

New book explores the new era of drones

## A Buzz in the Air

In recent years drones have become more and more ubiquitous. No longer just a weapons platform used to launch missiles at terrorists, today unmanned aerial vehicles (UAVs) are being used for a growing number of civilian and law enforcement purposes.

As drones become cheaper and more capable, the potential uses by both the public and private sectors have raised a host of complex questions. Those issues are tackled in a new book, *Eyes to the Sky: Privacy and Commerce in the Age of the Drone*, edited by Matthew Feeney, director of Cato's Project on Emerging Technologies.

*Eyes to the Sky* draws together contributions from several leading scholars on the law and technology of drones. In one chapter, technology attorney Sara Baxenbergs of Wiley Rein outlines the history of UAV regulation in the United States and the slow-moving bureaucracy's struggles to keep pace with the rate of technological innovations. "These challenges have been particularly significant given the complexity of the U.S. National Airspace System, the Federal Aviation Administration's mandate to ensure aviation safety, and society's deep-seated aversion to aviation-related accidents," she explains. But in spite of these hurdles, the industry continues to make substantial progress.

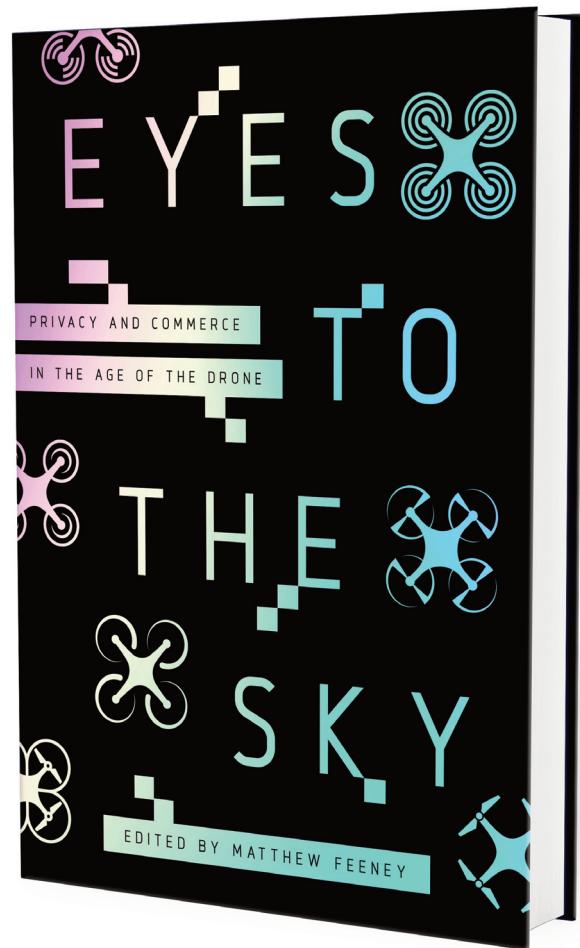
In another chapter, Laura Donohue, director of Georgetown University's Center on National Security and the Law, explores an age-old question made newly relevant: who owns the airspace over private property? The issue long predates the advent of aviation. The influential medieval legal treatise *Glossa Ordinaria* established a principle that whoever owned the land "controlled everything from the heavens above to hell below."

Drones raise new questions for 20th-

century laws that applied federal regulation to "anywhere aircraft can safely navigate," which was interpreted as above 500 feet. Drones, however, can safely operate as low as a few feet, potentially bringing federal jurisdiction all the way down to the ground and impinging on the role constitutionally reserved to the states in defining private property rights.

UAVs also raise new questions about privacy. They can hover as an eye in the sky, providing effectively continuous coverage in ways manned aircraft cannot. The Supreme Court has never squarely addressed the limits of Fourth Amendment protections from aerial surveillance, nor have federal legislators and regulators crafted effective guidelines for the private use of drones. Jake Laperruque, senior counsel for the Constitution Project at the Project on Government Oversight, proposes a set of rules for the use of drone surveillance by law enforcement agencies. As he explains, though federal action has been lacking, "dozens of states have adopted rules and limits on drones, with 18 establishing a warrant requirement for police use of drones."

Laperruque identifies four principles to guide police surveillance using drones. He draws from both Fourth Amendment law and some of the norms that have developed for electronic surveillance: a probable cause warrant requirement, an exhaustion requirement for using less in-



vasive options first, minimization rules to protect persons and property outside the scope of the warranted targets, and a requirement that the government provide logistical information with a justification for the extent of surveillance requested.

Other questions addressed in *Eyes to the Sky* include ways to make American regulations more conducive to innovation, the capabilities of drones and their use by the federal government, and the potential commercial uses of drones that are rapidly developing. As UAVs become more and more a part of everyday life, *Eyes to the Sky* offers a critical guide for policymakers for years to come. ■

**EYES TO THE SKY IS AVAILABLE FROM MAJOR BOOKSELLERS AND AT CATO.ORG/BOOKS.**