

23May16

Law Professors Disagree On Whether UAVs Should Be Allowed To Fly Over Private Property.

Two legal experts offer their opposing opinions in the [Wall Street Journal](#) (5/22, Subscription Publication) regarding whether property owners should be able to prevent UAVs operating below 500 feet from flying over their property. University of Miami Laurie Silvers and Mitchell Rubenstein Distinguished Professor of Law A. Michael Froomkin contends that such flights, without the permission of property owners, threaten safety, privacy, and Fourth Amendment rights. However, Froomkin writes that Amazon and other delivery companies could use micropayments to purchase the rights to fly over private property as well as mapping technology to navigate routes where UAVs are permitted to fly. University of Washington Assistant Law Professor Ryan Calo argues that individuals should not be able to decide whether UAVs may fly over their property, and counters safety concerns by noting that Amazon is working with NASA to develop a UAV air-traffic-control system.

Organization Testing UAVs To Find Radioactive Contamination.

The [AP](#) (5/22) reports that Nevada National Security Site officials have purchased two remotely controlled UAVs that will be used to monitor sites for radioactive contamination, as well as “in situations where manned aircraft may not be used safely.” The organization, “stewards of the former national nuclear weapons proving grounds,” will test the aircraft “in coming months over a secure federal reservation north of Las Vegas with a goal of being ready to be sent elsewhere if needed.”

High-Flying UAV Takes Off For Inaugural Flight.

The [AP](#) (5/20) reported that on Friday, the high-flying Elbit Systems Hermes 450 UAV took off for its inaugural flight from the Hillsboro airport in North Dakota “to start a summer-long project that will take pictures of farmland in the fertile Red River Valley.” According to the article, the purpose of the project is “to show whether the larger drone is more efficient to capture imagery of agricultural land than satellites or smaller unmanned aircraft.”

24May16

Xiaomi Likely To Unveil UAV Wednesday.

[TechCrunch](#) (5/23) reports that China-based electronics company Xiaomi is expected to unveil a new UAV on Wednesday, following the reveal of a teaser video posted on Chinese media website Youku. According to the article, given that Chinese manufacturers have “flooded” the UAV market with mostly inexpensive products, Xiaomi, which is mostly known for its mobile phones, may release its new device at “a very aggressive price.”

FAA Tests FBI Drone Detection System at JFK Airport Published: 24 May 2016

The Federal Aviation Administration (FAA) has announced that, in conjunction with its government, industry and academia partners, it is expanding research on ways to detect “rogue” drones around airports. To this end, the FAA and partners have evaluated drone detection technology at John F. Kennedy International Airport (JFK) in New York.

Beginning May 2, the FAA conducted evaluations at JFK to study the effectiveness of a Federal Bureau of Investigation (FBI) UAS detection system in a commercial airport environment. Five different rotorcraft and fixed wing UAS participated in the evaluations, and about 40 separate tests took place.:

http://www.unmannedsystemstechnology.com/2016/05/faa-tests-fbi-drone-detection-system-at-jfk-airport/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=ec4fbbe028-

[Unmanned Systems Technology eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-ec4fbbe028-111778317#sthash.WFRuceTH.dpuf](http://www.unmannedsystemstechnology.com/2016/05/yamaha-rmax-unmanned-helicopter-performs-first-u-s-commercial-agricultural-flight/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=ec4fbbe028-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-ec4fbbe028-111778317#sthash.WFRuceTH.dpuf)

Yamaha RMAX Unmanned Helicopter Performs First U.S. Commercial Agricultural Flight Published: 20 May 2016

Yamaha Motor Corp. U.S.A. has announced the inaugural commercial operation of its RMAX remotely piloted helicopter for agriculture spraying service in the U.S. The RMAX flight was completed in California for Napa-based Silverado Farming Company, a vineyard management company. During its debut the RMAX applied a fungicide for preventative control of powdery mildew — one of the most common fungal diseases affecting grapes and many other crops.

For Yamaha, the U.S. debut of RMAX commercial services for the agricultural industry marks the culmination of several years working with the Federal Aviation Administration to receive appropriate certifications, as well as extensive field research with the University of California, Davis. RMAX provides a unique and effective solution for spray applications, particularly for grape growers with vineyards on slopes or difficult terrain.” Brittany Pederson, a professional pest control adviser and viticulturist for Silverado Farming Company, said the RMAX provides a promising solution for grape growers in California’s wine country. “We’ve followed the UC Davis research trials and evaluations pretty closely,” said Pederson. “The results of those trials and conclusions drawn from work at the Oakville Experimental Vineyards were pretty strong and gave us the confidence to begin our own experiments with the RMAX on privately owned commercial vineyards.”

RMAX offers several benefits, including safe and reliable application of treatments with no soil compaction. The RMAX has also proven to be faster and more efficient than current ground spray applications (both wheeled and foot). It provides growers with more flexibility and accessibility to their fields, giving them another option for applications. http://www.unmannedsystemstechnology.com/2016/05/yamaha-rmax-unmanned-helicopter-performs-first-u-s-commercial-agricultural-flight/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=ec4fbbe028-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-ec4fbbe028-111778317#sthash.kcB9eaxo.dpuf

25May16

UAV Etiquette Rules Proposed.

In an article titled, “How to Fly a Drone Without Being a Jerk,” [Slate](#) (5/24) reports that because UAVs are still so new in popular culture, “our society has yet to form rules of etiquette and behavior around them.” The FAA “discourages hobby and recreational drone pilots from flying over crowds of people, and this is simple common sense.” It is not illegal to do so, but “people often do not like it when you fly a drone over their private property (especially at low altitudes) without asking first.” Given the “number of incidents in which California air crews responding to forest fires claimed to see drones hovering in their flight lines” last summer, the article’s author recommends not flying UAVs close to disasters without explicit permission and that UAVs should avoid flying near airports and disturbing strangers or animals.

UAVs Complete Indra-Led Safe Separation Test In Controlled Spanish Airspace.

[Flightglobal](#) (5/24) reports that two UAVs, one fixed-wing and the other rotary, have “flown alongside a manned aircraft from a Spanish airport for the first time, under an Indra-led effort to demonstrate safe separation between the

two types in controlled airspace.” The UAVs were carrying out “operations alongside Indra’s Tecnam P2006T-based MRI maritime surveillance aircraft (MSA) variant, under the guidance of the Single European Sky ATM Research (SESAR) initiative.” According to Flightglobal, SESAR’s Ariadna project “aims to test integration of UAVs with air traffic control in non-segregated airspace.”

UAV Pilot Group Rotor Riot Shoots Star Wars Short.

[Quartz](#) (5/24) reports that a group of UAV pilots called Rotor Riot put together a short film that uses UAVs to depict Rebel Alliance starships from Star Wars escaping Imperial fighters. Rotor Riot includes “some of the most well-known drone racers on the internet,” Quartz reports. The group used modified racing UAVs and Star Wars toys to shoot footage that shows R2-D2 piloting an X-wing through forests and bridges, “in footage that feels reminiscent of the first viral drone racing video.”

AATI Announces Successful UAS Flight Campaign in Virginia

By AUVSI News posted 2 days ago

American Aerospace Technologies Inc. announced today that it has successfully completed flight tests for the energy industry flying an unmanned aircraft system from the Farmville Regional Airport in Farmville, Virginia. Energy companies and AATI partners interested in testing and evaluating sensors, analytics and aircraft to improve the safety and integrity of our nation’s linear infrastructure, to include oil and natural gas pipelines and electric transmission lines, are sponsoring this research through the Pipeline Research Council International Inc.

In 2015, AATI conducted two BVLOS UAS flight campaigns on pipeline corridors in Central Virginia under a certificate of authorization issued by the Federal Aviation Administration to the Mid-Atlantic Aviation Partnership at Virginia Tech. The recent flights were also conducted under a new MAAP COA covering an area of nearly 5,000 square miles in Central Virginia.

“Virginia offers an incredible environment to conduct the flight testing needed to develop safe and effective beyond line of sight UAS for the energy sector,” says David Yoel, CEO. “The energy infrastructure, the interest and backing of the energy companies, the services offered by the MAAP and the active support of the governor’s office have made this the obvious location to conduct these flight operations.”

ARIADNA Consortium Successfully Completes First Simultaneous Flight of a Civil Drone and Manned Aircraft

By AUVSI News posted 2 days ago

The European ARIADNA consortium, led by the company Indra with participants CRIDA, ENAIRE and Fada-Catec, has completed simultaneous flight tests in a conventional airport of an unmanned aircraft in the presence of a manned aircraft. This test is one of the first instances in Europe of a drone operating in the area of conventional air traffic.

The flight program was held at the ATLAS Experimental Flight Center, located in Villacarrillo, Spain. This center has the ability to segregate for such operations. The exercises were carried out in two distinct phases. In the first, a drone called Viewer flew, executing various maneuvers on the airfield while the Indra MRI P2006T manned aircraft operated simultaneously. A controller supervised the operation, giving separation instructions to the aircraft. The drone’s remote pilot, which monitors the aircraft from

the ground at all times, had the position data of both aircraft provided by an automatic dependent surveillance-broadcast receptor, thus improving situational awareness of traffic in the area.

An additional drone was used in the second phase of flights — an unmanned helicopter called Logo — which validated the feasibility of instrumental approach and landing procedures with vertical guidance based on satellite navigation.

26May16

Entrepreneurs Interested In UAVs' Commercial Possibilities.

The [New York Times](#) (5/25, B5, Subscription Publication) reports that entrepreneurs are uncovering ways to use UAVs “as the core of their business ideas.” The Times describes how the co-founders of HoneyComb are using UAVs to “scout fields for irrigation and pest problems.” Instead of farmers scouting for problems on foot at the rate of 10 acres an hour, HoneyComb’s AgDrone “can cover 700 acres an hour, producing 2-D and 3-D maps that can be used to assess most aspects of crop health.” According to The Times, starting a new business centered on UAVs is challenging, because of the difficulties of obtaining venture financing and a commercial exemption from the FAA.

More Fire Departments Using UAVs, Despite Controversies.

[WRC-TV](#) Washington (5/25) reports that more fire departments across the country are using UAVs, “though there are some controversies and hurdles surrounding their use.” Santa Clara Fire Chief Bill Kelly said that UAVs provide a “vantage point” that “helps us figure out tactical methods, like where to put the hose stream.” According to WRC-TV, CalFire does not own its UAVs, but “the state agency borrows U.S. Forest Service-owned, military-grade drones that can fly above 10,000 feet to document how large fires have spread, find hot spots and survey damage.” CalFire spokeswoman Lynne Tolmachoff said the agency is studying “where a non-military-grade drone...would be of practical use” but acknowledges the challenges UAVs present, such as getting “in the way of large firefighting helicopters dousing the fires with buckets of water.”

Xiaomi’s Low Price UAVs Could Transform US Market.

[Mashable](#) (5/25) analyzes Xiaomi’s new Mi Drone and questions whether the company can control the burgeoning UAV market. According to Mashable, the “lightweight, ‘prosumer’ drone” can fly for nearly a half an hour, can be directed “to a point in the distance with a tap on the screen, plan routes, circle subjects while keeping them in camera view, fly up 2 kilometers (1.25 miles) away, shoot 4K video and return home with a slide of a button.” Its rival, the DJI Phantom 4, costs \$1,399 while the Mi Drone (4k model) only costs \$457, and “the Mi will be available with a 1080p camera for an incredible \$380.” Mashable suggests that the Mi Drone could transform the US “enthusiast drone market,” but notes that Xiaomi’s past products, with similarly low prices, have been “almost impossible to buy in the U.S.” Although Xiaomi “has bigger aspirations,” it is “not clear what’s holding it back from the US markets.”

27May16

SpaceX Live Launch Webcast Unexpected Success.

[Bloomberg News](#) (5/26) reports that while SpaceX is disrupting the space sector with its development of reusable rockets, the Elon Musk-led launch venture is now also “turning heads with its Internet live-streams.” According to the article, SpaceX’s live launch webcasts from its Hawthorne, California headquarters “are becoming must-watch events for space nerds and common folk alike,” providing “an equally informative and entertaining crash course in STEM...topics with a heavy dose of rocket propulsion and flip maneuvers thrown in.” In an email, SpaceX spokesman Dex Torricke-Barton remarked, “Becoming a multi-planet species is one of the greatest challenges facing humanity,”

explaining, “Educating and engaging more people about space will help us to make faster progress, and each launch is an opportunity to do that.”

Miller: Insitu Had Busy May.

In a [UAS Magazine](#) (5/26) article, Patrick Miller describes on Insitu’s booth at Xponential 2016 this month, where it showcased a new Orbital engine for its ScanEagle UAS, “futuristic ground control station software” for controlling “numerous manned and unmanned aircraft” in the same airspace, and its new FLARES system for giving the fixed-wing ScanEagle vertical takeoff capability. Miller reports that in May, Insitu also announced both a strategic partnership with PrecisionHawk for beyond visual line of sight operations, and a new facility at Mississippi State University.

Textron Systems’ Phillips: With VTOL Capabilities, Aerosonde Has “Almost Endless” Mission Potential.

[IHS Jane’s 360](#) (5/26) continues coverage of Textron Systems’ Aerosonde sUAS’s vertical take-off and landing capabilities, which it allows the system to keep its “service-proven capability within a smaller, more portable footprint.” Textron Systems’ Vice President, Small/Medium Endurance Unmanned Aircraft Systems David Phillips said, “With its size, endurance and power, as well as experience in harsh environments, the Aerosonde sUAS has already proven its multimission capabilities.” Phillips added that with VTOL capabilities on Aerosonde units, “the mission possibilities are almost endless.”