STATEMENT ON PRIVACY ISSUES RELATED TO
THE DOMESTIC USE OF UNMANNED AERIAL VEHICLES

TODD HUMPHREYS
THE UNIVERSITY OF TEXAS AT AUSTIN

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1. The Drone Distinction

The Fourth Amendment guarantees U.S. citizens substantial protection against warrantless government intrusion into our homes. In fact, the Supreme Court has said that law enforcement can’t even try to peer through the walls of our homes with exotic thermal imaging technology or radio beacons. This restriction plausibly extends to all forms of electromagnetic radiation that could possibly be used to extract information from within a home through walls or a roof otherwise opaque to the naked eye. The introduction of UAVs doesn’t change this protection, no matter how sophisticated their sensors. Our homes are still our castles.

The Supreme Court has indicated that the area immediately surrounding our home—our back yard, swimming pool, or deck—deserves similar protections as the home if we make an effort to shield these areas from public view. So a tall fence, a shade cover over the swimming pool, and a light roof over the deck offer legal protection against prying eyes from the street and from the air. If our backyard shade cover is opaque to the human eye, then no police helicopter—manned or unmanned—is allowed to peer through it by any means.

Outside these covered areas the law says we have no reasonable expectation of privacy from aerial surveillance. And for the past 24 years, since the U.S. Supreme Court made this doctrine clear in *Florida v. Riley*, Congress has agreed with this assessment, as evidenced by their not enacting any special restrictions on aerial surveillance.

So then why are we here? How do UAVs change this situation? The answer boils down to a single word: *cost*. UAVs are much more cost-effective than manned aircraft to buy and to operate. For the cost of a few hours’ worth of police helicopter surveillance, a police department can buy an entire new UAV setup. In fact, the cost-effectiveness of UAVs is precisely why law enforcement agencies, who are always being asked to do more with fewer dollars, find them interesting.

But the high cost of aerial surveillance is not necessarily a drawback from the public point of view: it has historically been an important practical privacy protection. We know that local police could legally fly a manned helicopter over our back yard to see if we installed a swimming pool without a permit, but this doesn’t bother us much because we don’t consider it likely.

UAVs change this calculus. If a few thousand dollars buys a new UAV and it costs pennies to operate one, then when we find ourselves outside the sacrosanct covered areas mentioned earlier, we’re likely to be surveilled more often. This increased likelihood is at the center of our conversation today.

Interestingly, those members of Congress promoting legislation restricting the use of UAVs for surveillance in “open fields” are simply voicing a disagreement with the earlier Supreme Court precedents: *they believe that citizens in fact do have a reasonable expectation of privacy when in the public view—an expectation to be free from long-term surveillance*. The decision and concurring opinions in *United States v. Jones*, the GPS tracking case handed down earlier this year, indicate that the Supreme Court is coming around to this viewpoint.
Representative Ted Poe’s *Preserving American Privacy Act of 2012* (H.R. 6199) would limit the use of UAVs by law enforcement to cases where a warrant has been obtained in the investigation of a felony. The Act further proscribes any federal agency from authorizing private persons to employ a UAV to surveil any other private person without consent of that person or consent of the owner of the property on which the person is present. In my view, the Act is a prudent attempt to codify, within the scope of UAV technology, the emerging recognition that U.S. citizens have a reasonable expectation to be free from long-term surveillance. Nonetheless, I see some problems with the Act in its current form.

### 2.1. Collateral Surveillance

The Act forbids federal agencies from authorizing private persons to surveil each other without consent, but it does not make clear whether incidental surveillance is also forbidden. Would a university research team, having obtained from the FAA a Certificate of Authorization (COA) for UAV operation in a restricted area, be prevented from operating the UAV except under the narrow circumstance in which only consenting persons would possibly be visible to the UAV’s cameras? If so, then the Act would practically forbid any federal authorization to operate UAVs for research, power line monitoring, search and rescue monitoring, medical delivery, etc., by private persons. On the other hand, if incidental surveillance by private persons is allowed, then the rule against private surveillance becomes practically unenforceable—the UAV operator could always claim to be birdwatching.

And what of private surveillance for which no authorization, federal or otherwise, has been sought? Today’s toy UAVs, which can be purchased online for a few hundred dollars, are remarkably capable. The latest generation Parrot 2.0 units, for example, are equipped with a high-definition camera and can reach an altitude of 160 feet. So far, the FAA has not required a COA for use of these toy drones. Does this mean that private surveillance with a toy UAV is permissible? If so, how do we distinguish a toy UAV from a non-toy UAV?

### 2.2. General Public Use

In *Kyllo v. United States* the Court classified thermal imaging of a home as a 4th Amendment search in part because the imaging equipment was not in “general public use.” If the instrument used to peer into the home had been an ordinary pair of binoculars, then the act would likely not have constituted a search. Likewise, our emerging recognition that U.S. citizens have a reasonable expectation to be free from long-term surveillance is linked to such surveillance being uncommon. But if it becomes common for our neighbors to legally fly toy UAVs with high definition cameras, will we continue to expect freedom from long-term surveillance? And won’t it be awkward to forbid law enforcement from using a UAV to peek into my back yard when my 12-year old neighbor can legally do so any day of the week?

The University of Texas at Austin

E-mail address: todd.humphreys@mail.utexas.edu