Ethics Aloft: The Pros and Cons of Commercial Drones

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THE TECHNOLOGY OF THE MOMENT

Drones — or Unmanned Aerial Vehicles (UAVs) — are a battlefield technology quickly moving into government, civilian, and commercial use. Civilian drones enable aerial photography, videography, and data-gathering at a small fraction of the cost of airplanes or helicopters.

You can buy a toy drone capable of streaming video to YouTube for a paltry $300. Full-fledged drones — complete with autonomous flying and geolocation capabilities — are on the market for $50,000 to $300,000, but not yet legal to fly in the National Airspace System (NAS).

Estimates vary, but some expect between 10,000 and 30,000 drones to be flying in the airspace of the United States by 2020, making for a $90 billion industry in that decade. Already in use for patrolling U.S. borders to deter illegal immigration, UAVs will be deployed in everything from golf course management to fighting wildfires.

BUDDING ETHICAL THINKING

The legal issues still haven't been ironed out, and the commercial use of drones also raises key ethics concerns. Among those key concerns:

Safety: Putting a drone up is "essentially launching a flying lawnmower into the air." With whirring rotors and rudimentary guidance systems, low-end drones would pose serious risks if deployed to, say, count a crowd at a protest.

Conflicts of interest: UAVs have the potential to reignite longstanding concerns about the gathering and sharing of information. It would be easy for drone operators to become a surrogate for police, sharing images and data the government could not get on its own without a warrant.

Accuracy and context: One of the most heated debates in military drone use centers on the very idea of remote sensing and decision-making. Critics argue that soldiers far removed from the horrors of war make decisions to kill or destroy without context. Though far less lethal, the same danger applies to civilian uses. By relying on a partially autonomous machine, drone operators can distance themselves from the human toll of situations, potentially removing critical context.

THE PRIVACY QUESTION

In most debates about the use of drones, every other ethical question seems to pale against the concerns about privacy. The debate is structured around legal terms, using such constructs as "reasonable expectation of privacy," "private property" and "public land."

But as privacy advocates will attest, technological advances are steaming well ahead of the development of law. For instance, the way the law reads now is that private property only exists up to the "National Air Space" (500 feet in most cases). Unless changes are made the law, drones would be free to fly—and take pictures and videos of people on the ground—within this public air space.

In the absence of — and in addition to — legal guidelines, operators must develop clear ethical principles to guide their drone use. This will take some time and a lot of debate.