Can you prevent a drone from flying over your house to deliver a package to your neighbor? Until now, that question has been of purely theoretical interest. However, the Senate recently passed a bill that could significantly change the operational landscape for unmanned aircraft systems (UAS or drones) and make these kinds of hypothetical delivery drones a reality.

On April 19, the Senate passed H.R. 636, which would reauthorize the Federal Aviation Administration (FAA) through fiscal year 2017. Section 2141 of the bill would require the FAA, within two years, to issue a final rule authorizing the carriage of property within the United States by operators of small UAS for compensation or hire. Many commentators believe that this section could facilitate the use of UAS by companies like Amazon to deliver packages to your front door. This provision would require the FAA to create a “small UAS air carrier certificate,” allowing the operation of small UAS “directly, by lease, or other arrangement” to carry property, including as part of a highly automated commercial fleet. These kinds of flights have not yet been approved by the FAA because they would likely involve operations beyond line of sight and in densely populated areas, both of which are currently prohibited. However, Amazon has been testing its so-called Prime Air operations for about a year, under an individual exemption granted by the FAA that imposes specific limits, such as speed and altitude limits and a requirement to fly within visual line of site of the pilot in command, on its test operations.

The prospect of highly automated fleets of drones being used routinely to deliver packages raises a number of interesting legal questions. Can a property owner bar overflight by a drone making a delivery nearby? Could a homeowners’ association prohibit the delivery of packages by drones within their jurisdiction? The answers to these questions hinge on who owns the airspace. A couple of centuries ago, the answer would have been obvious—under ancient common law principles, ownership of land would have extended from the ground all the way up to the heavens. In modern times, starting with the Supreme Court’s decision in United States v. Causby, federal courts have rejected this conception of absolute property ownership, instead finding that landowners own the airspace in the “immediate reaches” of the surface necessary to use and enjoy the land. However, above these “immediate reaches,” the airspace is part of the public domain.

The courts have not adopted a consistent test for defining where the immediate reaches of the surface end, but rather have taken various conceptual approaches, which are discussed in detail in this CRS Report. Some courts have adopted a fixed-height theory that declares navigable airspace to be part of the public domain, and thus not part of the immediate reaches of the surface. Under this theory, a homeowner could not prohibit flights occurring in navigable airspace. Navigable airspace is defined in statute as the airspace above the minimum flight altitudes prescribed by regulation. FAA regulations define the minimum safe altitudes for traditional aircraft, which can vary based on the type of aircraft, the characteristics of the area, and whether the aircraft is in the process of taking off or landing. The application of the fixed-height theory to UAS flights, however, is complicated by the fact that the FAA has not prescribed specific minimum safe altitudes for UAS and, therefore, it is unclear how a court would determine if a UAS flight occurred in navigable airspace.

Other courts have determined ownership based solely on the amount of airspace necessary for the owner to use and enjoy the land. Therefore, whether or not a specific UAS flight occurs in airspace owned by the property owner would likely depend on a number of factors, including: the altitude of the flight; the purpose for which the property is used;
and whether a reviewing court would deem the flight to interfere with the use and enjoyment of the surface. Based on these theories, while an owner would have the right to restrict a UAS from launching from or landing on its property, it seems unlikely that a property owner or homeowners’ association could outright ban all UAS flights over its property.

If a property owner could not effectively prevent overflights by delivery UAS, could a state or city enact a law banning these kinds of operations within its boundaries? A state or local government’s attempt to enact such a prohibition may be seriously impeded by another provision the Senate included in H.R. 636, as amended, expressly preempting certain state and local laws regulating UAS. Subsection (a) of Section 2152 states, in relevant part:

No State or political subdivision of a State may enact or enforce any law, regulation, or other provision having the force and effect of law relating to the ... operation ... of an unmanned aircraft system, including airspace, altitude, flight paths, equipment or technology requirements, [and] purpose of operations....

Subsections (b) and (c) are saving clauses, which describe state and local laws that would not be expressly preempted under this section. Subsection (b) preserves state and local authority to enforce certain named privacy and tort laws, such as nuisance, harassment, and personal injury, if those laws are not specifically related to the use of UAS. Subsection (c) preserves state or federal common law rights and certain causes of action for injuries based on state law. Subsection (c) also states that “[n]othing in this subtitle ... shall be construed to preempt ... any State or Federal statute creating a remedy for civil relief, including those for civil damages, or a penalty for a criminal conduct.”

Whether state or local laws fall within the scope of this preemption section such that they are superseded by federal law would depend on the specific details of each law. For example, it appears likely that a local ordinance that prohibited small UAS carrying property for compensation from flying in the airspace above its surface boundaries would be preempted under subsection (a) of Section 2152. This kind of law would likely be interpreted as a law “relating to” the operation of UAS and would not appear to fall within any of the saving clauses. In contrast, a state law that established liability for nuisance, without reference to UAS specifically, may not be expressly preempted when applied to a UAS operation because a reviewing court could interpret it as falling within the saving clause in subsection (c). Thus, this type of law would remain valid and not be facially superseded by federal law. It is less clear as to what kinds of law could be saved from express preemption under the provision in subsection (c) referencing state statutes that create a remedy for civil relief or criminal penalties. At this time, there does not appear to be legislative history that explains the potential congressional intent behind this clause in subsection (c). Moreover, it is theoretically possible that certain state and local laws could be superseded through implied conflict preemption, even if they survive the express preemption analysis.

The Senate-passed FAA reauthorization bill now heads to the House, which must decide whether to continue with its own reauthorization bill (H.R. 4441), take up the Senate’s bill, or simply extend the current authorization. H.R. 4441 contains a similar provision instructing the agency to issue final rules on the carriage of property by UAS within one year. The House bill, as introduced, does not contain an express preemption clause addressing state and local UAS regulation. The FAA’s current authorization expires on July 15, 2016.