



ELECTRONIC PRIVACY INFORMATION CENTER

Statement for the Record of

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In Support of House Bill 620: "Crimes – Unmanned Aircraft Systems – Unauthorized Surveillance"

Hearing before the

House Judiciary Committee
of the
General Assembly
of Maryland

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Chairman Vallario, Jr., Vice Chair Dumais, and Members of the House Judiciary Committee of the General Assembly of Maryland, thank you for holding this hearing and for the invitation to EPIC to submit a statement for the record on House Bill 620. The bill addresses a very important and timely issue—Drone Surveillance.

The Electronic Privacy Information Center ("EPIC") is a non-partisan research organization established in 1994 to focus public attention on emerging privacy and civil liberties issues.¹ We work with a distinguished panel of advisors in the fields of law, technology, and public policy.² EPIC is focused on the protection of individual privacy rights, and we are particularly interested in the unique privacy problems associated with aerial drones. EPIC regularly updates and maintains multiple webpages to provide valuable information to the public about current and developing issues involving the domestic use of drones.³

In addition, EPIC contributes to the government's understanding of the privacy implications of domestic drone use through amicus briefs,⁴ federal and state testimony,⁵ and comments to federal agencies.⁶ Immediately after Congress directed the Federal Aviation Administration ("FAA") to fully integrate drones into the National Airspace by 2015,⁷ EPIC petitioned⁸ the FAA to conduct a public rulemaking on the privacy impact of domestic drones.

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. This combination of factors will make pervasive and indiscriminate aerial surveillance feasible.

¹ *About EPIC*, EPIC, <https://epic.org/epic/about.html>.

² *EPIC Advisory Board*, EPIC, https://epic.org/epic/advisory_board.html.

³ EPIC: Domestic Unmanned Aerial Vehicles (UAVs) and Drones, <https://epic.org/privacy/drones/>; EPIC: EPIC v. Army – Surveillance Blimps, <https://epic.org/foia/army/>; EPIC: Spotlight on Surveillance – October 2014: DRONES: Eyes in the Sky, <https://epic.org/privacy/surveillance/spotlight/1014/drones.html>; EPIC: Spotlight on Surveillance – August 2005: Unmanned Planes Offer Opportunities for Clandestine Government Tracking, <https://epic.org/privacy/surveillance/spotlight/0805/>.

⁴ *See, e.g.*, Brief for EPIC as Amicus Curiae Supporting Respondent, *State v. Davis* (No. 34,548) available at <https://epic.org/amicus/drones/new-mexico/davis/EPIC-Amicus-Brief.pdf>.

⁵ *See, e.g.*, *The Future of Drones in America: Law Enforcement and Privacy Considerations Before S. Judiciary Comm.*, 113th (2013) (statement of Amie Stepanovich, Director of the Domestic Surveillance Project, EPIC), available at <https://epic.org/privacy/testimony/EPIC-Drone-Testimony-3-13-Stepanovich.pdf>.

⁶ *See, e.g.*, Comments of EPIC on Unmanned Aircraft System Test Site Program (April 23, 2013), available at <https://epic.org/privacy/drones/EPIC-Drones-Comments-2013.pdf>.

⁷ *See* Federal Aviation Administration Modernization and Reform Act of 2012, Pub. L. 112-95 §§ 331-336 (2012), available at <http://www.gpo.gov/fdsys/pkg/PLAWU112publ95/pdf/PLAWU112publ95.pdf>.

⁸ Letter to Michael P. Huerta, Acting Administrator of the FAA, from EPIC, *et al.* (Feb. 24, 2012), available at <https://epic.org/privacy/drones/FAA-553e-Petition-03-08-12.pdf>.

Drones with advance surveillance capabilities are readily available to the public. 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 over a mile away.⁹ The camera system on the Inspire 1 can shoot video up to 4K resolution at 24-30 frames per second and can capture 12 megapixel photos.¹⁰ 4K is an ultra-high definition resolution that exceeds most HD televisions sold today. The high-resolution camera allows for detailed analysis of the area viewed that goes well beyond what is possible with the naked eye. Even lower-end hobbyist drones costing less than \$200 can stream live video. The Hubsan X4, a drone that can fit in the palm of your hand, utilizes a front facing camera with 640 x 480 resolution that can stream live video up to 100 meters away and uses a memory card to capture video images.¹¹

Many drone vendors that sell to the military, law enforcement, and commercial users advertize drones with surveillance technologies that include powerful cameras, thermal imaging systems, radar, infrared imaging systems, and other sophisticated electronic sensors.¹² According to Aeryon, a leading small drone vendor, "Aeryon SkyRanger operators can now read a license plate and recognize a face from a distance of over 1000 ft. (300 m)."¹³ AeroVironment, another leading drone vendor, states that the RQ-11 Raven is "a lightweight solution designed for rapid deployment and high mobility" for operations "requiring low altitude surveillance and reconnaissance."¹⁴ Another one of AeroVironment's drones, the RQ-20A-Puma AE, can fly for 3.5 hours at a time and has a communication range of over 9 miles.¹⁵ AeroVironment describes the Puma as "quiet to avoid detection and operates autonomously, providing persistent intelligence, surveillance, reconnaissance and targeting data (ISRT)."¹⁶

EPIC recognizes that there are many positive applications for drones within the United States. With little to no risk to individual privacy, drones may be used to combat forest fires, conduct search and rescue operations, survey emergency situations, and monitor weather phenomena. However, when drones are used to obtain evidence in a criminal proceeding, intrude upon a reasonable expectation of privacy, or gather personal data about identifiable individuals, rules are necessary to ensure that fundamental standards of fairness, privacy and accountability are preserved.

⁹ DJI, *Inspire 1*, <http://www.dji.com/product/inspire-1/feature> (last visited Mar. 16, 2015).

¹⁰ *Id.*

¹¹ Hubsan, *FPV Hubsan X4*, http://www.hubsan.com/productinfo_11.html (last visited Mar. 16, 2015).

¹² See Aeryon Labs Inc., *Aeryon Small Unmanned Aerial Systems*, <https://www.aeryon.com/products.html> (last visited Mar. 16, 2015); AeroVironment, *The Future is Unmanned*, <http://www.avinc.com/uas/> (last visited Mar. 16, 2015).

¹³ Aeryon Labs Inc., *Aeryon HDZoom30 Imaging Payload*, <https://www.aeryon.com/products/payloads/hdzoom30.html> (last visited Mar. 16, 2015).

¹⁴ AeroVironment, *Raven RQ-11B: Technical Specifications V1.01.09*, http://www.avinc.com/downloads/AV_RAVEN-DOM_V10109.pdf (last visited Mar. 16, 2015).

¹⁵ AeroVironment, *Unmanned Aircraft Systems: UAS RQ-20A Puma AE*, http://www.avinc.com/uas/small_uas/puma/ (last visited Mar. 16, 2015).

¹⁶ *Id.*

EPIC supports House Bill 620, "Crimes – Unmanned Aircraft Systems – Unauthorized Surveillance." The bill is an important first step toward safeguarding fundamental privacy rights. Specifically, EPIC supports the bill's general prohibition against surveillance of "specifically targeted individuals or private property." House Bill 620 rightly prohibits warrantless surveillance by law enforcement, apart from narrow exceptions. The bill also prohibits commercial surveillance of individuals without their explicit consent. Similarly, the bill prohibits a private actor from using drones as a means to spy on unsuspecting individuals regardless if the unsuspecting individual is in the privacy of his or her own home or in public. But, appropriately, House Bill 620 would allow for media coverage of public events, traffic conditions, and other news-related events. Additionally, the bill allows new commercial applications and the use of drones for recreational purposes.

House Bill 620 provides a solid foundation for the protection of privacy, but there are additional protections that the bill should implement to improve transparency, oversight, and accountability of drone use in Maryland. EPIC recommends the following additions:

1. **Law Enforcement Restrictions on General Surveillance:** The bill addresses targeted surveillance but should also explicitly limit law enforcement's ability to use drones for the general surveillance of individuals in public, especially those engaged in first amendment protected activities.
2. **Use and Data Retention Limitations:** Where the bill allows commercial or law enforcement drone surveillance, use and data retention limitations should apply. Data collected via drone surveillance should not be used for purposes beyond the original reason for collection or beyond the consented use. Similarly, data should not be retained longer than necessary to fulfill the original purpose of collection.
3. **Transparency and Public Accountability:** Where the bill allows commercial and law enforcement drone surveillance, mechanisms should be implemented to provide ongoing transparency and public accountability in the use of drones for surveillance. Transparency and accountability are particularly important for law enforcement's use of exceptions to prevent narrow exceptions from becoming broadly accepted practices.
4. **Published Policy and Procedures:** All government agencies that use drones should make their policy and procedures with respect to the use of drones publicly available.

The increased use of drones to conduct various forms of surveillance must be accompanied by increased privacy protections. The current state of the law is insufficient to address the threat to privacy domestic drones represent. We support House Bill 620 as a step in the right direction, but we also support additional protections to better provide transparency, oversight, and accountability.