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RESEARCH SUMMARY

Who Determines Where Commercial Drones Can Fly?: The Need for a Cooperative Federalism

In recent years the federal and state governments have promoted drone technology because it promises economic benefits, but they have not yet resolved who manages drone airspace. The absence of a clear and uniform rule stunts development of the domestic drone industry. In "Drone Technology, Airspace Design, and Aerial Law in States and Cities," Brent Skorup traces the history of surface airspace propertization and sales back to Anglo-American legal treatises and court decisions in the mid-19th century. Drones use this surface airspace, and Skorup proposes a cooperative federalist approach and airspace leasing above public roads. In this approach, the federal government would recognize state government powers over surface airspace, thus permitting state authorities to create a network of drone highways. Federal and state authorities would split airspace leasing revenues.

ANTICIPATING THE LEGAL ISSUES THAT DRONE SERVICES HAVE CREATED

Landowners (public and private) own low-altitude airspace and air rights. As a result, drone operators risk litigation from landowners for issues including nuisance, trespass, and takings.

Historically, states have had regulatory powers over public ways both on the ground and in the air (up to a certain altitude). For that reason, Skorup's proposed network of drone highways minimizes the litigation risk simply by having drone traffic avoid private property and by protecting traditional state and local powers..

STATE AND FEDERAL LAWMAKERS SHOULD COLLABORATE TO LEASE AIRSPACE ABOVE ROADWAYS

Some responsibilities for airspace design and management should be devolved to states and cities, much like with communications infrastructure and roadway management. For example, federal aviation authorities should "whitelist" geographic areas where drone highways pose a de minimis risk to manned aircraft. States and cities would demarcate drone highways and create time, place, and manner restrictions (e.g., time-of-day rules, noise maximums, and privacy protections). Doing so would

- avoid most lawsuits from property owners,
- open up potentially millions of miles of drone routes,
- allow market allocation of a scarce natural resource (surface airspace), and
- permit government entities to raise revenue from public right-of-way use.

In the absence of federal legislation clarifying the limits of private air rights, Skorup proposes that federal and state courts establish a legal presumption that drones' regularly flying below 200 feet altitude amounts to trespass.

The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University.

KEY TAKEAWAY

The current federal-centric regime governing traditional aviation will not easily extend to drone traffic management. To avoid gridlock with states and the risk of civil suits from landowners, the federal government should recognize state and local government authority over drone airspace. Creating a network of drone highways above roadways can protect private property and allow the drone industry to take off.