

The Truth About Remotely Piloted Vehicles and Privacy.

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May 23, 2012

The media and privacy groups have two well-known tendencies. First, they are more than willing to make dogmatic pronouncements based on limited information and limited effort to determine the facts, and second, they tend to sensationalize everything to try to get everyone's attention. Both of those attributes have come into play as attacks have been launched on the use by law enforcement agencies of remotely piloted vehicles, known as RPVs, or "drones" as the media prefers to refer to them.

Recently, the Electronic Frontier Foundation (EFF) took on the crusade to find out which law enforcement agencies were using RPVs in the United States. When the FAA provided the list of agencies in response to a Freedom of Information Act request, EFF celebrated as if it were finally breaking the government conspiracy to spy on citizens. EFF has targeted the FAA for allegedly creating a system that would result in a privacy invasion pandemic. Unfortunately, EFF did not take the time to ask questions before shooting off its press releases.

Currently, the average citizen can buy a remote control helicopter with a camera system or attach their high quality camera. With the simple addition of a commercially available autopilot, they can have autonomous RPVs capable of taking pictures of your backyard. Unfortunately, there is very little the local police or you can do to stop this invasion of privacy beyond pursuing claims through existing civil laws. The FAA regulations do not currently regulate the remote controlled helicopter with a camera used by the average citizen. Similarly, the paparazzi could build their own RPV with autopilot features and cameras using the information on www.diydrones.com, or a host of other websites. The technology permitting private citizens to spy on others is abundant. A simple YouTube search will reveal hundreds of homemade videos using what EFF would consider to be a drone.

The FAA recognized long ago that the use of remotely piloted vehicles would continue to grow exponentially with the decrease in cost of equipment and the availability of high resolution low cost, light weight cameras. The FAA set up the Unmanned Aircraft Program Office, now the FAA's UAS Integration Office, to help identify the issues with the use of RPVs and to work on developing updated regulations to encompass this technology. The FAA has already conducted an advisory rulemaking committee to help provide input into a small unmanned aircraft system rule. The FAA is now working through the information provided by the rulemaking committee in the hopes of publishing regulations.

Based on a number of recent stories in the media, members of Congress sent a letter to the Federal Aviation Administration asking how the FAA will protect individuals' privacy rights in response to the new legislation requiring the FAA to take steps to assist in the integration of

RPVs into the National Airspace. The letter stated, “we are writing to express our concerns about the law’s potential privacy implications and to requisition information about how the FAA is addressing these important matters.” Similarly, Jay Stanley, a Senior Policy Analyst with the ACLU, wrote that the FAA needs to “impose some rules (such as those we proposed in our report) to protect Americans’ privacy from the inevitable invasions that this technology will otherwise lead to.” However, everyone seems to be overlooking the fundamental principle that it is not the FAA’s responsibility to protect privacy. It was best said by Justice Sandra Day O’Connor in her concurring opinion in the Supreme Court of the United States’ Florida v. Riley when she stated that the FAA regulations are intended to promote air safety and not to protect the right to be secure against unreasonable search and seizures. Even though the FAA is not responsible for ensuring our privacy rights, its efforts to regulate and increase the safety of the use of RPV has an indirect benefit of adding protection to our privacy rights.

As previously stated, the average citizen can fly a drone now and use it to take pictures of his neighbor. Such use would likely not violate any FAA regulation. However, if the FAA is able to enact the small unmanned aircraft system regulations which address air safety, those regulations could have the additional benefit of significantly restrict this unwanted privacy invasion. In fact, if the FAA added a provision that made a violation of the regulations a criminal act, local law enforcement could help enforce the proper use of civil drones. Without these beneficial regulations, there is very little that can be done to stop civil homemade drone use.

Now to address the groups that believe our domestic law enforcement agencies are an offshoot of Stalin’s secret police. I find it disappointing that privacy groups presume guilt, i.e. that law enforcement will inappropriately spy on citizens, without any evidence that inappropriate spying is occurring, yet law enforcement abides by the requirement to obtain probable cause before conducting a search for possible illegal activities. The mere fact that someone could do something illegal is not enough for law enforcement to conduct a search. Yet, the mere fact that someone could use an RPV to “spy” on a citizen results in condemnation of an entire industry.

The ability for law enforcement to observe what happens in your backyard from the sky has been around for years. In fact, there have been many court cases argued over the scope of a “search” from the air by law enforcement without a warrant. The Supreme Court of the United States stated, “what a person knowingly exposes to the public, even in his own home or office, is not a subject of *Fourth Amendment* Protection.” Katz v. United States. In addition, the Supreme Court noted “as a general proposition, the police may see what may be seen from a public vantage point where they have a right to be.” Florida v. Riley. In Riley the plurality opinion focused on the fact that the helicopter that hovered over the defendant’s house looking for marijuana plants did so at 400 feet above the ground. The Court noted that flying over the defendant’s house was permitted by FAA regulations; and, therefore, the police were observing from a position the general public also could observe from. Substituting an RPV for a manned helicopter in no way changes the equation from a privacy perspective.

Applying the rationale in Riley, the FAA's recent collaboration with DOJ'S NIJ is an effort to provide guidance and structure to law enforcement operations that will increase, not decrease, our right to privacy. Under the current FAA regulations, there is a strong argument that a law enforcement entity could fly a RPV without any permission from the FAA. A public entity does not need a civil airworthiness certificate issued from the FAA and the operator of the public aircraft does not need an airman certificate. As long as the law enforcement agency complies with the Part 91 rules of the road, no further FAA input is needed. Recently, Amie Stepanovich, legal counsel to the Electronic Privacy Information Center ("EPIC") was quoted by Shaun Waterman in his article "Drones over U.S. Get OK by Congress" in the Washington Times stating, "currently, the only barrier to the routine use of drones for persistent surveillance are the procedural requirements imposed by the FAA for the issuance of certificates." Actually, Ms. Stepanovich is not correct. The FAA has very limited authority right now to prevent a government owned RPV from operating as a public aircraft. The FAA's certificate of authorization ("COA") process is a process created by FAA policy to help government agencies operate RPVs in a safe manner consistent with the FAA's "rules of the road" regulations.

The recent efforts by the FAA and the Department of Justice, through the National Institute of Justice, to create a public safety focused COA process are intended to address the risk associated with RPV operations and provide a common structure for those public safety entities wanting to use RPV to assist in routine missions. However, the FAA's focus is, as it should be, on ensuring safe operations in the National Airspace, not privacy matters. The benefit of the FAA and DOJ's effort in establishing a public safety specific COA process is that it provides notice to the public about unmanned aircraft operations through the Airport Facilities Directory and Notice to Airman sources accessible by the public. Moreover, if the Supreme Court is going to look at FAA guidance to help determine when it is appropriate for law enforcement to be flying an RPV over someone's house, the COA process would be the only guidance at this point.

Using the structure of the COA process, we can then look at the Constitution and the numerous court opinions to determine the implication on privacy protections. For example, the use of RPVs to conduct surveillance can be analogous to the Supreme Court's handling of thermal imaging.

In the case of Kyllo v. United States the Supreme Court addressed whether the use of thermal imaging to detect the heat emitted from a house indicating possible marijuana plant grows constituted a search under the *Fourth Amendment*. The basic facts of the case involved the use of a thermal imager by a police office to scan a house from across the street at 3:20 am. The results of the scan indicated that the garage was producing excessive heat in comparison with the rest of the house and other houses in the neighborhood. Based on tips from an informant, the utility bills and the thermal scan, a warrant was issued to search the home. The Supreme Court held that the use of the thermal scanner, a sense-enhancing technology that was not in general public use, was a search that required a warrant.

The Kyllo Court noted:

It would be foolish to contend that the degree of privacy secured to citizens by the *Fourth Amendment* has been entirely unaffected by the advance of technology. For example, as the cases discussed above make clear, the technology enabling human flight has exposed to public view (and hence, we have said, to official observation) uncovered portions of the house and its curtilage that once were private... The question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy.

The Court struggled with the emergence of technology and the protections of privacy. In determining whether privacy has been invaded by the use of technology by law enforcement, the Court analyzed whether such technology was readily available to the public.

We think that obtaining by sense-enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical intrusion into a constitutionally protected area,... constitutes a search -- at least where (as here) the technology in question is not in general public use.

The standard set forth by the Kyllo Court was flexible enough to be adapted to future advance in technology, such as the use of RPVs. To the extent law enforcement is using an RPV with unique technology available to the public, then the use of the unique RPV technology to search the privacy of a home could be considered a search. If the civilian small unmanned aircraft rule were implemented in a manner that limited the ability for the average citizen to fly over another's property at low levels for observation, then the FAA's issuance of a COA to permit police to fly low level for observation would likely be considered a search, i.e. law enforcement using technology in a manner not available to the public, and a warrant would be needed. In other words, the FAA is not the privacy rights enemy. If anything, the FAA, as an incidental benefit to its legitimate safety role, is providing a frame work to secure our right to privacy.

So where do we go from here? The uproar that adequate laws are not in place to protect the privacy of individuals from spying drones is misleading and uninformed. The *Fourth Amendment* is the foundation of our right to privacy. The Supreme Court and many local courts have offered countless opinions defining when the use of technology by law enforcement constitutes a search. Public safety agencies have been using aircraft for decades to provide situational awareness and eyes in the sky to aid in their missions. The use of RPVs provides no further capabilities than what already exist. In fact, a Cessna 206 (single engine six passenger aircraft) with a high powered camera is more effective at surveillance, and therefore potentially more intrusive, than most RPVs available to law enforcement because the camera system is of substantially better quality; it can see finer detail at high altitudes and it does not have the operational limitations imposed on the use of RPVs. Even with aviation assets available to law

enforcement for the past decades, our privacy has not been unreasonably invaded. We have not had a pandemic of privacy invasions from aircraft because the Constitution along with the judicial system have routinely provided rigorous protections.

Demanding that the FAA address the privacy implications of RPVs is like asking your car mechanic to perform open-heart surgery. The FAA's expertise is aviation safety. We should look to those tasks with protecting our civil rights, the Department of Justice, to help identify the issues with privacy as they relate to the use of RPVs by law enforcement. Moreover, we should look to the expansive body of case law that has already established the standards for limiting unconstitutional searches. If the privacy groups' concerns are truly limited to how law enforcement may use RPVs in their daily missions, then a technology acceptance panel hosted by the National Institute of Justice would be the perfect avenue for addressing those concerns. A technology acceptance panel brings together interested parties, i.e. law enforcement, privacy groups, regulators and others, to discuss the use of the technology, the public's concerns over the technology and hopefully arrive at best practices for effectively using the technology while at the same time protecting the public's interests.

I would also recommend that the FAA consider inserting criminal penalties for violation of the small unmanned aircraft rule when it comes out in the near future. This rule will hopefully capture the current unlimited use of RPVs by civilians and provide law enforcement with a means to enforce improper use of RPVs by civilians. On that note, I would highly recommend that FAA be given the necessary resources to quickly implement the small unmanned aircraft rule to further enhance our privacy protections from the spying civilian.

Finally, instead of taking punches at the FAA, DOJ or other government entities for working to implement a technology safely, I would suggest that interested parties start acting collaboratively. The FAA and DOJ's NIJ spent many months working together to develop a process for the safe operation of RPVs. Such government collaboration should be applauded. Instead of making assumption that the local sheriff is now going to be spying on you, why not provide suggested guidance on how to address the public concerns. The privacy uproar over the use of RPVs by law enforcement reminds me of a brilliant line by Michael Douglas in the movie *American President*:

We have serious problems to solve, and we need serious people to solve them. And whatever your particular problem is, I promise you, [my opponent] is not the least bit interested in solving it. He is interested in two things and two things only: making you afraid of it and telling you who's to blame for it. That, ladies and gentlemen, is how you win elections.

I cannot help but think as I read the articles about the use of RPVs to invade your privacy that the articles attempt to prey on peoples' fears and tell you who to blame, yet they offer no substantive suggestions on how to address the issue. If privacy groups take the position that RPVs should

never be used, then it is difficult to argue logic with them. If the privacy groups understand that there is a real value to the use of RPVs, such as using an RPV to patrol a school campus during an active shooter incident to identify possible hostiles or potential victims, then hopefully through their thoughtful assessment of the situation they could provide meaningful suggestions on the proper use of RPVs.