] *2 Killed as KOMO News Helicopter Crashes Near Space Needle*, KOMONEWS (Mar. 18, 2014, 7:54 AM), http://www.komonews.com/news/local/News-helicopter-crashes-burns-beside-Space-Needle-250790281.html.
[41] Christopher Beam, *Hellish Copters: Why Are Choppers Always Crashing?*, SLATE (Oct. 30, 2009, 5:36 PM), http://www.slate.com/articles/news_and_politics/explainer/2009/10/hellish_copters.html.
[42] Brian Palmer, *Are Helicopters Safer Than Cars?*, SLATE (June 3, 2011, 3:57 PM), http://www.slate.com/articles/news_and_politics/explainer/2011/06/are_helicopters_safer_than_cars.html.
[43] *About Peter Sachs*, DRONE L.J., http://dronelawjournal.com/about-peter-sachs/, last visited Sept. 17, 2014.

C. UASs Reduce the Cost of Aerial News Gathering

As the *New York Times* pointed out, UASs not only provide journalists with a safer, more effective mechanism of reporting on certain events, they also present a cost-saving alternative to aerial coverage at a time when news organizations are struggling with economic sustainability.[44] Helicopters, which many news organizations rely on daily, cost hundreds of thousands of dollars and require significant funds to operate, including large amounts of fuel and significant ongoing operation costs. Even the most effective UASs available for journalistic purposes cost less than $1,000 and can be operated at a fraction of the cost of their heavier and less reliable helicopter counterparts.[45] At least one prominent engineering expert has noted that the cost of operating UASs will likely drop to below $10 per hour in the coming years.[46]

Even without helicopters, ground reporting—especially that which provides unique perspectives to convey powerfully visual contextualization—can often be a costly venture. The BBC's Richard Westcott notes that bulky and expensive equipment often makes for stressful reporting, but that such anxiety (and costs) could be significantly reduced by employing UASs to "go close to something then soar into the air in one smooth movement" rather than having a reporter "creep along the ground, shimmy a fence, crawl through a tree then climb to 400-ft for a spectacular panorama."[47] All this is accomplished without hefty video cameras, dollies, grips, news vehicles, and other resources frequently needed for news broadcasts.

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[44] Leslie Kaufman & Ravi Somaiya, *Drones Offer Journalists a Wider View*, N.Y. TIMES (Nov. 24, 2013), http://www.nytimes.com/2013/11/25/business/media/drones-offer-journalists-a-wider-view.html?_r=0.
[45] *About Peter Sachs*, *supra* note 43.
[46] *Id.*
[47] Richard Westcott, *"Hexacopter" Changes the Way TV Reporters Work*, BBC (Oct. 28, 2013), http://www.bbc.com/news/business-24712136.

D. UASs Are the Future of Innovation in News Gathering

Despite the potential cost-saving benefit of UASs, news organizations remain cautious in their approach, demonstrating a willingness to use drone-generated content from citizens without assuming any of the innovative risk that the incorporation of any new technology might require. Such innovation is instead being led by hobbyists like Brian Wilson and by media scholars, who are less bound by journalistic norms and the regulations of news organizations and perhaps better positioned to experiment with drone technology on personal and professional levels. As media professor Matt Waite said about the Drone Journalism Lab he helped to develop at the College of Journalism and Mass Communication at the University of Nebraska–Lincoln in 2011, "Journalists are increasingly faced with two problems: a growing appetite for unique online video in an environment of decreased budgets; and restricted or obstructed access to stories ranging from disaster coverage to Occupy Wall Street protests."[48] While current organizational policies may restrict some journalists from making use of UASs, Waite and other scholars are encouraging the innovative incorporation of UASs in news coverage by students, who represent the journalists of tomorrow, and by citizen journalists, who continue to provide most of the UAS-captured footage used by news organizations. Both the Drone Journalism Lab at Nebraska and the Missouri Drone Journalism Program have run up against FAA scrutiny, but they continue to seek clarity in legal restrictions while offering unique collaborations and partnerships with local and national news organizations, many of whom have closely monitored the progress of these programs.[49] Similar programs have begun to surface elsewhere in the United States and Canada at universities such as the College of the North Atlantic and the University of Utah, both

[48] DRONE JOURNALISM LAB, http://www.dronejournalismlab.org/about (last visited Mar. 31, 2014).
[49] THE MISSOURI DRONE JOURNALISM PROGRAM, http://www.missouridronejournalism.com/ (last visited Mar. 31, 2014).

of which have courses scheduled for 2014 that examine the legal and ethical aspects of UASs, as well as their innovative repurposing for journalism and beyond.

III. FAA Definitions and Actions Regarding UASs and Commercial Activity

The FAA has taken enforcement action on more than a dozen occasions against individuals employing drones for the purposes of aerial photography and news gathering. The basis of this enforcement is twofold. First, the agency's definition of a UAS is so broad as to include radio-controlled model aircraft (RCMA), a type of flying device not traditionally regulated by the FAA. The RCMA is also the type of device most commonly used by aerial photographers and drone journalists. Second, the FAA's broad definition of commercial activity makes no distinction between First Amendment–protected activity and nonprotected activity. Enforcement actions based on these definitions have resulted in an effective government ban on aerial photography and news-gathering activities using a type of device that has existed for decades but has never before been subject to regulation.

A. The FAA Definition of a UAS Is Overly Broad

As mentioned above, conflation of a number of distinct entities or activities under a larger category is a key rhetorical strategy that encourages technopanics and subsequent calls for greater regulation of new technologies.[50] This phenomenon is at work in the FAA's attempts to define UASs. Its 2007 policy statement on Unmanned Aircraft Operations in the National Airspace System, which purported to ban commercial use of UASs, is the foundation of its enforcement actions. In this document, the agency defines a UAS as "a device that is used, or is

[50] *See supra* notes 9, 10, 13, and accompanying text.

intended to be used, for flight in the air with no onboard pilot." It acknowledges that this includes military drones like those used in Afghanistan, but says that UASs also include "remotely controlled model aircraft" (RCMA), the type of devices most used by aerial photographers and journalists. Of course, Predator drones and RCMAs constitute an extremely broad spectrum of devices. The broadness of the definition seems intentional, given that the FAA policy says that UASs can be "controlled either manually or through an autopilot using a data link," that their dimensions can range from "wingspans of six inches to 246 feet," and that they can "weigh from approximately four ounces to over 25,600 pounds."[51]

In a definitional snowball effect, the agency's attempts to carry out enforcement against operators of devices falling under this broad definition of a UAS have also resulted in their attempt to broaden the category of "aircraft" in general. In the most severe case of enforcement to date, as mentioned above, the FAA tried to assess a civil penalty of $10,000 against Raphael Pirker for operating his Styrofoam, camera-carrying RCMA weighing four and a half pounds.[52] The FAA sought to fine him for operating "an aircraft in a careless or reckless manner so as to endanger the life or property of another."[53] The FAA argued that "The aircraft referenced above is an Unmanned Aircraft System (UAS)" and argued that it is subject to regulation under Part 91 of Federal Aviation Regulations (FARs) Section 91.13(a). But because "the classification UAS does not appear in the FARs,"[54] the FAA asserted that the device in question was not just a UAS, but an "aircraft" as defined in 14 C.F.R. Part 1, Section 1.1, which is a "device that is used or

[51] *2007 Notice*, *supra* note 21, at 6689.
[52] Mot. to Dismiss at 2, Huerta v. Pirker, No. CP-217 (NTSB Mar. 6, 2014).
[53] Cmplt. at 1, Huerta v. Pirker.
[54] Huerta v. Pirker, No. CP-217, at 4 (N.T.S.B. Mar. 6, 2014), *available at* http://www.kramerlevin.com/files /upload/PirkerDecision.pdf.

intended to be used for flight in the air."[55] Thus, the FAA argued, in essence, that even if existing regulations do not define a UAS as something that the agency can regulate, they do give the agency the ability to regulate "aircraft," which includes virtually anything and everything that flies in the air.

However, the administrative law judge for the National Transportation Safety Board, in granting the defendant's motion to dismiss, held that the FAA's asserted definition of aircraft is overly broad to the point of being laughable in its implications. The judge wrote,

> To accept Complainant's interpretive argument would lead to a conclusion that those definitions include as an aircraft all types of devices/contrivances intended for, or used for, flight in the air. The extension of that conclusion would then result in the risible argument that a flight in the air of, *e.g.*, a paper aircraft, or a toy balsa wood glider, could subject the "operator" to the regulatory provisions of FAA Part 91, Section 91.13(a).[56]

The judge ultimately held that an RCMA does not meet the statutory or regulatory definition of an aircraft subject to FAA regulation.[57]

Further evidence of the FAA's attempt to conflate previously distinct entities under a broader category is found in the judge's observation "that FAA historically has not required model aircraft operators to comply with" the kinds of requirements now being imposed on operators of the newly minted category of UASs, which the FAA says includes RCMAs. "The reasonable inference," the judge said, "is not that FAA has overlooked the requirements, but, rather that FAA has distinguished model aircraft as a class excluded from the regulatory and statutory definitions."[58] The judge viewed as correct the FAA's historical distinction between RCMAs and aircraft and, therefore, rejected the agency's attempt to erase that distinction by conflating the two.

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[55] *Id.* at 2.
[56] *Id.* at 3.
[57] *Id.* at 7. The FAA is appealing the decision.
[58] *Id.* at 3.

B. The FAA Identifies Three Categories of UAS Use

Of course, any agency must make decisions about when—and when not—to take enforcement action. But the FAA's overly broad definition of a UAS does not allow for making distinctions as to type of device. Therefore the primary distinctions deployed by the FAA for purposes of deciding when to take enforcement action are based on by whom and for what purposes the UAS is used, rather than on its technical attributes, that is, how, when, and where it is used.

In its 2007 policy statement on UASs, the FAA says that its "current policy is based on whether the unmanned aircraft is used as a public aircraft, civil aircraft or as a model aircraft."[59] Public aircraft are those used by government agencies, such as the military and law enforcement, for government purposes. To operate a UAS as a public aircraft, the FAA policy is that these agencies must apply for and receive a Certificate of Waiver or Authorization (COA), obtain a Department of Defense airworthiness statement, or demonstrate the UAS's safety "by other approved means."[60]

All uses of a UAS that are not public are civil, with a special category carved out for recreational and sport use of RCMAs. According to the policy, any use of a UAS "for hire," or for "commercial" or "business purposes," falls under the category of civil use. Two things are of note here. First, FAA policy states that "operators who wish to fly an unmanned aircraft for civil use must obtain an FAA airworthiness certificate, the same as any other type of aircraft."[61] Civil use requires prior government approval. Second, the only kind of airworthiness certificate offered by the FAA at this time is for experimental aircraft; it is rarely given and places serious restrictions on how a UAS can be used. As of the 2007 policy statement, the FAA had only

[59] *2007 Notice*, *supra* note 21.
[60] *Id.*
[61] *Id.*

issued five of these certificates. All five certificates were "for purposes of research and development, marketing surveys, or crew training."[62]

Neither aerial photography nor news gathering are among the purposes for which the FAA will issue a certificate. This is likely because some of the provisions of the certification would make it impossible to do these activities. Operating a UAS under the experimental certification requires describing for the FAA, in advance, "the time or number of flights . . . along with a description of the areas over which the aircraft would operate."[63] A professional or citizen journalist using a UAS for news-gathering purposes is not likely to fly it in only one location and to know in advance when and how many times it will fly. These factors will be dictated by breaking news events over which the journalist has no control. Finally, in any case, the FAA is explicit that "UAS issued experimental certificates may not be used for compensation or hire."[64] Even if a certificate is issued, the aerial photographer or journalist cannot be paid for his or her work because the FAA will deem this a violation of its policy and, therefore, an illegal use of a UAS.

As mentioned above, there is a sub-category carved out within the civil use category for recreational and sport uses of RCMAs. In 1981, the FAA developed a set of voluntary guidelines for operators of RCMAs, which are spelled out in *Advisory Circular 91-57, Model Aircraft Operating Standards* (AC 91-57). The devices most commonly used by aerial photographers and journalists fall within this category, at least in terms of their technical characteristics. In response to this kind of use for RCMAs, the FAA noted in its 2007 policy that "some operators have used [AC 91-57] as the basis for commercial flight operations"; however "AC 91-57 only applies to modelers, and thus specifically excludes its use by persons or companies for business

[62] *Id.*
[63] *Id.*
[64] *Id.*

purposes."[65] In the FAA's current understanding, using an RCMA for commercial or business purposes transforms it into a UAS in the civil aircraft category and, as such, makes its operation illegal without prior approval from the FAA.[66]

Finally, it is not exactly clear what the FAA considers to be a "commercial" or "business" use. As the judge in the Pirker decision noted, "'business' is not defined, so it is unclear if the term is limited to ongoing enterprises held out to the general public, or if it includes a one-time operation for any form or amount of compensation."[67] The closest that the FAA comes to a definition in its 2007 policy statement is when it says that a UAS operating under experimental certification "may not be used for compensation or hire."[68] Whatever the case, it will become clear in the following section that the FAA considers paid aerial photography and news gathering with a UAS to be a commercial or business use of the device and, as such, illegal.

The bottom line, from the FAA's perspective, is that any use of a UAS, no matter its technical characteristics, requires government approval. The 2007 policy statement clearly asserts that "no person may operate a UAS in the National Airspace System without specific authority."[69] Public aircraft require a COA. Civil aircraft require an experimental airworthiness certificate, which is hard to get and restrictive. RCMAs operate under AC 91-57, unless used for commercial or business purposes, in which case they fall under the civil aircraft rules. We will see in the following section that a significant portion of the FAA's enforcement actions under the

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[65] *Id.* In fact, AC 91-57 makes no mention of business use of RCMAs and is, in any case, a set of voluntary guidelines without the authority to specifically exclude any particular use or set of users. *See* FEDERAL AVIATION ADMINISTRATION, ADVISORY CIRCULAR 91-57, MODEL AIRCRAFT OPERATING STANDARDS (1981).
[66] Huerta v. Pirker, No. CP-217, at 5 (N.T.S.B. Mar. 6, 2014), *available at* http://www.kramerlevin.com/files/upload/PirkerDecision.pdf ("[B]y such [business] use the model aircraft is deemed an UAS, requiring special airworthiness certification.").
[67] *Id.*
[68] *2007 Notice*, *supra* note 21.
[69] *Id.*

2007 policy statement have been against aerial photographers or journalists for using an RCMA for commercial or business purposes.

C. The FAA Has Sought to Enforce a Ban on Photography and News Gathering with UASs

A string of news reports, seventeen FAA cease-and-desist letters released as a result of a Freedom of Information Act (FOIA) request, and statements from FAA spokespeople all establish that the FAA views photography and news gathering with drones as inherently commercial and, therefore, illegal. The FAA has taken action on a number of occasions to stop individuals from using RCMAs for photography or news gathering without distinguishing between First Amendment–protected activities and nonprotected activities. In fact, the FAA has sought to enforce a ban on both, based on the same reasoning—that is, commercial and business use is illegal.

In the category of clearly nonprotected activity, perhaps the most famous case to date is the FAA informing the Lakemaid Beer Company in Wisconsin that it was in violation of the FAA's purported ban on commercial use of UASs in the wake of national news coverage of the company's plans to use radio-controlled octocopters to deliver its beer to ice fishermen on the state's frozen lakes.[70] Given the potential safety concerns, this action against Lakemaid Beer seems at least somewhat reasonable. Radio-controlled vehicles carrying twelve-packs of beer through the air obviously have the potential to cause harm if they crash or drop their payload prematurely. Nonetheless, it is important to note that this action is still on shaky legal footing, given the lack of notice-and-comment-rulemaking. It also raises concerns about overbroad regulations stifling innovation.

[70] Kelly, *supra* note 6; Bill Chappell, *Beer Drone Can Buzz the Skies No More, FAA Says*, NPR (Jan. 30, 2014), http://www.npr.org/blogs/thetwo-way/2014/01/30/269039542/beer-drone-can-buzz-the-skies-no-more-faa-says.

Perhaps more troubling, however, is the release of seventeen FAA cease-and-desist letters, as well as a number of news reports, indicating that the majority of FAA enforcement actions have been carried out against individuals or organizations engaged in First Amendment–protected activity. Patrick McKay, who won the release of the documents, reports that his initial analysis of the letters indicates that "FAA seems to be exclusively targeting UAS operators who are using drones for commercial aerial photography."[71] A more extensive analysis of the documents by journalist Jason Koebler of *Motherboard* also indicates that the majority of the released cease-and-desist letters cited aerial photography for commercial purposes as the violation that prompted the letter.[72] Our own analysis of the letters shows that all but four of the seventeen letters identified either aerial photography or videography for commercial purposes as the offense that triggered the sending of the letter. Finally, as mentioned above, in the case of Raphael Pirker, the FAA sought to impose a $10,000 civil penalty after Pirker was hired by a marketing company to take video for the University of Virginia using his camera-carrying RCMA.[73]

One case in particular has made it abundantly clear that the FAA considers news gathering with drones to be illegal. In January 2014, photographer Jesse Tinsley used a personal, radio-controlled quadcopter to shoot a video of the New Year's Day polar bear plunge at Lake Coeur d'Alene, Idaho. Tinsley is also a journalist employed by the *Spokesman-Review* newspaper in Spokane, Washington. After his video was published on the newspaper's website, an FAA spokesperson commented that this constituted an illegal use of a UAS for commercial or

[71] Patrick McKay, *FOIA Response Reveals FAA Routinely Misrepresents the Law Regarding Unmanned Aircraft*, DIYDRONES.COM (Feb. 4, 2014), http://diydrones.com/profiles/blogs/foia-response-reveals-faa-routinely-misrepresents-the-law.
[72] Jason Koebler, *These Are the Companies the FAA Has Harassed for Using Drones*, MOTHERBOARD (Feb. 6, 2014), http://motherboard.vice.com/blog/these-are-the-companies-the-faa-has-harassed-for-using-drones.
[73] Huerta v. Pirker, No. CP-217, at 5 (N.T.S.B. Mar. 6, 2014), *available at* http://www.kramerlevin.com/files/upload/PirkerDecision.pdf.

business purposes.[74] Tinsley responded that he had operated his RCMA in his personal capacity, not in an official capacity or at the direction of the newspaper, that the device in question was his personal property, and that he had taken the video on his day off. Thus, he believed that his use of the RCMA fell into a "gray area" of current law regarding the use of UASs for aerial photography.[75] In response to Tinsley, FAA spokesman Les Dorr asserted that "there is no gray area." He told *Poynter.org* that "if you're using [a UAS] for any sort of commercial purposes, including journalism, that's not allowed." He said that the FAA's "main goal" in sending cease-and-desist letters "is to get them to stop."[76] Dorr continued,

> It's an attractive technology for journalists, and people would like to be able to use it. . . . That said, the FAA is responsible for the safety of the air space. And as much as we'd like to encourage them, we can't let them do it as long as there are no rules in place.[77]

In a similar case, the FAA warned a television station in Little Rock, Arkansas, that it was in violation of the ban on the commercial use of drones after it aired video footage of tornado damage that had been taken with a small UAS. As in the case above, the journalist works for the news outlet, but the journalist, not his employer, privately owns the small, camera-wielding UAS used to take the video. The news director of the television station has disputed the claim that use of the video is a violation of the FAA's purported ban because, he said, the journalist is not required by the news outlet to take video with his small UAS and, as such, any UAS-created video he provides is the same as that provided by any other citizen volunteer. According to the news director, the FAA informed him that "they are aware of our

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[74] Jacob Jones, *FAA Takes Issue with Recent* Spokesman *Drone Video*, INLANDER (Jan. 6, 2014), http://www.inlander.com/Bloglander/archives/2014/01/06/faa-takes-issue-with-recent-spokesman-drone-video.
[75] Jeremy Barr, *Photographer Says* Spokesman-Review*'s Drone-Shot Video Occurred in a "Gray Area,"* POYNTER.ORG (Jan. 3, 2014), http://www.poynter.org/latest-news/mediawire/235099/photographer-says-spokesman-reviews-drone-shot-video-occurred-in-a-gray-area/.
[76] Jeremy Barr, *FAA on Drone Recordings by Journalists: "There Is No Gray Area,"* POYNTER.ORG (Jan. 6, 2014), http://www.poynter.org/latest-news/mediawire/235239/faa-on-drone-recordings-by-journalists-there-is-no-gray-area/.
[77] *Id.*

drone and aware of our driving it, and in the FAA's eyes that is a violation." Nevertheless, he said that he would continue using video taken with the device because, in his view, "This video is being used to advance the story and advance public information. . . . We don't use it because it's cool."[78]

The FAA has even launched investigations or taken enforcement actions in several instances when the use of UASs for aerial photography and news gathering were not conducted explicitly for commercial or business purposes, raising questions about the consistency of agency enforcement. In two of the four released FAA cease-and-desist letters that did not mention photography or videography, the FAA identified using a "UAS for journalism education purposes" by two public universities, the University of Missouri and the University of Nebraska (referred to above), as the underlying offense.[79] Though it has not taken enforcement action, the FAA is reported to be investigating the use of UASs in two recent cases, one in which an off-duty journalist used a radio-controlled, camera-carrying quadcopter to capture video of an accident scene in Connecticut and another in which a private citizen, operating the same device used in the Connecticut case and with permission of first responders, captured aerial video of a building explosion in New York City.[80] Finally, in one case, a cease-and-desist letter sent to a company advertising aerial photography for hire seemed to indicate that *any* use of a drone for aerial photography is illegal. Though the letter sent to Hybird Video LLC identified the

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[78] Diana Marszalek, *KATV Stands Behind Its Use of Drone Video*, TVNEWSCHECK.COM (May 6, 2014, 10:54 AM), http://www.tvnewscheck.com/article/76101/katv-stands-behind-its-use-of-drone-video.

[79] Letter from Christopher L. Grotewohl, Aviation Safety Inspector, FAA, to Missouri School of Journalism, University of Missouri (July 10, 2013) (on file with authors); Letter from Christopher L. Grotewohl, Aviation Safety Inspector, FAA, to College of Journalism and Mass Communication, University of Nebraska–Lincoln (July 10, 2013) (on file with authors).

[80] Jason Koebler, *A Journalist Is Suing the Police Who Grounded His Drone*, MOTHERBOARD (Feb. 17, 2014), http://motherboard.vice.com/blog/journalist-is-suing-the-police-who-grounded-his-drone; Jim Hoffer, *Investigation into Drone over East Harlem Explosion*, ABC NEWS (Mar. 20, 2014), http://abclocal.go.com/wabc/story?section=news/investigators&id=9474104.

company's commercial use of a drone as an offense, it also stated, "The use of a Quadcopter UAS for aerial photography is prohibited without proper authorization."[81]

The agency has subsequently indicated that its view of what constitutes commercial activity does not require direct compensation for the use of a UAS or RCMA and that journalistic use of these devices is prohibited. In June 2014, the agency released its proposed Interpretation of the Special Rule for Model Aircraft (Interpretation) for public comment. This Interpretation seeks to clarify the FAA's understanding of Section 336 of FMRA 2012, which provides guidelines to the agency about what constitutes a model aircraft and places strict limits on how the agency can regulate them. The Interpretation asserts that a model aircraft may not be used for any commercial purpose, including not only direct compensation for a flight, but any flight "in furtherance of a business, or incidental to a person's business."[82] The Interpretation goes on to provide examples of prohibited uses, including "A person photographing a[n] . . . event and selling the photos to someone else."[83] It identifies that very same activity—photography of an event—as permissible for hobbyists, however.

In the most disturbing case, an FAA spokeswoman implied that even publishing drone video footage obtained by and provided to the news outlet by citizen volunteers is illegal. After a fire in Dayton, Ohio, local hobbyists offered to donate to the *Dayton Business Journal* video footage of the fire taken with their model aircraft. When the news outlet asked the FAA about the legality of using the footage, an FAA spokeswoman advised the news outlet to "err on the side of caution" and not publish because, the spokeswoman said, "It's still prohibited in the U.S. to use drones for commercial operations, and if it had to go through the court we would get our lawyers

[81] Letter from Christopher L. Grotewohl, Aviation Safety Inspector, FAA, to Hybird Video LLC (June 6, 2013) (on file with authors).
[82] Interpretation of the Special Rule for Model Aircraft, 79 Fed. Reg. 36,171, 36,174 (2014).
[83] *Id*.

involved." The news outlet explained that this warning was the reason "[w]hy you won't see drone footage from the downtown fire on our site."[84]

It is clear, based on news reports, FAA cease-and-desist letters, and official statements from the FAA, that it sees aerial photography and news gathering with UASs as illegal. The most common rationale used by the FAA when seeking to enforce this ban via the use of cease-and-desist letters, or even civil fines, is the belief that aerial photography and journalism are inherently commercial or business activities, no different from delivering beer, and are, therefore, subject to FAA restrictions. In other cases, even when the photography or journalistic activity in question was not for compensation, the FAA has still taken enforcement actions or, at the least, publicly announced that it was conducting an investigation of the activity in question. In cases where enforcement has been taken, the FAA has been clear that its goal is "to get them to stop."[85] It is reasonable to expect that an off-duty journalist or private citizen, upon learning of an FAA investigation into his or her use of a UAS for photography or news gathering, would likely stop those activities. At the same time, however, while claiming that the commercial ban is necessary to promote safety, the agency has allowed the very same uses for average citizens. In the next section, we analyze the First Amendment implications of this regulatory scheme, arguing that it runs afoul of the Constitution. We then conclude the article by proposing guidelines for reasonable time, place, and manner restrictions that would better promote the safety of the national airspace while avoiding the constitutional problems of the agency's current regulatory scheme.

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[84] Tristan Navera, *Why You Won't See Drone Footage from Downtown Fire on Our Site*, DAYTON BUS. J. (Apr. 4, 2014, 1:25 PM), http://www.bizjournals.com/dayton/blog/2014/04/why-you-won-t-see-drone-footage-from-downtown-fire.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+industry_7+(Industry+Technology).

[85] Barr, *supra* note 76.

IV. First Amendment Implications

As we have established, the FAA's proposed regulatory structure broadly interprets the definition of aircraft to include any and all devices designed to fly in the air, leading the FAA to classify small RCMAs in the same fashion as large, military-grade Predator drones. Further, the FAA's three categories of UAS use—public, civil, and recreational—has the practical effect of classifying all civil nonrecreational use of UASs as commercial. Because the FAA asserts that all commercial uses require prior approval from the FAA in the form of airworthiness certificates that, in turn, are only rarely issued, the FAA's asserted regulatory power effectively bans all commercial use in the United States. The FAA's ban on commercial use is even more troubling when combined with the FAA's assertion that all aerial photography, including that used for news gathering, is inherently commercial and thus illegal.

This section addresses the serious First Amendment implications of the FAA's proposed regulatory scheme and concludes that the FAA's overregulation fails constitutional scrutiny. Specifically, we argue that aerial photography and videography are First Amendment–protected activities. First, we argue that the First Amendment protects a basic right to gather news that guarantees journalists at least as much right to access to information as the general public. Second, we argue that these activities do not lose their First Amendment protection merely because they are carried out for compensation. Finally, in addition to a general news-gathering right, we argue that the First Amendment specifically protects photography and videography as part of the news-gathering process.

We then turn our attention to whether the FAA's proposed regulatory scheme impermissibly infringes on journalists' First Amendment rights. We argue that it does so in two ways. First, we argue that aerial photography and videography—as practiced with small UAS

technologies—occurs in public forums. As such, the FAA's proposed regulatory scheme must qualify as a content-neutral time, place, or manner restriction. We argue that it does not. Second, we argue that the FAA's licensing scheme acts as a prior restraint on speech. Accordingly, the FAA must put in place narrowly drawn, definite licensing standards that prevent arbitrary enforcement actions by government officials. We argue that the FAA has failed to articulate a set of specific standards for when and how a party may seek a license to utilize UAS technology for journalistic purposes. As such, the FAA's blanket ban on commercial UAS use acts as an unconstitutional prior restraint on speech. Additionally, when the FAA's definitions and reasoning are adopted by other agencies of government, enforcement actions by those agencies also result in infringements on First Amendment rights.

A. Aerial Photography and Videography Are First Amendment–Protected Activities

1. The right to gather news is guaranteed by the First Amendment. The FAA has asserted broadly that journalists' use of UAS technology for news-gathering operations constitutes "commercial" activity that falls within the FAA's purported ban. The FAA's position rests on a fundamental mischaracterization of the status of news gathering under the First Amendment. Though the precise contours of the news-gathering right are not well defined, the existence of the right is firmly established.

The First Amendment protects the "unfettered interchange of ideas for the bringing about of political and social changes desired by the people."[86] The law recognizes the importance of a free-flowing exchange of ideas on issues of public importance. Indeed, the Supreme Court has expressly recognized the existence of a "profound national commitment to the principle that

[86] Roth v. United States, 354 U.S. 476, 484 (1957).

debate on public issues should be uninhibited, robust, and wide-open."[87] Of course, the press plays a critical role in ensuring "the widest possible dissemination of information from diverse and antagonistic sources" that "is essential to the welfare of . . . a free society."[88] It is precisely because of the press's importance in the marketplace of ideas that the Supreme Court has consistently recognized the bedrock First Amendment principle that "without some protection for seeking out the news, freedom of the press could be eviscerated."[89] Accordingly, the Court has repeatedly reinforced the basic notion that the press must be afforded at least as much access to information as the general public.[90]

These principles challenge the fundamental assumptions underlying the FAA's ban on commercial UAS use as it is applied to journalists. The FAA's proposed rules would allow the general public, in the form of hobbyists, to fly camera-mounted UASs and record public events, but would prohibit the exact same behavior by journalists because the journalists' use is commercial.[91] Such a distinction is constitutionally infirm because it acts to place greater restrictions on journalists' access to information than the general public's. At a minimum, government regulations that burden speech activity cannot favor the general public over the press.

Thus, the FAA's proposed rules banning commercial UAS use, combined with its assertion that journalistic uses are inherently commercial, acts to exclude journalists from a news-gathering venue that is otherwise open to the public. Such a distinction rests on dubious

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[87] New York Times Co. v. Sullivan, 376 U.S. 254, 270 (1964).
[88] Associated Press v. United States, 326 U.S. 1, 20 (1945); *see also* Pell v. Procunier, 417 U.S. 817, 832 (1974) ("The constitutional guarantee of a free press assures the maintenance of our political system and an open society and secures the paramount public interest in a free flow of information to the people concerning public officials.").
[89] Branzburg v. Hayes, 408 U.S. 665, 702 (1972).
[90] *Id.* at 684–85; *Pell*, 417 U.S. at 834; Zemel v. Rusk, 381 U.S. 1 (1965). Indeed, these cases stand for the proposition that the government may exclude the press from any venue from which the public is also excluded. The converse—that the press may not be excluded from venues accessible to the public—is equally valid.
[91] As discussed above, videography and photography are an increasingly important part of news gathering. *See supra* Part II.

constitutional grounds. Moreover, as explained in the next section, the FAA's attempt to distinguish between commercial and noncommercial is unavailing in the context of First Amendment–protected activities.

2. Commercial news gathering remains protected speech. A central problem with the FAA's purported ban is that it subsumes journalistic activity under the umbrella category of commercial activity. The agency's proposed regulatory structure assumes that commercial speech activities—including journalism—are subject to greater control. But, for the purposes of the First Amendment, this assumption is fatally flawed. The U.S. Supreme Court has long recognized that "a speaker's rights are not lost merely because compensation is received."[92] In *Riley v. National Federation of the Blind*, the Court considered a state licensing provision that required professional fundraisers to acquire a license before engaging in solicitation, but allowed volunteer fundraisers to solicit without a license.[93] The Court rejected the state's argument that it had an interest in licensing professional fundraisers, noting that the "power to license professional fundraisers carries with it (unless properly constrained) the power to directly and substantially alter the speech they utter."[94] The Court explicitly acknowledged that "a speaker is no less a speaker because he or she is paid to speak."[95] Indeed, common sense supports the notion that the government cannot regulate the speech of the *New York Times* simply because the newspaper is a profit-making enterprise. If the act of receiving compensation abrogated First Amendment protection, such protection would largely cease to exist.

[92] Riley v. Nat'l Fed'n of the Blind of N.C., Inc., 487 U.S. 781, 801–2 (1988).
[93] *Id.* at 801.
[94] *Id.*
[95] *Id.*

Moreover, the *sale* of First Amendment–protected materials is also protected.[96] For example, in *New York Times Co. v. Sullivan*, the paper published a full-page advertisement that accused state officials in Alabama of using violence and intimidation tactics against civil rights activists.[97] The advertisement contained a public appeal for funds and support for the civil rights movement.[98] An Alabama official brought a libel suit against the activists and the *New York Times*, alleging that his reputation had been harmed by false statements contained in the advertisement.[99] The official argued that the paper could not rely on the First Amendment for protection because the allegedly libelous statements were "published as part of a paid, commercial advertisement."[100] Though the Court had previously recognized that "commercial" speech is entitled to lessened First Amendment protection,[101] the Court held that the advertisement "was not a commercial advertisement . . . . It communicated information, expressed opinion, recited grievances, protested claimed abuses, and sought financial support on behalf of a movement whose existence and objectives are matters of the highest public interest and concern."[102] The Court explicitly recognized that the paper's acceptance of financial compensation for the advertisement did not magically transform otherwise core political speech into commercial speech.

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[96] Bery v. City of New York, 97 F.3d 689, 695 (2d Cir. 1996).
[97] 376 U.S. 254, 256–58 (1964).
[98] *Id.* at 257.
[99] *Id.* at 258–60.
[100] *Id.* at 265.
[101] *See* Valentine v. Chrestensen, 316 U.S. 52 (1942); Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc., 425 U.S. 748, 758 (1976) (modifying *Valentine* and recognizing a lessened protection for "commercial speech"). The Court has repeatedly stated that commercial speech in the form of advertisements is entitled to lessened protection. But these cases focus on the contents of the advertisement—price, descriptions, required disclaimers—as part of consumer protection measures. The Court has never conflated the idea that compensated speech can be classified as "commercial speech."
[102] *Sullivan*, 376 U.S. at 266; City of Lakewood v. Plain Dealer Publ'g Co., 486 U.S. 750, 756 n.5 (1988) ("Of course, the degree of First Amendment protection is not diminished merely because the newspaper or speech is sold rather than given away."); Murdock v. Com. of Pa., 319 U.S. 105, 111 (1943) ("The right to use the press for expressing one's views is not to be measured by the protection afforded commercial handbills. It should be remembered that the pamphlets of Thomas Paine were not distributed free of charge.").

The Court has continued to recognize that compensated speech remains protected under the First Amendment. After all, "[i]f a newspaper's profit motive were determinative, all aspects of its operations—from the selection of news stories to the choice of editorial position—would be subject to regulation if it could be established that they were conducted with a view toward increased sales."[103] In fact, compensation can be a key driver of valuable expressive content.[104] As the *Bery* court recognized, without some form of financial compensation, often speakers "would not have engaged in the protected expressive activity."[105] Authors, painters, and photographers all engage in expressive conduct with the expectation of compensation. The FAA's position, if accepted, would serve to undermine the creation of valuable speech by infirming the speakers' ability to be compensated for his or her work. Such a position is completely at odds with the First Amendment and would impose a significant burden, not only on speakers, but also on the public's ability to receive their speech.[106]

Thus, the FAA's ban on the use of UASs for commercial purposes, as applied to journalists and citizens engaging in journalistic activity, runs squarely afoul of core First Amendment principles. Whether a speaker is compensated for his or her speech is simply irrelevant under the First Amendment. Any other approach would permit the government to censor newspapers, book publishers, or any other for-profit entity engaging in even the most protected speech, solely on the basis that they profit from the dissemination of speech. As such, the FAA's assertion that it can place more onerous regulations on journalists if their activities are

[103] Pittsburgh Press Co. v. Pittsburgh Comm'n on Human Relations, 413 U.S. 376, 385 (1973).
[104] United States v. Nat'l Treasury Employees Union, 513 U.S. 454, 468 (1995) ("Publishers compensate authors because compensation provides an incentive toward more expression.").
[105] Bery v. City of New York, 97 F.3d 689, 696 (2d Cir. 1996).
[106] *See Nat'l Treasury Employees Union*, 513 U.S. at 468–70.

commercial is erroneous. In short, whether news gathering is for profit or not is simply irrelevant for the purposes of determining the scope of First Amendment protections.

3. Photography and videography constitute speech under the First Amendment. As discussed above, professional journalists and private citizens have long relied on photography, and later videography, as part of the news-gathering and reporting processes.[107] Thus, it is important to recognize that photography and videography play an increasingly vital role in core First Amendment–protected journalistic activities and are entitled to First Amendment protection.

The First Amendment states that "Congress shall make no law . . . abridging the freedom of speech, or of the press."[108] By its plain text, the amendment bars only laws that abridge speech. But the U.S. Supreme Court has long recognized that the First Amendment's protection "does not end at the spoken or written word."[109] Though the Court has rightly rejected the idea that any and all conduct can be protected as speech, it has "acknowledged that conduct may be sufficiently imbued with elements of communication to fall within the scope" of the First Amendment.[110] To this end, the Court has recognized that conduct designed to convey a message to an audience qualifies for First Amendment protections.[111] Thus, to qualify for First Amendment protection, a person must show that he has a message to be communicated and an audience for that message, regardless of the medium through which the message is communicated.[112]

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[107] *See supra* Part II.
[108] U.S. CONST. amend. I.
[109] Texas v. Johnson, 491 U.S. 397, 404 (1989).
[110] *Id.*
[111] *See, e.g.*, *id.* at 419–20 (recognizing flag burning as expressive First Amendment conduct); Tinker v. Des Moines Indep. Cmty. Sch. Dist., 393 U.S. 503, 505 (1969) (holding that students' wearing of black armbands to protest the Vietnam war qualified as protected expression); Brown v. Louisiana, 383 U.S. 131, 141–42 (1966) (holding that a sit-in by African Americans in a "whites only" area to protest segregation is protected conduct).
[112] *See* Hurley v. Irish-American Gay, Lesbian & Bisexual Grp. of Boston, 515 U.S. 557, 568 (1995) (holding that a parade designed to convey a particular message is protected activity).

Though the Court has not explicitly addressed photographers' and videographers' First Amendment right to record public events, the Court has recognized that "[p]hotography, painting, and other two-dimensional forms of artistic reproduction . . . are plainly expressive activities that ordinarily qualify for First Amendment protection."[113] In fact, visual depictions can be a particularly powerful speech medium because they "have the power to transcend . . . language limitations and reach beyond a particular language group to both the educated and the illiterate."[114] As such, "[v]isual art is as wide ranging in its depiction of ideas, concepts and emotions as any book, treatise, pamphlet or other writing, and is similarly entitled to full First Amendment protection."[115] Thus, photographs and videos have the unique ability to communicate ideas and concepts beyond the written word and are entitled to the full range of First Amendment protections.

For example, in *Bery v. City of New York*, the plaintiffs brought a challenge to a city ordinance that barred the sale of any nonfood items in a public space without a vendor license.[116] The ordinance exempted vendors of newspapers, books, and other written materials from the licensing requirement.[117] A group of visual artists challenged the ordinance on First Amendment grounds. The city argued that the artists' works were merely "merchandise," devoid of communicative content.[118] The Second Circuit flatly rejected this argument, noting that "[s]uch a myopic vision not only overlooks case law central to First Amendment jurisprudence but fundamentally misperceives the essence of visual communication and artistic expression."[119] In

[113] Massachusetts v. Oakes, 491 U.S. 576, 591 (1989) (Brennan, J., dissenting); *see also* Miller v. California, 413 U.S. 15 (1973) (recognizing that works that, taken as a whole, possess artistic value are entitled to protection).
[114] Bery v. City of New York, 97 F.3d 689, 695 (2d Cir. 1996).
[115] *Id.*
[116] *Id.* at 692.
[117] *Id.*
[118] *Id.* at 695.
[119] *Id.*

rejecting the city's argument, the court recognized a broad First Amendment protection for visual depictions, including photographs.[120] Thus, it is the communicative properties of photography and videography that are the key to their First Amendment protection.

In fact, courts have only recognized one type of photography that does not fall within the ambit of First Amendment protection: personal, recreational, noncommunicative photography.[121] In *Larsen v. Fort Wayne Police Department*, the plaintiff was charged with disorderly conduct and resisting arrest following an altercation related to the plaintiff's desire to videotape his daughter's choir performance.[122] The choir's booster group had contracted with a professional videography company to record the show, intending to sell copies of the video for fundraising.[123] Because the group wanted to be able to sell videos of the performance, no other photography or videography was permitted during the performance.[124] When the plaintiff argued that he had a right to videotape his daughter's performance, he was asked to leave and was ultimately arrested when he refused. The plaintiff brought a Section 1983 claim, arguing that his First Amendment rights were violated.[125] Though the court agreed that videography is entitled to First Amendment protection, it rejected the plaintiff's First Amendment claim because the plaintiff only wanted to record the performance for his own private personal use and not to convey any message.[126] The importance of the *Larsen* court's analysis lies in its easy recognition that videography is entitled

[120] *Id.* at 696 ("[P]aintings, photographs, prints and sculptures, such as those appellants seek to display and sell in public areas of the City, always communicate some idea or concept to those who view it, and as such are entitled to full First Amendment protection."). *See also* W. Va. State Bd. of Educ., 319 U.S. 624, 632 (1943) ("Symbolism is a primitive but effective way of communicating ideas. The use of an emblem or flag to symbolize some system, idea, institution, or personality, is a short cut from mind to mind.").
[121] *See* Porat v. Lincoln Towers Cmty. Ass'n, No. 04-civ-3199, 2005 WL 646093, at *5 (S.D.N.Y. Mar. 21, 2005); Larsen v. Fort Wayne Police Dep't, 825 F. Supp. 2d 965, 980–81 (N.D. Ind. 2010).
[122] *Larsen*, 825 F. Supp. 2d at 968–73.
[123] *Id.* at 968–69.
[124] *Id.*
[125] *Id.* at 981–83.
[126] *Id.* at 979–80.

to First Amendment protection. The plaintiff's claim failed only because he asserted that he had no intention of communicating his video to any audience, but rather intended it only for his own personal use.

Finally, several recent cases reaffirm that photography and videography are key parts of the speech process and indispensible to the dissemination of information, particularly in regards to events of public concern.[127] Several circuits have upheld citizens' and journalists' rights to record public events in public places. For example, the ACLU of Illinois planned to institute a "police accountability program," which involved making audiovisual recordings of police officers performing their official duties in public places, such as during traffic stops and at public gatherings.[128] At the time, Illinois law contained an eavesdropping statute that made it a felony to make an audio recording of any conversation unless all parties to the conversation gave their consent.[129] The statute imposed enhanced penalties of up to fifteen years in prison if one of the parties to the conversation was a law enforcement officer.[130] The ACLU sought to enjoin enforcement of the statute, alleging that the eavesdropping statute, as applied to the ACLU's accountability program, impermissibly infringed on First Amendment activity.[131]

The State of Illinois staked out the extreme position that "openly recording what police officers say while performing their duties in traditional public forums—streets, sidewalks, plazas, and parks—is *wholly unprotected* by the First Amendment."[132] The Seventh Circuit recognized the extraordinary reach of such a position, which would essentially ban

[127] Glik v. Cunniffe, 655 F.3d 78 (1st Cir. 2011); Smith v. City of Cumming, 212 F.3d 1332 (11th Cir. 2000); Fordyce v. City of Seattle, 55 F.3d 436 (9th Cir. 1995).
[128] ACLU of Illinois v. Alvarez, 679 F.3d 583, 586 (7th Cir. 2012).
[129] *Id.*
[130] *Id.*
[131] *Id.*
[132] *Id.* at 594 (emphasis in original).

videography, or even note taking, at any public event.[133] Further, the court recognized the important principle that "[t]he act of *making* an audio or audiovisual recording is necessarily included within the First Amendment's guarantee of speech and press rights as a corollary of the right to disseminate the resulting recording."[134] The court reasoned that "laws enacted to control or suppress speech may operate at different points in the speech process" and concluded that restrictions on activities early in the speech process—for example, news-gathering activities—necessarily infringed on the speaker's subsequent ability to communicate.[135] Thus, bans on audio or audiovisual recordings can act to suppress the resulting dissemination of information and therefore cannot be readily disaggregated from the act of speech itself. As the Ninth Circuit stated,

> The process of expression through a medium has never been thought so distinct from the expression itself that we could disaggregate Picasso from his brushes and canvas, or that we could value Beethoven without the benefit of strings and woodwinds. In other words, we have never seriously questioned that the processes of writing words down on paper, painting a picture, and playing an instrument are purely expressive activities entitled to full First Amendment protection.[136]

Thus, the First Amendment broadly protects, as speech, photography and videography that is intended to convey a message. Courts have routinely recognized the communicative value of visual depictions. Video, of course, offers a powerful medium for journalists and citizens to convey messages, especially in conjunction with social media and the Internet. As discussed above, media outlets increasingly look to citizen journalists for content, and UASs equipped with video cameras offer these citizens the ability to contribute to the news process in ways they never could previously. And, as this discussion establishes, the creation of audio and

[133] *Id.* at 595–96.
[134] *Id.* at 595.
[135] *Id.* at 596 (quoting Citizens United v. FEC, 558 U.S. 310 (2010)).
[136] Anderson v. City of Hermosa Beach, 621 F.3d 1051, 1062 (9th Cir. 2010).

audiovisual recordings is entitled to the full range of First Amendment protections as part and parcel of the act of disseminating those recordings. Accordingly, the FAA's purported ban on aerial photography, under the label of commercial activity, implicates core First Amendment–protected activities.

B. The FAA's Proposed Regulatory Scheme Violates the First Amendment

Having established that the FAA's proposed regulatory scheme targets activity within the scope of the First Amendment, we must question whether it does so permissibly. As the above discussion establishes, the act of recording public events is intimately connected with the act of disseminating information about those events and the FAA's distinction between aerial photography for recreation and for profit is unavailing. We are left, then, to consider whether the FAA's restrictions can be constitutionally justified, despite effectively banning aerial photography or videography for journalistic purposes. We argue that they cannot.

1. The FAA's regulations impermissibly restrict speech in public forums. The FAA has asserted that no party may use UASs in the national airspace without explicit authorization.[137] The agency's proposed regulatory scheme requires all civil users of UASs to obtain an airworthiness certificate. But the FAA has refused to issue these certificates except for a narrow class of "experimental" uses: research and development, marketing surveys, or crew training.[138] As we discussed previously, the requirements imposed by these certificates effectively render journalistic uses of UASs impossible because applicants must detail, in advance, the number of proposed flights, the time the flights will take place, and a description of the physical location in

[137] *2007 Notice*, *supra* note 21.
[138] *Id.*

which the flights will take place.[139] Because journalists cannot possibly provide this kind of information in advance, they are effectively barred from using UASs for journalistic purposes under the FAA's proposed regulatory scheme.

Traditionally, the Supreme Court has looked to the nature of the forum the speaker wishes to employ in order to ascertain what limits on speech will be permissible.[140] The Court has identified three basic types of forums: the traditional public forum, the limited public forum, and the nonpublic forum.[141] It is important to note, here, that our analysis is focused on journalistic uses of UASs in public places. We do not argue that journalists should be permitted special access rights to private property or other restricted sites. Instead, our focus in this article is on journalistic uses of UASs to record events of public interest that occur in publicly accessible places—the type of events that most implicate First Amendment protections.[142] Supreme Court precedent has long recognized that public streets, parks, sidewalks, and the like are archetypal traditional public forums.[143] Because these traditional public forums are historically important venues for the free exchange of ideas, speech occurring therein receives the highest protection under the First Amendment.

"In these quintessential public fora, the government may not prohibit all communicative activity."[144] Rather, the government may only restrict First Amendment–protected activity under

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[139] *Id.*
[140] Frisby v. Schultz, 487 U.S. 474, 479 (1988) ("To ascertain what limits, if any, may be placed on protected speech, we have often focused on the 'place' of that speech, considering the nature of the forum the speaker seeks to employ.").
[141] *Id.* at 479–80.
[142] We acknowledge that there will be hard cases in which the propriety of regulation would be a much closer call. For example, the FAA may seek to ban the use of UASs for journalistic purposes over private property without the permission of the landowner. In such a case, the journalist's First Amendment rights might well have to yield to the property owner's right to exclude others. But such cases are beyond the scope of this analysis.
[143] *Supra* note 140 at 480 ("Time out of mind, public streets and sidewalks have been used for public assembly and debate, the hallmarks of a traditional public forum."); *see also* Forsyth Cnty., Ga. v. Nationalist Movement, 505 U.S. 123, 130 (1992) (recognizing public streets as "the archetype of a traditional public forum").
[144] Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 31, 45 (1983).

narrowly proscribed circumstances. The Supreme Court has recognized two basic categories of restrictions on expression: content based and content neutral.[145] Whether the restriction is content based or content neutral determines the level of scrutiny courts will subject it to. If the government wishes to restrict expression based on its content, "it must show that its regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end."[146] However, content-neutral time, place, and manner restrictions are permitted, provided they "are narrowly tailored to serve a significant government interest, and leave open ample alternative channels of communication."[147] Content-neutral restrictions must be based on furthering a legitimate government interest other than disagreement with the message being conveyed by the speaker.

Thus, when evaluating government activity that infringes on speech, we must determine what type of forum is involved and evaluate the type of restriction to determine whether it passes constitutional muster. We argue that journalistic use of UAS technology for news gathering in public places takes place in a traditional public forum. Because the FAA's proposed regulatory structure is not a content-neutral time, place, or manner restriction, we argue that it fails to stand up to constitutional scrutiny.

i. The airspace within a traditional public forum should also be considered a public forum. Sidewalks, parks, and public streets are quintessential public forums because they are traditionally used for assembly and debate. The question facing journalists and citizens who wish to utilize UASs for news gathering in public places is whether the airspace directly contiguous to

[145] Bourgeois v. Peters, 387 F.3d 1303, 1320 (11th Cir. 2004).
[146] *Perry*, 460 U.S. at 45.
[147] *Id.*

a public forum also constitutes a public forum. If so, then the government cannot restrict speech activities, including aerial photography, without a sufficiently important interest and appropriately tailored regulations.

In *Center for Bio-ethical Reform v. City and County of Honolulu*,[148] the Ninth Circuit held that the airspace above a public forum is not a public forum.[149] The Center for Bio-ethical Reform wished to hire airplanes to tow aerial banners displaying graphic photographs of aborted fetuses over heavily populated beaches.[150] The Center had used the aerial banner technique in other areas in an effort to further its antiabortion advocacy.[151] Honolulu had a long-standing ban on aerial advertising that was designed to protect the aesthetics of the city's beaches and, consequently, the city's valuable tourism industry.[152] When Honolulu refused to allow the Center to display its aerial banners, the Center brought suit, arguing that the city ordinance violated its First Amendment rights. The Ninth Circuit held that the airspace at issue was not a public forum on the grounds that the airspace was "physically separate from the ground or beaches, require[d] special equipment and authorization for access, and has never typically been a locus of expressive activity."[153]

Though the Ninth Circuit's decision in *Center for Bio-ethical Reform* can superficially be read to categorically determine that airspace is a nonpublic forum, upon closer examination the facts are readily distinguishable. *Center for Bio-ethical Reform* dealt with manned aircraft, which necessarily must fly in navigable airspace above 500 feet in altitude.[154] In contrast, the UASs

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[148] 455 F.3d 910 (9th Cir. 2006).
[149] *Id.* at 920–21.
[150] *Id.* at 916.
[151] *Id.*
[152] *Id.* at 915–16.
[153] *Id.* at 919–20.
[154] *See* 49 U.S.C. § 40,103(2)(b) (instructing the FAA to develop plans "for the use of the navigable airspace"); *id.* § 40,102(32) (defining "navigable airspace" as "airspace above the minimum altitudes of flight prescribed by [FAA] regulations"); 14 C.F.R. § 91.119 (defining minimum safe altitudes as 500 feet over noncongested areas and 1,000 feet over congested areas).

utilized by citizens and journalists for news gathering are typically flown in nonnavigable airspace, well below 500 feet in altitude. For example, most journalists have attempted to follow AC 91-57's instruction not to fly model aircraft above 400 feet. Moreover, much of the news-gathering activity relevant to journalists takes place at even lower altitudes so as to maximize video quality. Thus, though the Ninth Circuit may be correct that the airspace in which passenger planes travel is not a public forum, the opinion offers little help when determining whether the airspace directly contiguous to a public forum—the air above a public sidewalk, for example—is also a public forum.

When determining whether an area contiguous to a public forum is itself a public forum, the Supreme Court has focused on the degree of physical separation between the two. In *United States v. Grace*,[155] the Court held that the sidewalks forming the perimeter of the Supreme Court grounds were public forums for First Amendment purposes.[156] U.S. law prohibited the "display of any flag, banner, or device designed or adapted to bring into public notice any party, organization or movement" on the grounds of the U.S. Supreme Court.[157] Two protestors who were removed for picketing on the sidewalks surrounding the Supreme Court's grounds brought suit, arguing that the law violated their First Amendment rights.[158] The central issue facing the Court was whether the public sidewalks surrounding the Court's grounds were public forums for the purposes of the First Amendment. The Court reasoned that the sidewalks were "indistinguishable from any other sidewalks in Washington, D.C."[159] The Court focused on the fact that there was physical separation between the sidewalks surrounding the Court's grounds

[155] 471 U.S. 171 (1983).
[156] *Id.* at 180.
[157] *Id.* at 172 (quoting 40 U.S.C. § 13k).
[158] *Id.* at 172–75.
[159] *Id.* at 179.

and other sidewalks in Washington D.C. In so doing, the Court distinguished its prior case, *Greer v. Spock*, in which it held that sidewalks inside an enclosed military base were separated from other sidewalks, and thus, a nonpublic forum. Thus, the Court's public forum analysis focuses on whether the space at issue is distinguishable from a traditional public forum.

Under this framework, the airspace occupied by small UASs above a public forum should be considered as *within* the public forum. The immediate airspace above a park, for instance, is indistinguishable from the park itself. Indeed, it is best to think of a public forum in three dimensions. A public forum certainly has length and width measurements, but it also necessarily extends some height above the ground. Otherwise, the government could bar the use of banners, balloons, or tall signs, even in a public park, under the theory that the airspace above the park is a nonpublic forum.[160] This would be a radical departure from established First Amendment jurisprudence.

Because of the relatively recent rise of UAS technology in civilian operation, courts have yet to confront this question. But "[o]ur public forum doctrine ought not to be a jurisprudence of categories rather than ideas or convert what was once an analysis protective of expression into one which grants the government the authority to restrict speech by fiat."[161] The purpose of the First Amendment's guarantees would not be well served by a refusal to recognize new avenues of expression. Thus, the proper inquiry should focus on the broad characteristics of a traditional public forum as an avenue for expression and recognize that the airspace within a public forum should be categorized as a public forum in and of itself.

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[160] To be clear, we do not argue that the airspace above a public forum remains a public forum unto the heavens. Rather, we assert the modest proposal that public forums necessarily exist in three dimensions. As the rise of UAS technology opens new avenues for expression, courts need to recognize that speech need not be tethered to the ground to warrant First Amendment protection.

[161] Int'l Soc. for Krishna Consciousness, Inc. v. Lee, 505 U.S. 672, 693–94 (1992) (Kennedy, J., concurring).

ii. The FAA's blanket ban on commercial use unconstitutionally restricts speech in public forums. Because the airspace within a public forum should itself be considered a public forum, the government may only restrict the journalistic use of UAS technology with content-neutral regulations of the time, place, or manner of such use.[162] Such regulations must be "justified without reference to the content of the regulated speech," be "narrowly tailored to serve a significant government interest," and "leave open ample alternative channels of communication."[163] The FAA's blanket ban on commercial use fails to meet this test.

The FAA's ban is not a reasonable time, place, or manner restriction. The FAA has made no attempt to regulate when and how a UAS may be used for aerial photography. The proposed ban does not differentiate between classes of UASs and their varying capabilities. Nor is the FAA's commercial ban narrowly tailored to serve the agency's asserted interest in public safety. The line drawn by the FAA—receipt of compensation—is wholly unrelated to the safety of any particular use of a UAS. Under the FAA's proposed rule, a hobbyist could undertake the exact same flight and film the exact same event as a journalist, but only the journalist's flight would be barred. The fact that the journalist received compensation for the flight does not make the flight any more or less safe than that of the hobbyist. Though we do not dispute that public safety is an important government interest, the FAA's focus on commercial use is not tailored to achieving that interest. Finally, the FAA's proposed regulations operate as a blanket ban on the use of UAS technology for journalistic purposes. This in no way leaves open alternative channels of communication.

It might be argued that the FAA's ban on commercial use could be sustained on the grounds that journalists' use of UASs incorporates both "speech" and "nonspeech" elements. In

[162] Clark v. Cmty. for Creative Non-Violence, 468 U.S. 288, 293 (1984); *see also* Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 37, 45–46 (1983).
[163] *Clark*, 468 U.S. at 293; *see also* Ward v. Rock Against Racism, 491 U.S. 781, 791 (1989).

United States v. O'Brien, the Supreme Court has allowed the government to restrict nonspeech elements of otherwise expressive conduct if "a sufficiently important interest in regulating the nonspeech element can justify incidental limitations on First Amendment freedoms."[164] Thus, "if the governmental interest is unrelated to the suppression of free expression" and "if the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of the interest," the government may regulate the nonspeech elements of speech.[165]

There is no indication that the FAA's ban on commercial use is specifically targeted at suppressing expression. Rather, the FAA has consistently asserted an interest in public safety as its justification for the ban. As such, the FAA's commercial ban could be viewed as an incidental restriction on journalists' First Amendment rights. But even under this less stringent standard, the FAA's ban fails to pass constitutional muster. A blanket commercial ban restricts substantially more speech activity than is necessary to ensure public safety—that is, it is overly broad. The FAA could easily place limits on the type of device used, on the time and location of the use, or on use in certain types of weather, or institute any number of other reasonable restrictions. Instead, the FAA has chosen to ban all commercial use. As discussed above, commercial use is not necessarily any more or less safe than noncommercial use. Accordingly, the FAA's blanket ban fails even the more lenient *O'Brien* test.

2. The FAA's regulations are an unconstitutional prior restraint on speech. Not only does the FAA's proposed regulatory framework impermissibly restrict speech in a traditional public forum, but it also acts as a prior restraint on speech. As discussed in the previous section, the FAA's framework acts to close traditional public forums to journalists by banning them from

[164] United States v. O'Brien, 391 U.S. 367, 377 (1968).
[165] *Id*.

using UASs for journalistic purposes. Journalists are not even provided the opportunity to engage in the protected conduct; the ban operates prospectively.

The primary purpose of the First Amendment was to prevent the government from placing restraints on speech prior to the act of speaking.[166] The law is particularly suspicious of government actions that create prior restraints on speech because such restraints constitute "an immediate and irreversible sanction."[167] Where after-the-fact penalties, such as defamation suits, act to restrict speech, they do so only after "the whole panoply of protections afforded by deferring the impact of the judgment until all avenues of appellate review have been exhausted."[168] In contrast, prior restraints constitute "the most serious and least tolerable infringement on First Amendment rights" because they stop speech before it happens.[169] These restraints lack any of the particularized procedural safeguards that after-the-fact penalties feature because the speaker is never given the opportunity to defend his particular message.[170] Because of this feature of prior restraints, they are presumptively unconstitutional.[171] The government bears the heavy burden of justifying any prior restraint on expressive activity.[172]

Courts have recognized that government regulations that serve to deny access to a forum constitute prior restraints.[173] Similarly, if the government requires parties to seek permission prior to engaging in protected activity, it is a prior restraint.[174] The FAA's proposed regulatory scheme requires civil operators to apply for airworthiness certificates—effectively permits—

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[166] Near v. Minnesota ex rel. Olson, 283 U.S. 697, 713 (1931) ("[I]t is the chief purpose of the guaranty to prevent previous restraints upon publication.").
[167] Neb. Press Ass'n v. Stuart, 427 U.S. 539, 559 (1976).
[168] *Id.*
[169] *Id.*
[170] *Id.*
[171] Carroll v. Princess Anne, 393 U.S. 175, 181 (1968).
[172] *Neb. Press Ass'n*, 427 U.S. at 558; Organization for a Better Austin v. Keefe, 402 U.S. 415, 418–20 (1971).
[173] Bourgois v. Peters, 387 F.3d 1303, 1319 (11th Cir. 2004) ("A prior restraint on expression exists when the government [denies] access to a forum before the expression occurs.").
[174] Forsyth Cnty., Ga. v. Nationalist Movement, 505 U.S. 123, 130 (1992).

before using UASs for aerial photography or videography. But, because the FAA heavily restricts the issuance of such permits, the agency has effectively closed the forum for journalistic purposes. This type of restriction runs squarely afoul of the Supreme Court's prior restraint jurisprudence. And, though the Court has recognized that the government may require permits prior to the use of a public forum, any permitting scheme must comply with constitutional requirements.[175]

If the government wishes to require permits before speech in a public forum, it can do so only after establishing "narrowly drawn, reasonable and definite standards for [permitting] officials to follow."[176] The absence of such standards invites arbitrary application and censorship.[177] Moreover, any justifications offered by the government in support of a prior restraint cannot be based on "surmise or conjecture that untoward consequences may result" from the expressive conduct.[178] In *Forsyth County*, the Court considered a challenge to a city permitting scheme that required parade organizers to help defray the costs of road closing and extra law enforcement personnel for their parades with a fee that ranged up to $1000 per day.[179] The problematic part of the permitting scheme was that the county administrator was allowed to set the actual amount of the fee on a case-by-case basis.[180] The county did not set any standards by which the administrator was to calculate the fee and required no explanation after the fact.[181] The Supreme Court held that, while the county was justified in charging a permit fee, the

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[175] *Id.*
[176] Niemotko v. Maryland, 340 U.S. 268, 272 (1951).
[177] *Forsyth Cnty.*, 505 U.S. at 130–31 ("If the permitting scheme involves appraisal of facts, the exercise of judgment, and the formation of an opinion by the licensing authority, the danger of censorship and of abridgment of our precious First Amendment freedoms is too great to be permitted.").
[178] Bertot v. Sch. Dist. No. 1, 522 F.2d 1171, 1183 (10th Cir. 1975); *see also* New York Times Co. v. United States, 403 U.S. 713, 725–26 (1971) (Brennan, J., concurring).
[179] *Forsyth Cnty.*, 505 U.S. at 126.
[180] *Id.*
[181] *Id.*

county's scheme vested too much discretion in the administrator.[182] Without some objective, articulable standards to restrict the administrator's discretion, the permitting regulation allowed the administrator to "encourag[e] some views and discourage[e] others through the arbitrary application of fees."[183]

The FAA asserts that civil UAS operators, including journalists, must seek permission of the agency before engaging in aerial photography or videography. And yet, the FAA has not undertaken the burdensome task of establishing "narrowly drawn, reasonable and definite standards"[184] that would serve to constrain the discretion of agency personnel. Such standards must necessarily be reasonable and not overly broad. In the absence of such standards, the agency's prior restraint on expressive activity fails to survive constitutional scrutiny.

The FAA's lack of articulated standards is compounded by the agency's overall approach to regulation in this area, which has relied on the use of agency threats in an attempt to enforce quasi-regulatory mechanisms like its 2007 policy notice.[185] Rather than proceeding through notice-and-comment rulemaking as required by the Administrative Procedures Act, the FAA has opted to pursue an ad hoc cease-and-desist approach in which it brings enforcement actions against UAS operators engaged in First Amendment activities on a case-by-case basis.[186] While such an approach is problematic from an administrative law perspective, it is even more troubling in the context of the important First Amendment principles at stake. The Supreme Court has recognized that two discrete due process concerns arise when the government acts to

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[182] *Id.* at 133.
[183] *Id.*
[184] Niemotko v. Maryland, 340 U.S. 268, 272 (1951).
[185] On agency threats as a mode of regulatory action, *see* Tim Wu, *Agency Threats*, 60 DUKE L.J. 1841 (2011); Jerry Brito, *"Agency Threats" and the Rule of Law: An Offer You Can't Refuse*, 37 HARV. J.L. & PUB. POL'Y 553 (2014). On quasi-regulatory mechanisms, *see* John D. Graham & Cory R. Liu, *Regulatory and Quasi-regulatory Activity Without OMB and Cost-Benefit Review*, 37 HARV. J.L. & PUB. POL'Y 425 (2014).
[186] *See* Brief for Advance Publications, Inc. et al. as Amici Curiae Supporting Respondent Raphael Pirker at 21–23, Huerta v. Pirker, No. CP-217 (N.T.S.B.) (detailing the FAA's enforcement process).

regulate parties without giving adequate notice of what conduct, precisely, is prohibited: "first, that regulated parties should know what is required of them so that they may act accordingly; second, precision and guidance are necessary so that those enforcing the law do not act in an arbitrary or discriminatory way. . . . When speech is involved, rigorous adherence to those requirements is necessary to ensure that ambiguity does not chill protected speech."[187]

Specifically, the Court has recognized that vague or unclear regulations, by their very nature, inhibit speech by causing citizens to err on the side of caution in order to avoid potential transgressions.[188] Thus, "[u]ncertain meanings inevitably lead citizens to steer far wider of the unlawful zone . . . than if the boundaries of the forbidden areas were clearly marked."[189] As the Court has routinely held, government regulations that burden speech must clearly inform the public as to what conduct, specifically, is prohibited. Far from meeting its burden in this instance, the FAA has undertaken an ad hoc enforcement strategy that leaves journalists and the general public uncertain about what they may and may not do with UASs. Such confusion was demonstrated in the case of the *Dayton Business Journal* in April 2014.[190] There, a private citizen took video footage of a fire in Dayton, Ohio, using his personal UAS and offered to donate the footage to the newspaper for publication on its website.[191] Though the private citizen received no financial compensation and was not otherwise affiliated with the paper, an FAA spokesperson nonetheless informed the paper that it should "err on the side of caution" and not publish the footage.[192]

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[187] FCC v. Fox Television Stations, Inc., 132 S. Ct. 2307, 2317 (2012).
[188] Grayned v. City of Rockford, 408 U.S. 104, 109 (1972).
[189] *Id.*; *see also* N.A.A.C.P. v. Button, 371 U.S. 415, 432–33 (1963) ("[S]tandards of permissible statutory vagueness are strict in the area of free expression. . . . Because First Amendment freedoms need breathing space to survive, government may regulate in the area only with narrow specificity.").
[190] Navera, *supra* note 84. See *supra* Part III.C.
[191] *Id.*
[192] *Id.*

The Dayton case is particularly concerning. The media's constitutional right to publish information it obtains lawfully—even if the source obtained the information unlawfully—is a bedrock principle of the Court's First Amendment jurisprudence.[193] Nonetheless, the confusion engendered by the FAA's ad hoc approach has muddled even this fundamental principle. The Dayton newspaper, as the regulated party, was clearly uncertain as to the propriety of publishing the video it obtained from a private citizen. On the other side, the agency's response cannot be viewed as anything other than an arbitrary restriction. Even the agency's own public policy statements acknowledge hobbyists' rights to operate UASs for noncommercial purposes. Yet the agency threatened the paper with legal action if it decided to go ahead with publication—a classic prior restraint on publication. This is precisely the type of arbitrary agency action that proper notice-and-comment rulemaking is designed to prevent and that the FAA's ad hoc regulatory approach encourages.

As the above discussion establishes, the FAA's proposed regulatory framework is nothing less than a prior restraint on speech. The agency has failed to articulate a set of clear, nonarbitrary standards that would serve to limit the discretion of agency personnel. And as the Dayton example demonstrates, agency personnel have been acting to prohibit the publication of material legally obtained by journalists—an archetypal case of prior restraint. The vague and uncertain status of the regulations governing UAS use facilitates such arbitrary and illegal action by the FAA and must be addressed.

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[193] *See* New York Times Co. v. United States, 403 U.S. 713, 714 (1971) (per curiam) (refusing to enjoin the media from publishing a classified study of the Vietnam War); Bartnicki v. Vopper, 532 U.S. 514, 527–35 (2001) (upholding the media's right to publish information it lawfully obtained, even when the ultimate source obtained the information unlawfully).

3. The FAA's overly broad definitions and reasoning lead to infringements by other agencies. As we have demonstrated, the FAA has taken enforcement actions that violate the First Amendment. But other agencies have begun to adopt the FAA's overly broad definitions of RCMAs as aircraft, as well as its reasoning in the Pirker case, which is that designating a device an aircraft makes it subject to any and all agency regulation without the need for notice-and-comment rulemaking. Thus, the FAA's reasoning has also resulted in other agencies taking enforcement actions that are clear violations of the First Amendment.

The most egregious example comes from the National Park Service (NPS). In seeking to ban the use of UASs in national parks, it has decided to ignore its own Code of Federal Regulations (C.F.R.) defining aircraft as "a device that is used or intended to be used for *human flight* in the air, including powerless flight."[194] Instead, it has sought to adopt the FAA's broader definition, which includes *any* "device that is used or intended to be used for flight in the air," which abandons the "human flight" element of the NPS definition. As a result, the NPS is able to argue that "aircraft" includes unmanned aircraft, which in turn, it says includes "radio controlled aircraft" and "model aircraft."[195] Of course, this is precisely the definition that was rejected by the administrative law judge in the Pirker decision.

The NPS believes that it can abandon its own definition in favor of the FAA definition because the C.F.R. states, "The use of aircraft shall be in accordance with regulations of the Federal Aviation Administration. Such regulations are adopted as a part of these

[194] 36 C.F.R. Pt. 1 § 1.4(a) (emphasis added).
[195] Greg McNeal, *Six Months in Jail for Drones in Parks, According to What Law?*, FORBES (May 5, 2014, 5:47 PM), http://www.forbes.com/sites/gregorymcneal/2014/05/05/park-service-ignores-law-says-flying-a-drone-may-mean-six-months-in-jail-5000-fine/.

regulations."[196] This incorporation of FAA regulations by reference also serves as the basis of the agency's reasoning that it can ban UASs in national parks. The problem is that in the Pirker decision, in addition to rejecting the FAA's overly broad definition of aircraft, the administrative law judge also found that there are no enforceable FAA regulations for UASs, only an unenforceable policy statement.

By incorporating FAA definitions and policies by reference, the NPS has also adopted the overly broad and vague nature of those definitions and policies. For example, the definitions employed by the NPS differ from national park to national park. Additionally, the Grand Canyon, Zion, and Yosemite each have slightly different policies, some claiming that certain uses of UASs are allowed, others that all uses are prohibited; some relying on the NPS C.F.R. definition of aircraft, others relying on the FAA definition.[197] What's more, the Fire and Aviation Management web page for the NPS uses the FAA definition of aircraft, not the NPS definition. But unlike the FAA and some (but not all) of the individual national park policies, it does not specifically include RCMAs in its list of UASs covered by the FAA definition.[198]

Given its adoption of the FAA's overly broad and vague definitions and policies, it should come as no surprise that NPS enforcement actions have also resulted in infringements of First Amendment rights. In the most disturbing example, the individual in question was, once again, none other than Raphael Pirker, but this incident took place before the case now under appeal to the National Transportation Safety Board. In this prior case, park rangers at the Grand

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[196] 36 C.F.R. Pt. 2 § 2.17(d). But, as Greg McNeal has argued, this only gives the NPS the ability to incorporate by reference rules for aircraft *use,* not the FAA *definition* of aircraft, for which this agency has its own definition. *See* Greg McNeal, *Yosemite Looks to Ban Drones by Relying on an Absurd Legal Argument*, FORBES (May 3, 2014, 3:40 AM), http://www.forbes.com/sites/gregorymcneal/2014/05/03/yosemite-looks-to-ban-drones-but-the-law-is-not-on-their-side/; McNeal, *supra* note 195.

[197] McNeal, *supra* note 195.

[198] FIRE AND AVIATION MANAGEMENT, http://www.nps.gov/fire/aviation/safety/unmanned-aerial-systems.cfm (last visited May 11, 2014).

Canyon demanded that Pirker delete video footage he had taken with his small UAS. After rangers threatened to get a search warrant, Pirker turned the video over to the rangers. Park officials demanded the deletion or confiscation of the video footage taken by Pirker for the express purpose of preventing it from being published on the Internet because, as the citation report in the case notes, officials worried that the video could "invite additional individuals to replicate these prohibited flight maneuvers within Grand Canyon National Park." Even after Pirker paid a civil penalty of $325, which should have ended the matter, authorities still refused to return the video to him. Of special note here is that at no time did park officials confiscate Pirker's UAS itself. They were only keen to confiscate the video taken by the UAS.[199] This is a textbook example of a prior restraint on publication.[200]

Thus, the FAA's overly broad definitions, vague policies, and attempts to implement a blanket ban on UASs in contravention of the required notice-and-comment rulemaking process are dangerous, not only when the FAA seeks to enforce its ban against First Amendment–protected activities, but also because other government agencies adopt these definitions and policies and then engage in the same rights-infringing activities.

V. Conclusion

In this article, we have focused on the First Amendment implications of the FAA's attempt to ban the use of UASs for commercial purposes. Though the use of drones by the military has

[199] Jason Koebler, *Feds Confiscated a Hobbyist's Drone Footage to Keep It off the Internet*, MOTHERBOARD (May 6, 2014, 10:40 AM), http://motherboard.vice.com/read/feds-confiscated-a-hobbyists-drone-footage-to-keep-it-off-the-internet. As of this writing, the video in question has still not been returned to Pirker. Instead of returning the memory card on which the video was contained, officials sent Pirker an inferior memory card and indicated that they would not be returning the original card and its contents.

[200] *See* Robinson v. Fetterman, 378 F. Supp. 2d 534, 541 (E.D. Pa. 2005) (holding that police officers' confiscation of videographer's camera and film was unconstitutional prior restraint on speech); Channel 10, Inc. v. Gunnarson, 337 F. Supp. 634, 637 (D. Minn. 1972) ("[T]he seizure and holding of the camera and undeveloped film was an unlawful prior restraint whether or not the film was ever reviewed.").

garnered a lot of attention from the public, the press, policymakers, and scholars, less attention has been paid to the legal issues surrounding the domestic use of this technology. When the discussion does turn to domestic use of UASs, the focus has thus far been on issues related to privacy or administrative law. But as we have demonstrated in the preceding pages, there are significant First Amendment implications to the way in which the FAA chooses to fulfill its congressional mandate to promulgate rules for the integration of UASs into the domestic airspace. Thus far, the FAA approach has been much too broad and draconian. Its current, working definition of a UAS makes no distinctions between the radically different types of devices that make up this category. The FAA's only bases for distinction when making enforcement decisions is the type of user and the use of the device. But here again, the FAA's three categories—public, civil, and recreational—are much too broad. The result has been a purported ban on all commercial or business use of UASs, again, broadly defined. Through its enforcement actions and public statements, the FAA has made it clear that it believes that journalism is an inherently commercial activity, and thus, any use of a UAS for photography or news gathering, even if the vehicle used is the same as those allowed for recreational purposes, is banned or subject to a restrictive government licensing scheme. As such, we have argued that the FAA's purported ban is an unconstitutional restriction of speech in a public forum. Additionally, we have argued that the requirement to seek prior FAA authorization for the use of UASs for First Amendment–protected activities constitutes an unconstitutional prior restraint on speech.

As it moves to meet its congressional mandate to promulgate regulations for domestic use of UASs, the FAA must take a much more nuanced approach to defining the technological artifacts, users, and uses it seeks to regulate if it is to avoid running afoul of the Constitution. First, technologically, the universe of what the FAA is calling a UAS is much too broad for a

one-size-fits-all approach to regulation. Styrofoam RCMAs and toy quadcopters with cameras are not the same as Predators, just as ultralight aircraft and balloons are not the same as jumbo jets. Though the current C.F.R.s recognize the differences between vehicles in the latter set and thus regulate them differently, to date the FAA has not recognized the obvious and consequential differences between the wide spectrum of vehicles in the UAS category. It must do this if it is to create fair and effective regulations.

Second, the agency must also define users and uses in a much more nuanced way. Just as all devices are not the same, neither are all uses and users currently lumped under the civil aircraft category the same. As we have noted, the most problematic uses and users lumped under this category include photography and news gathering carried out by private citizens and professionals alike. Not only are these uses and users not the same as delivering beer or packages, they are also not treated the same way under the Constitution, which provides special protections for the former.

Luckily, the FAA's 2007 policy statement tacitly acknowledges that its current categories of uses and users may be too broad and anticipates the potential creation of a new category that could account for commercial use of RCMAs. Devices in this category could be

> defined by the operator's visual line of sight and are also small and slow enough to adequately mitigate hazards to other aircraft and persons on the ground. The end product of this analysis may be a new flight authorization instrument similar to AC 91-57, but focused on operations which do not qualify as sport and recreation, but also may not require a certificate of airworthiness.[201]

Indeed, the broad contours offered here to describe this potential category could serve as the basis for constructing more reasonable restrictions on the use of UASs that are narrowly tailored enough to pass constitutional muster because they would be directly related to the

[201] *2007 Notice*, *supra* note 21.

agency's compelling interest in promoting the safety of the national airspace, unlike its blanket ban on commercial activity, which we have argued is irrelevant to this interest. For example, reasonable time, place, and manner restrictions on the use of UASs, even for First Amendment–protected activities, could include the following:

- Time: Restrictions related to time of day, weather conditions, emergency situations, etc.
- Place: Restrictions related to flights over crowds, near airports, over military bases, etc.
- Manner: Restrictions related to the weight of the device, the speed and altitude of its operation, the distance it can be flown from the operator (e.g., a visual line of sight requirement), etc.

In any case, when contemplating potential restrictions, the FAA should take First Amendment–protected uses into account and work with relevant stakeholder groups. So far, however, it does not appear that these uses and users are on the FAA's radar. In recent comments, Jim Williams, the head of the FAA's unmanned systems office, indicated that the agency is several years from promulgating rules for the kinds of small UASs most often used by journalists. Though he did indicate that the agency would seek to work within provisions of FMRA 2012 that allow the FAA to make exceptions to its ban on a case-by-case basis, journalism was not one of the "industries" that he identified for a possible exception,[202] nor is the process for applying for an exemption transparent because there are no published guidelines for doing so. Williams also noted that the agency would continue to take enforcement actions against those it believes are violating its prohibition against commercial use of the technology.[203]

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[202] John Goglia, *FAA Official's Comments Indicate Legalizing Small Commercial Drone Operations Long Way Off,* FORBES (May 9, 2014, 7:50 PM), http://www.forbes.com/sites/johngoglia/2014/05/09/faa-officials-comments-indicate-legalizing-small-commercial-drone-operations-long-way-off/.

[203] Paul Bertorelli, *FAA to UAS Industry: We'll Keep Enforcing*, AVWEB.COM (May 13, 2014), http://www.avweb.com/avwebflash/news/FAA-To-UAS-Industry-Well-Keep-Enforcing222005-1.html.

This means that we are likely to see more future enforcement actions against those involved in First Amendment–protected activities with UASs.

It is imperative that the FAA alter its current course to take First Amendment–protected uses into account as it develops rules for small UASs. One way to accomplish this is to involve the news media as key stakeholders in the process, remembering that the First Amendment protects not only large media organizations, but all citizens, including the amateur news gatherers and photographers who are becoming increasingly important to the collection and dissemination of vital information in our democracy. But the First Amendment cannot be suspended while the agency develops its rules for UASs. Therefore, in the meantime, the agency should prioritize the drafting of an exception for small UASs used for news gathering. Such a move would not be unprecedented. In fact, as various major media outlets note in an amicus brief filed in support of Raphael Pirker, "throughout modern lawmaking the federal government, and even the FAA itself in other contexts, has crafted laws and regulations to accommodate the First Amendment rights of journalists to gather that news and the public's corresponding rights to receive information." For example, the brief notes that even when the FAA restricts airspace due to disasters or other, similar situations, "accredited news media are expressly permitted to enter the area."[204]

Finally, and most importantly, the FAA needs to follow the law in making rules. It must be held to Administrative Procedures Act requirements for notice-and-comment rulemaking, which, as the Pirker decision indicated, it has so far ignored. Next, the agency should also be held, as much as is practicable, to the timetable for promulgating rules that Congress gave it in

[204] Brief for Advance Publications, Inc. et al. as Amici Curiae Supporting Respondent Raphael Pirker at 10–12.

FMRA 2012, which the agency has so far admitted it will not meet.[205] In the meantime, the FAA should refrain from acting on the temptation, driven by fear and uncertainty, to use agency threats as a means to enforce quasi-regulatory mechanisms like its 2007 policy statement. The dangers of this regulatory approach are no mere matter of esoteric administrative law. Rather, as we have demonstrated, use of threats to enforce illegally promulgated rules, in particular a ban on journalistic use of UASs, infringes on perhaps our most cherished constitutional right, that of free speech and a free press.

[205] Elizabeth A Tennyson, *Hearing Reveals FAA Behind on NextGen, UAS, Consolidation*, AOPA.ORG (Feb. 6, 2014), https://www.aopa.org/News-and-Video/All-News/2014/February/06/FAA-behind-on-NextGen-UAS-and-consolidation-hearing-reveals.aspx.