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Flirtey Completes First FAA-Sanctioned UAV Delivery To Urban Target.

The [AP](#) (3/26) reported that drone delivery startup Flirtey made history on March 10, 2016 by successfully delivering a package in Hawthorne, Nevada via drone, the first time a UAV has made a fully autonomous delivery in an urban setting in the United States. Flirtey also conducted the country's first legal drone delivery in a rural zone, having delivered supplies to a health clinic in provincial Virginia. The article noted that Nevada is one of the states approved by the FAA as a test site for unmanned aerial systems. The FAA and NASA are both working with the commercial UAV industry to develop safety and air traffic control systems.

[Fortune](#) (3/25) reported that Flirtey's half-mile UAV flight in Hawthorne relied on GPS, and "sent the flying robot to an uninhabited house where it eventually lowered the package to the home's front porch using a rope while hovering above." *Fortune* mentioned that Amazon has been experimenting with drone deliveries, but the FAA's currently restrictive regulations are partially why it has been performing tests in countries such as the Netherlands and Canada. According to the article, Flirtey CEO Matt Sweeny "said Flirtey was able to win FAA approval for its latest drone delivery over bigger companies like Amazon and Google because of its prior experience testing drone deliveries in Australia and New Zealand."

NASA, AFRL To Demonstrate Autonomous UAS.

[Aviation Week](#) (3/28) reports that NASA and the U.S. Air Force Research Laboratory (AFRL) are preparing to demonstrate a UAS called the Traveler, which is "capable of planning, launching, navigating and refueling itself." The article mentions that the FAA plans to "use data collected during the program to help formulate future standards for UAS operations." Mark Skoog, principal investigator of automatic systems at NASA Armstrong Flight Research Center, said, "Some folks argued adamantly that the FAA would never let them do this." Skoog added, "But I was at an FAA headquarters briefing about this and they said, 'This is what we need. What do you need to do this?'"

UAV Testing Increasing Nationwide.

The [AP](#) (3/27) reports that transportation departments at the state level "are increasingly studying the use of drones for everything from inspecting bridges to clearing car accidents." According to a new survey by the American Association of State Highway and Transportation Officials, a total of 33 states nationwide have studied or tested UAVs, helped develop UAV policies, or assisted in UAV research. The article particularly highlights the research initiatives taking place in Michigan, Massachusetts, Minnesota, and Vermont.

Upstate New York Looking To Boost Economy Through UAV Testing Sites. The [Wall Street Journal](#) (3/27, Subscription Publication) reports that the FAA has designated six sites in upstate New York for UAV testing, which is part of a plan to boost the economy in the region through the use of UAVs. The six-county region includes cities such as Syracuse and Utica, where companies such as Lockheed Martin Corp., Saab Sensis Corp. and SRC Inc., already have a presence.

Despite Awareness Efforts, UAV Sightings At Airports On Rise.

[Newsday \(NY\)](#) (3/27) reported on the alarming number of UAV sightings at the nation's airports, a number that "continues to rise despite efforts to combat the safety threat." FAA statistics released ahead of the weekend show that the number of reported UAV sightings in restricted areas multiplied by a factor of at least three in the period of December, 2015 to January 2016, on a year-to-year basis. Furthermore, the FAA predicts that hobbyist UAV sales will increase "from 1.9 million this year to 4.3 million by 2020," while commercial UAV sales could shoot up "from 600,000 to 2.7 million."

[CNN](#) (3/26) reported that the FAA "now receives more than 100 reports of drone sightings a month from pilots, air traffic controllers and citizens." [Business Insider](#) (3/26) noted that, "Some companies are even developing

innovative ways to shoot down or disable unauthorized drones.” [Engadget](#) (3/27) also reports on drone sightings, while [Tech Times](#) (3/26) (3/26) provided additional coverage of the FAA’s predictions for a surge in UAV sales in coming years.

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Delaware Father, Son Demonstrate Tethered UAV Technology.

The [Lewes \(DE\) Cape Gazette](#) (3/28) profiles a father-son team in Delaware who “invented a tethered drone system designed to allow pilots to have more control of their flights.” The pair “demonstrated their tethered flying system during a March 15 seminar – Drones for Delaware” – and commented that the system could allow drones to be flown within 100 feet of the public. The article notes that current FAA regulations “require drones to leave a space of at least 500 feet from people.”

Flirtey UAV Delivery Test In Nevada Highlighted.

In continuing coverage of Flirtey’s successful UAV delivery test in Nevada, co-anchors on [KASA-TV](#) Albuquerque, NM (3/28, 8:10 a.m. MDT) discussed their thoughts on UAV deliveries. One co-anchor said that despite some safety concerns, “they’re cool, and if I can get my packages faster because a drone is delivering them straight to me, I’d love it.” Another expressed concern about mechanical failures, adding that with “the sheer fact of how many people are shopping on Amazon...you have a sky full of drones.”

FAA Reports That Close Encounters With UAVs Increased Significantly Last Year.

In continuing coverage, [Bloomberg Politics](#) (3/28) reports that according to the FAA, close calls involving UAVs and aircraft rose to four incidents per day late last year. The article explains that “the 1,200 incident reports in 2015 were more than five times the 236 the FAA recorded a year earlier when it first began compiling the data.” FAA Administrator Michael Huerta said, “We have a number of educational initiatives with our government and industry partners to teach drone operators how to fly safely, including the drone registry we launched last December.” He added, “But enforcement goes hand-in-hand with education, and we will take action against anyone who operates irresponsibly to the full extent of the law.” Despite the new registration requirements mandated for drones by the FAA, close calls have been reported in several cities near airports and in restricted airspace.

[MarketWatch](#) (3/28) reports that in November 2014, the FAA “began tracking ‘drone sightings,’ in which a person or entity reports a drone in flight to the police or directly to the FAA.” In 2014, the agency received reports of 1,303 drone sightings. A report from the Academy of Model Aeronautics stated that “The majority of these reports are ‘sightings.’ Only a few dozen are explicitly reported as ‘near misses’ or ‘near midair collisions.’” Skylogic Research founder Colin Snow said, “More and more sophisticated drones from manufacturers like Yuneec and DJI are making it into the market that have geofencing.” The software feature prevents drones from flying over “no-fly-zones,” mostly airports.

[Fortune](#) (3/28) reports that in a report released last Friday, the FAA said that close to 600 drones flew too close to airports and airplanes between Aug. 22, 2015 and Jan. 31, 2016, marking a large increase in the number of drones flying in restricted areas compared to 2014. The article reports that “Current FAA safety guidelines for drones recommend consumers not fly drones within five miles of an airport or intentionally ‘fly over unprotected persons or moving vehicles.’”

Drone Use To Triple By 2020, FAA Says. [Business Insider](#) (3/28) reports that the FAA “said last week that it expects 2.5 million drones to be in use in the U.S. by the end of 2016, and it expects that number to triple to more than 7 million by 2020, reports [the] Daily Mail.” In addition, the article notes that “The FAA expects consumer drones to grow from 1.9 million at the end of 2016 to 4.3 million by 2020,” while the administration “expects

commercial drone usage to grow from 600,000 to 2.7 million.” The FAA’s upcoming drone regulations will determine the pace of drone adoption by companies.

Georgia Lawmakers Pass UAV Legislation.

The [Atlanta Journal-Constitution](#) (3/28) reports that Georgia legislators have passed a bill that bans weaponized UAVs, creates a state-level UAV commission, and clarifies UAV-applicable privacy protections relating to surveillance. Explaining the intent of the legislation, bill sponsor Rep. Kevin Tanner, said, “We tried to carefully craft the legislation in a way that promotes the industry while at the same time protects privacy,” adding, “If a device is attached to a drone and capturing those images intentionally where someone has a reasonable expectation of privacy [such as in someone’s backyard], then that person would be acting in violation of the law.”

EEI and Sharper Shape Partner to Develop Safe BVLOS UAS Flight

22 Mar 2016 <http://www.unmannedsystemstechnology.com/2016/03/eei-and-sharper-shape-partner-to-develop-safe-bvlos-uas-flight/#sthash.B9M1hBcZ.dpuf>

The Edison Electric Institute (EEI) and Sharper Shape, a provider of Unmanned Aircraft Systems (UAS)-based asset inspection solutions, have announced that the two companies have formed a partnership to demonstrate and develop commercial UAS beyond visual line of sight (BVLOS) flights for electric companies. “The safe use of Unmanned Aircraft Systems can help electric power companies improve the reliability, resiliency, and security of the power grid, which ultimately benefits electricity customers,” said EEI Director of Government Relations Chris Hickling. “Our innovative partnership with Sharper Shape to safely develop the use of beyond visual line of sight UAS flights will provide crews with yet another tool to quickly and efficiently inspect critical assets during routine maintenance and following a storm or natural disaster. Several electric power companies are already flying UAS under the Federal Aviation Administration’s (FAA’s) Section 333 program for flights within line of sight. We look forward to continuing to work with FAA and other stakeholders to expand these efforts as we work toward regulatory approval of BVLOS flights for our industry.”

Kongsberg Geospatial Successfully Tests Rescue Drone Technology

Published: 25 Mar 2016

Kongsberg Geospatial, a developer of geospatial visualisation software, and the County of Renfrew Paramedic Service have announced the successful conclusion of field trials of a new software application developed to improve the safety of operating a search-and-rescue drone **beyond visual line-of-sight** (BVLOS). The County of Renfrew Paramedic Service is one of the first paramedic services in Canada to use a commercial drone as a first response tool, and gained attention in the media last year when their UAV was used on an active crime scene following a triple homicide in Wilno Ontario.

<http://www.unmannedsystemstechnology.com/2016/03/kongsberg-geospatial-successfully-tests-rescue-drone-technology/#sthash.7x4nWHVD.dpuf>

Woolpert Collects Imagery via Drone for Rural Roads Published: 25 Mar 2016

Woolpert, an engineering and geospatial services firm, has announced that it has been hired by Michigan Tech Research Institute (MTRI) to collect imagery via unmanned aerial system (UAS) of haul roads throughout the Midwest. This project, “Characterization of Unpaved Road Conditions Through the Use of Remote Sensing,” is sponsored by the U.S. Department of Transportation (USDOT), Office of the Assistant Secretary for Research and Technology (OST-R). The data collected will help test a set of algorithms developed by MTRI, a branch of Michigan Technological University located in central Michigan. <http://www.unmannedsystemstechnology.com/2016/03/woolpert-collects-imagery-via-drone-for-rural-roads-project/#sthash.WACiXYKp.dpuf>

Heath Consultants and Physical Sciences to Develop Methane Detector Published: 24 Mar 2016

Heath Consultants Incorporated, a developer of natural gas detection technologies, and Physical Sciences Inc. (PSI), a technology development firm, have announced that they are adapting a laser-based Remote Methane Leak Detector (RMLD) for mounting on the InstantEye, PSI’s two-foot-wide quadrotor Unmanned Aerial Vehicle featuring highly advanced autonomy and all-weather operation. This technology combination, known as the RMLD Sentry, will implement self-directed flight patterns to continuously monitor, locate, and quantify volumetric leak rates of methane, a potent greenhouse gas, from natural gas production sites. <http://www.unmannedsystemstechnology.com/2016/03/heath-consultants-and-physical-sciences-to-develop-methane-detector-uav/#sthash.8tMhGkiD.dpuf>

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FAA Increases Altitude Limit For Commercial UAVs.

[The Hill](#) (3/29) reports on the FAA’s announcement of a new policy that will allow certain small, commercial unmanned aircraft vehicles to fly as high as 400 feet, doubling the currently authorized altitude of 200 feet, except in restricted airspace and other prohibited areas. The article explains that “the regulation applies to commercial and governmental unmanned aircraft system (UAS) operators with a Section 333 exemption and an aircraft that weighs less than 55 pounds.” The regulatory change could decrease the workload for Certificate of Waiver or Authorization applications by up to 40%, according to *The Hill*. FAA Administrator Michael Huerta said that “Expanding the authorized airspace for these operations means government and industry can carry out unmanned aircraft missions more quickly and with less red tape.” Brian Wynne, head of the Association for Unmanned Vehicle Systems International (AUVSI), said the agency’s move “provides greater flexibility to those receiving FAA exemptions.”

Marker-Wielding UAV Able To Duplicate Drawing Motions.

[Popular Mechanics](#) (3/29) reports on the MIT-developed Flying Pantograph, which is “a new way to direct a drone and make an art project at the same time.” The article explains that whatever a person draws on the horizontal surface, “the marker-wielding drone will try to duplicate on the vertical surface.” The article also highlights a three-minute video of the Flying Pantograph and its prototypes.

Provision In FAA Bill Would Allow Agency To Override State And Local UAV Laws.

The [Wall Street Journal](#) (3/29, Subscription Publication) reports that a Senate panel recently approved a new FAA reauthorization bill that includes a provision that would make the agency the sole regulator of UAVs nationwide. The article explains if the provision is implemented, those authorized by the FAA to operate UAVs would be allowed to ignore local and state UAV restrictions.

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State Farm Begins Using Drones For Roof Inspections.

[USA Today](#) (3/30) reports that State Farm, “the first insurer to win approval from the [FAA] to use drones commercially, has launched hundreds of experimental drone flights for routine roof inspections.” Airwave CEO Jonathan Downey, who is working with State Farm, said that companies are increasingly likely to use drones for inspections in difficult-to-reach as well as dangerous places. He adds that along with reducing employee risks, drones are less expensive than helicopters. The article mentions that the FAA is “granting more than 4,200 special permits for companies to fly drones for commercial purposes such as aerial photography and crop monitoring.”

Two Texas Companies Approved For UAV Operations.

The [Houston Chronicle](#) (3/30) reports that on Wednesday, companies in Austin and Addison “became the first two firms to become officially credentialed to operate unmanned aircraft systems under a new training and safety program that officials said promises to boost Texas’ key place in the emerging drone market.” The certificates were among the first to be granted to companies nationwide after the FAA announced new drone regulations.

Georgia Transportation Department To Study Practical UAV Applications.

In continuing coverage, the [Atlanta Journal-Constitution](#) (3/30) reports that several states across the U.S. are increasingly relying on unmanned aerial vehicles (UAVs) “to minimize the impact on traffic when conducting bridge inspections or clearing vehicle crashes,” noting that the Georgia Department of Transportation (GDOT) could begin using UAVs to monitor traffic in coming years. The article recounts that in 2014, GDOT “commissioned a Georgia Tech study in 2014 that found 40 different ways the agency could use unmanned aerial vehicles.” On Tuesday, Natalie Dale, GDOT spokeswoman, announced that the department would soon embark on the second phase of the study, which will examine the more practical applications of UAVs. The article also highlights a recent survey on UAV across the US and notes possible applications of the aircraft.

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Four Companies Leave Small UAV Coalition To Form Consumer-Focused Group.

[USA Today](#) (3/31) reports that four member companies of the Small UAV Coalition—DJI Technology, Parrot, GoPro, and 3DR—have left the advocacy group to form their own organization, which will specifically focus on consumer issues. The article explains that as the UAV market continues to mature, “a shifting of needs was inevitable,” since larger companies such as Amazon, Google, and others “are looking more at drones for delivery, cargo and more commercial uses,” while consumers are using UAVs for photography, racing and other recreational purposes. In a statement, Adam Lisberg, DJI Technology spokesman, explained that “the business is growing so big that we thought we would most benefit [from] a group focused on the issues that are important to small drone manufacturers and our customers.”

Amazon Files Patent For Quiet Drone Propellers With Proximity Warnings.

[Consumerist](#) (3/31) reports that as part of its Prime Air drone delivery program, “Amazon filed a patent for automated aerial vehicle technology that has two parts...the use of multiple propellers rotating in different directions to cut down on noise” and the use of propellers to communicate with people on the ground. The patent reads, “Upon approaching the location, the AAV determines (e.g., based on a video signal that is fed as an input parameter to the controller via a camera) that a person is situated at or near an intended or a suitable landing area corresponding to the delivery location,” and this may trigger a warning sound. In other situations, “light sources [e.g., light-emitting diodes (LEDs)] coupled to one or multiple propellers may be caused to intermittently emit light in a synchronized manner while the propellers are rotating to generate patterns that are visibly perceptible as ‘HELLO.’”

AirWare Aims To Become Default Software Suite For UAV Industry.

In continuing coverage, [The Verge](#) (4/1) reports that on Thursday, San Francisco-based start-up AirWare, which is aiming to become “the default software suite for big corporations that want to put sensors in the sky with minimal risk,” announced that State Farm Insurance has become a new client. According to the article, the UAV company will be “providing the software to plan flights, capture aerial images, and process and organize whatever data is collected,” while also “selecting and customizing the drones State Farm flies, and even providing the pilots who will accompany claims adjusters and operate the aircraft.” Airware founder and CEO Jonathan Downey “says State Farm is planning to begin operations in the US over the next few months.”

North Dakota Gets \$3 Million In Federal Funding For Drone Research.

The [Bismarck \(ND\) Tribune](#) (3/31) reports that the Department of Defense has granted \$3 million in funding for research on “integrating unmanned aircraft into national airspace.” The article explains that Grand Forks Air Force Base and Fargo’s Hector International Airport will use the funds to upgrade surveillance radar systems in a bid to allow “personnel to keep an eye on aircraft flying beyond line of sight, which is not permitted by the Federal Aviation Administration.” Sen. John Hoeven (R-ND) said, “The resolution is so good that even without an unmanned aircraft having a transponder, you can see the aircraft in the airspace.” The article adds, “Part of the bill is the renewal of the FAA’s UAS test site program, which designated six site locations around the country in 2013 to conduct research into the safe integration of unmanned aircraft into the national airspace.”