

March 13, 2017

The Honorable John Thune, Chairman
The Honorable Bill Nelson, Ranking Member
U.S. Senate Committee on Commerce, Science, & Transportation
512 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Thune and Ranking Member Nelson:

We write to you regarding the upcoming hearing on “Unmanned Aircraft Systems: Innovation, Integration, Successes, and Challenges.” We appreciate your interest in this issue. EPIC has previously testified before the Senate Judiciary Committee, the House Homeland Security Committee, and state legislatures regarding the privacy risks associated with drones.¹ EPIC is now proceeding in the U.S. Court of Appeals of the D.C. Circuit against the FAA for the agency’s failure to establish drone privacy safeguards.² EPIC has also pursued several open government matters regarding the FAA’s decision making process, which appears intended to purposefully avoid the development of meaningful privacy safeguards.³

EPIC believes that strong drone privacy rules are vital for the safe integration of commercial drones in the National Air Space. The present course is simply not sustainable.

¹ Testimony of EPIC Domestic Surveillance Project Director Amie Stepanovich, Hearing Before the Senate Committee on the Judiciary, U.S. Senate, *The Future of Drones in America: Law Enforcement and Privacy Considerations*, Mar. 20 2013, <https://epic.org/privacy/testimony/EPIC-Drone-Testimony-3-13-Stepanovich.pdf>; Testimony of Amie Stepanovich, Hearing Before the House Committee on Homeland Security, U.S. House of Representatives, *Using Unmanned Aerial Systems Within the Homeland: Security Game Changer?*, Jul. 19, 2012, <https://epic.org/privacy/testimony/EPIC-Drone-Testimony-7-12.pdf>; Testimony of EPIC Domestic Surveillance Project Director Jeramie Scott, Hearing before the Majority of Policy Committee, Pennsylvania State Senate, *Use of Unmanned Aerial Vehicles (Drones)*, Mar. 15, 2016, <https://epic.org/privacy/drones/EPIC-Drone-Testimony-20160315.pdf>.

² JD Supra, *EPIC Continues its Fight Against FAA for Drone Privacy Regulations* (Mar. 6, 2017) (“The Electronic Privacy Information Center (EPIC) filed its 65-page brief in its case against the Federal Aviation Administration (FAA) this week”), www.jdsupra.com/legalnews/epic-continues-its-fight-against-faa-71113/; *EPIC v. FAA*, No. 16-1297 (D.C. Cir. Filed Mar. 2, 2017), <https://epic.org/privacy/litigation/apa/faa/drones/1664208-EPIC-Amended-Brief.pdf>; *EPIC v. FAA: Challenging the FAA’s Failure to Establish Drone Privacy Rules*, EPIC, <https://epic.org/privacy/litigation/apa/faa/drones/>.

³ *EPIC FOIA: Drone Industry Cozied Up to Public Officials* (Dec. 21, 2016), EPIC, <https://epic.org/2016/12/epic-foia-drone-industry-cozie.html>. *EPIC v. DOT*, No. 16-634 (D.C. Cir. Filed Apr. 4, 2016), <https://epic.org/foia/dot/drones/taskforce/1-Complaint.pdf>; *EPIC v. Department of Transportation - Drone Registration Task Force*, EPIC, <http://epic.org/foia/dot/drones/taskforce/>.

Aerial Drones: A Unique Privacy Threat

Drones pose a unique threat to privacy. The technical and economic limitations to aerial surveillance change dramatically with the advancement of drone technology. Small, unmanned drones are already inexpensive; the surveillance capabilities of drones are rapidly advancing; and cheap storage is readily available to maintain repositories of surveillance data. A Pew Research Center and Smithsonian Magazine survey found that 63% of Americans objected to the idea of giving personal and commercial drones permission to fly through most U.S. airspace.⁴ However, in recent years individual drone use has soared, and the FAA predicts that 7 million drones will be sold by 2020.⁵ As drone use increases so do the risks to privacy and safety.

Drones are now regularly equipped with high definition cameras that increase the ability of a user to conduct domestic surveillance.⁶ The DJI Inspire 1 is a high-end, commercially available hobbyist drone about the size of a small desktop printer and weighs less than seven pounds, yet it can transmit high definition video to an operator up to five kilometers away and can stream that video live to YouTube.⁷ Even lower-end hobbyist drones costing less than \$100 can stream live video. The Hubsan X4 Star Pro, a drone that can fit in the palm of your hand, utilizes a front facing high definition camera with 720P resolution that can stream live video up to 300 meters away.⁸ Drones can be used to view individuals inside their homes and can facilitate the harassment and stalking of unsuspecting victims.⁹ Drones can also be modified with tools that can enable them to gather personal information using infrared cameras, heat sensors, GPS, automated license plate readers, and facial recognition devices.¹⁰

Drones also pose risks to security and cybersecurity. Close calls between drones and traditional aircraft have risen significantly as their use becomes more widespread.¹¹ Furthermore,

⁴ Aaron Smith, *U.S. Views of Technology and the Future*, Pew Research Center, Apr. 17, 2014, <http://www.pewinternet.org/2014/04/17/us-views-of-technology-and-the-future/>.

⁵ Sally French, *Drone Sales in the U.S. More Than Doubled In The Past Year*, Market Watch, May 28, 2016, <http://www.marketwatch.com/story/drone-sales-in-the-us-more-than-doubled-in-the-past-year-2016-05-27>; *FAA Aerospace Forecast: Fiscal Years 2016-2036*, FAA, 2016, https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf.

⁶ Petition for Rulemaking Submitted by EPIC, Mar. 8, 2012, <https://epic.org/apa/lawsuit/EPIC-FAA-Drone-Petition-March-8-2012.pdf>; Univ. of Wash. Tech. and Pub. Policy Clinic, *Domestic Drones: Technical and Policy Issues* 12 (2013), https://www.law.washington.edu/clinics/technology/reports/droneslawan_policy.pdf.

⁷ DJI, *Inspire 1*, <http://www.dji.com/product/inspire-1/feature>.

⁸ Hubsan, *X4 Star Pro*, http://shop.hubsan.com/index.php?main_page=product_info&products_id=%20519.

⁹ Petition for Rulemaking Submitted by EPIC, *supra* note 6.

¹⁰ *Id.*; Ciara Bracken-Roche et al., Surveillance Studies Centre, *Surveillance Drones: Privacy Implications of the Spread of Unmanned Aerial Vehicles (UAVs) in Canada* 46, Apr. 30, 2014, http://www.sscqueens.org/sites/default/files/Surveillance_Drones_Report.pdf; Mary Papenfuss, *Utah Couple Arrested Over 'Peeping Tom' Drone*, Huffington Post, Feb. 17, 2017, http://www.huffingtonpost.com/entry/peeping-tom-drone_us_58a6847fe4b045cd34c03e56.

¹¹ Alan Levin, *Drone-Plane Near misses, Other Incidents Surge 46% in U.S.*, Bloomberg, Feb. 23, 2017, <https://www.bloomberg.com/news/articles/2017-02-23/drone-plane-near-misses-other-incidents-surged-46-in-u-s>; Steve Miletich, *Pilot of Drone That Struck Woman at Pride Parade Gets 30 Days in Jail*, The

the very features that make drones easy to operate also make them susceptible to cyberattacks.¹² Hackers have the ability to exploit weaknesses in drone software to take over operation of a drone and access the camera and microphones.¹³

The privacy risks of drones, as well as the safety and security vulnerabilities, underscore the need for the FAA to develop drone privacy regulations. *We urge the Committee to question why the FAA has not yet taken steps to issue regulations on drone privacy despite prior Congressional directives to do so.*

The FAA Has Failed to Implement the Requirements of the FAA Modernization Act

The FAA has failed to take the action mandated by Congress. The FAA Modernization Act required the FAA to create a Comprehensive Plan to integrate drones into the National Airspace and subsequently conduct a notice and comment rulemaking. In the Plan, the FAA identified privacy as an important issue to address, acknowledging that “as demand for [drones] increases, concerns regarding how [drones] will impact existing aviation grow stronger, especially in terms of safety, privacy, frequency crowding, and airspace congestion.”¹⁴

Under the FAA Modernization Act, Congress required the FAA to implement the recommendations of the Comprehensive Plan via a public rulemaking within 46 months of the enactment of the Act. The FAA identified privacy as an important issue directly related to domestic drones, yet the agency has failed to address privacy in the agency’s only public rulemaking on drones in the National Airspace.¹⁵ Indeed it has been 60 months and the FAA has failed to implement the rulemaking that addresses the issues identified in the Comprehensive Plan, including privacy, as required by Congress.¹⁶

The FAA Has Failed to Conduct the Required Drone Privacy Report

The FAA was ordered by Congress to conduct a drone privacy report, which the agency failed to do. In the 2014 Consolidated Appropriations Act, Congress required the FAA to conduct a drone privacy study, stating:

Without adequate safeguards, expanded use of UAS and their integration into the national airspace raise a host of concerns with respect to the privacy of

Seattle Times, Feb. 24, 2017, <http://www.seattletimes.com/seattle-news/crime/pilot-of-drone-that-struck-woman-at-pride-parade-sentenced-to-30-days-in-jail/>.

¹² Kacey Deamer, *How Can Drones Be Hacked? Let Us Count the Ways*, Live Science, Jun. 10, 2016, <http://www.livescience.com/55046-how-can-drones-be-hacked.html>.

¹³ Wang Wei, *You Can Hijack Nearly Any Drone Mid-Flight Using This Tiny Gadget*, The Hacker News, Oct. 27, 2016, <http://thehackernews.com/2016/10/how-to-hack-drone.html>.

¹⁴ Joint Planning and Dev. Office, Fed. Aviation Admin., *Unmanned Aircraft Systems (UAS) Comprehensive Plan: A Report on the Nation's UAS Path Forward 4* (2013), https://www.faa.gov/about/office_org/headquarters_offices/agi/reports/media/UAS_Comprehensive_Plan.pdf.

¹⁵ Operation and Certification of Small Unmanned Aircraft Systems, 81 Fed. Reg. 42,063 (June 28, 2016) (codified at 14 C.F.R. pts. 21, 43, 61, 91, 101, 107, 119, 133, and 183).

¹⁶ FAA Modernization and Reform Act of 2012, Pub. L. 112-95 § 332, 126 Stat. 73-75.

individuals. For this reason, the FAA is directed to conduct a study on the implications of UAS integration into national airspace on individual privacy.¹⁷

The report specifically required the FAA to study “how the FAA can address the impact of widespread use of UAS on individual privacy as it prepares to facilitate the integration of UAS into the national airspace.”¹⁸ The report was to be submitted to Congress within 18 months of enactment of that appropriations bill and completed “well in advance of the FAA’s schedule for developing final regulations on the integration of UAS into the national airspace.”¹⁹ Nearly 38 months since the bill was enacted, the FAA has failed to produce the report. Furthermore, EPIC obtained documents through a Freedom of Information Act request that suggested that the FAA has no intention of complying with Congress’ directive to produce a report.²⁰

EPIC’s Lawsuit, EPIC v. FAA

Immediately after the passage of the FAA Modernization Act, EPIC and more than one hundred legal experts and organization petitioned the FAA to undertake a rulemaking to establish privacy regulations prior to the deployment of commercial drones in the National Airspace.²¹ More than two years later, the FAA responded to the petition by refusing to conduct a separate drone privacy rulemaking but said privacy would be considered in an upcoming rulemaking on small drones.²² However, the FAA later stated that privacy issues were “beyond the scope of the rulemaking”²³ and did not consider privacy in its final rule,²⁴ prompting EPIC to file suit.²⁵ EPIC is challenging the FAA’s refusal to consider privacy and to conduct a comprehensive drone rulemaking as required by Congress. The FAA has failed to explain why the agency did not evaluate privacy in their final rule despite the requirements of the FAA Modernization Act, EPIC’s petition calling for the agency to address privacy, the FAA’s own statements establishing privacy as an important issue to address, and the hundreds of comments that raised privacy issues in the small drone rulemaking.

EPIC urges this Committee to ask the FAA why the agency has failed to take steps to protect the public from the privacy risks posed by drones. Any privacy and security risks are no longer hypothetical and the longer the FAA waits to issue comprehensive privacy rules, the longer the public is at risk.

¹⁷ 160 Cong. Rec. 1186 (2014), <https://www.congress.gov/crec/2014/01/15/CREC-2014-01-15-bk2.pdf>.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ <https://epic.org/privacy/litigation/apa/faa/drones/EPIC-16-07-20-FAA-FOIA-20160921-Production.pdf>.

²¹ Petition for Rulemaking Submitted by EPIC, *supra* note 6.

²² Letter from Fed. Aviation Admin. to EPIC (Nov. 26, 2014), <https://epic.org/privacy/drones/FAA-Privacy-Rulemaking-Letter.pdf>.

²³ Operation and Certification of Small Unmanned Aircraft Systems, 80 Fed. Reg. 9,544 (proposed Feb. 23, 2015).

²⁴ Operation and Certification of Small Unmanned Aircraft Systems, 81 Fed. Reg. 42,063 (June 28, 2016) (codified at 14 C.F.R. pts. 21, 43, 61, 91, 101, 107, 119, 133, and 183).

²⁵ EPIC v. FAA, No. 16-1297 (D.C. Cir.); <https://epic.org/privacy/litigation/apa/faa/drones/>.

Conclusion

We ask that this letter be entered in the hearing record. EPIC looks forward to working with the Committee on these issues of vital importance to the American public.

Sincerely,

/s/ Marc Rotenberg
Marc Rotenberg
EPIC President

/s/ Jeramie Scott
Jeramie Scott
EPIC National Security Counsel

/s/ Caitriona Fitzgerald
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