Dow Jones Reprints: This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers, use the Order Reprints tool at the bottom of any article or visit www.djreprints.com

See a sample reprint in PDF format.

Order a reprint of this article now

THE WALL STREET JOURNAL.

WSJ.com

BUSINESS

Updated April 21, 2012, 11:48 p.m. ET

Drone Use Takes Off on the Home Front

By ANDY PASZTOR and JOHN EMSHWILLER

With little public attention, dozens of universities and law-enforcement agencies have been given approval by federal aviation regulators to use unmanned aircraft known as drones, according to documents obtained via Freedom of Information Act requests by an advocacy group.



Dozens of universities and law-enforcement agencies have been given approval by federal aviation regulators to use unmanned aircraft known as drones. Jennifer Valentino-DeVries reports on digits. Photo: AP.

The more than 50 institutions that received approvals to operate remotely piloted aircraft are more varied than many outsiders and privacy experts previously knew. They include not only agencies such as the Department of Homeland Security but also smaller ones such as the police departments in North Little Rock, Ark., and Ogden, Utah, as well the University of North Dakota and Nicholls State University in Louisiana.

The information, released by the Electronic Frontier Foundation, came to light as the Federal Aviation Administration gears up to advance the widespread use of the drones. By the fall of 2015, Congress wants the agency to integrate remotely piloted aircraft throughout U.S. airspace.



Associated Press

In February, the Mesa County Sheriff's Department in Colorado tested a drone with an infrared camera. It measures about 36 inch wide.

Although the documents don't indicate how the aircraft will be used, the disclosures likely will fuel privacy concerns involving drones.

On Thursday, Democratic Rep. Edward Markey of Massachusetts and Republican Rep. Joe Barton of Texas asked the acting administrator of the FAA to answer questions about the privacy implications of increased drone use.

Organizations That Have Sought to Use Drones

See a list of what groups have requested licenses from the FAA to use drones, and the status of that request.



More photos and interactive graphics

"Many drones are designed to carry surveillance equipment, including video cameras, infrared thermal imagers, radar and wireless network 'sniffers,' " the representatives wrote in their letter to Michael Huerta. Now that the FAA, under pressure from lawmakers and businesses, is pushing to increase the use of drones, it has "the responsibility to ensure that the privacy of individuals is protected and that the public is fully informed about who is using drones in public airspace and why," they wrote.

The FAA declined to comment.

As part of the push to increase uses of civilian drones, nearly 50 companies are developing some 150 different systems, ranging from miniature models to those with wingspans comparable to airliners.

The FAA previously said it has approved dozens of nonmilitary uses of unmanned aircraft, ranging from law enforcement to firefighting to wildlife monitoring. Drones also have been used for news coverage, mapping and agricultural applications.

Read More

Electronic Frontier Foundation website

The University of North Dakota uses drones in connection with an undergraduate degree program in unmanned aircraft systems it started in 2009. Al Palmer, a university official involved

in the program, said about 78 students have declared majors in the field and that graduates have found jobs with drone manufacturers or operators.

The North Little Rock police department has been working with a small pilotless helicopter since 2008, said Sgt. Pat Thessing. It is currently training with the aircraft over unpopulated areas only, while it awaits FAA rules for use of such aircraft elsewhere. It hopes to use them for surveillance of high-crime neighborhoods, during drug investigations and other work.

The list obtained by the EFF represents all entities that have applied for drone permits, but doesn't show how many drones each entity has, said Jennifer Lynch, a staff attorney with the group. FAA officials have talked about the existence of about 300 active permits.

Recipients of these special permits must fly in a certain geographic area outlined on their application. Currently, the FAA typically doesn't allow drones to fly through airspace where commercial, business and private planes travel.

Ryan Calo, who conducts research into privacy and robotics at Stanford Law School, said the domestic use of drones will likely grow as more machines are brought back from war and as prices fall.

"The very same drone that was staking out a nest of insurgents and possibly shooting them could be deployed in New York for surveillance" after removal of weaponry, Mr. Calo said. He said the use of drones could spark a wider debate about privacy because people aren't accustomed to such technology. "If you bring back a tank from Afghanistan, you don't expect it to show up in a park," he said.

—Jennifer Valentino-DeVries and Andrew Morse contributed to this article.

Write to Andy Pasztor at <u>andy.pasztor@wsj.com</u> and John Emshwiller at john.emshwiller@wsj.com

A version of this article appeared April 20, 2012, on page A3 in some U.S. editions of The Wall Street Journal, with the headline: Drone Use Takes Off on Home Front.

Copyright 2012 Dow Jones & Company, Inc. All Rights Reserved
This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our Subscriber
Agreement and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800843-0008 or visit
www.djreprints.com