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**26Oct19**

**Drones revolutionizing Japan’s farming industry** [DRONES AT WORK](https://www.commercialdroneprofessional.com/category/application-news/drones-at-work/" \o "Drones at Work)[HEADLINE NEWS](https://www.commercialdroneprofessional.com/category/headline-news/) [INNOVATION](https://www.commercialdroneprofessional.com/category/innovation/) [INTERNATIONAL](https://www.commercialdroneprofessional.com/category/news/international/) [NEWS](https://www.commercialdroneprofessional.com/category/news/) [TECHNOLOGY](https://www.commercialdroneprofessional.com/category/technology/) [MATTHEW TRASK](https://www.commercialdroneprofessional.com/author/matthew-trask/)n OCTOBER 24, 2019

[](https://2e2de02um3hsz26s7iwe817v-wpengine.netdna-ssl.com/wp-content/uploads/2019/10/xag-bayer-drone.jpg)XAG’s new innovations in drone technology are allowing Japanese farmers better control over crop spraying in complex terrains.

A partnership between XAG and Bayer has seen crop spraying drones combined with innovations in seeds and crop protection to move the country’s farms forward into the future.

Since establishing XAIRCRAFT as a subsidiary, XAG has worked with local authorities and farmers to develop new uses for drones. In addition to crop spraying, drones are used in field mapping and the direct seeding of rice.

This September, XAG collaborated with a local agriculture department and fruit tree research center to conduct drone spraying demonstration on citrus trees in Japan’s Ehime-ken. By controlling the discharge rate, droplet size and spraying width, the atomization spraying technology could ensure that the pesticide was uniformly deposited onto each side of the leaves without overdose or misses.” <https://www.commercialdroneprofessional.com/drones-revolutionising-japans-farming-industry/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-315625-Commercial+Drone+Professional+DNA+-+2019-10-24>

**Non-invasive UAV tackles concerns over ‘noisy’ drone deliveries** [COMMERCIAL UAV EXPO](https://www.commercialdroneprofessional.com/category/events/commercial-uav-expo/" \o "Commercial UAV Expo) [DELIVERY](https://www.commercialdroneprofessional.com/category/application-news/delivery/) [INNOVATION](https://www.commercialdroneprofessional.com/category/innovation/) [NEWS](https://www.commercialdroneprofessional.com/category/news/) [TECHNOLOGY](https://www.commercialdroneprofessional.com/category/technology/) [UNITED STATES](https://www.commercialdroneprofessional.com/category/news/united-states/) [MATTHEW TRASK](https://www.commercialdroneprofessional.com/author/matthew-trask/) OCTOBER 24, 2019

[](https://2e2de02um3hsz26s7iwe817v-wpengine.netdna-ssl.com/wp-content/uploads/2019/10/a2z-drone-delivery.jpg)A start-up behind a nonintrusive tethered drone delivery system claims it has the solution to the safety and privacy concerns.

The company’s tech involves using a tethered delivery mechanism that allows drones to maintain a safe hover height of 400 feet above the target before the delivery system controls its free-fall to the desired location.

By keeping the drone itself at a safe distance, the company claims it can mitigate many of the concerns regarding the use of delivery drones including keeping people safe from spinning rotors and high noise levels.

“As regulators, delivery businesses and consumers wrangle with the ideal approach to drone deliveries, our platform offers a safe, less-intrusive solution that can be deployed in diverse delivery conditions,” said Zhang. “Whether flying life-saving medicine to a remote location or dropping an Amazon delivery on the doorstep, our platform can adapt to numerous UAV airframes and payload demands.” <https://www.commercialdroneprofessional.com/non-invasive-uav-tackles-concerns-over-noisy-drone-deliveries/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-315625-Commercial+Drone+Professional+DNA+-+2019-10-24>

**Terra Drone launches new Chile branch** [DJI](https://www.commercialdroneprofessional.com/category/manufacturer/dji/" \o "DJI) [DRONES AT WORK](https://www.commercialdroneprofessional.com/category/application-news/drones-at-work/) [INTERNATIONAL](https://www.commercialdroneprofessional.com/category/news/international/) [NEWS](https://www.commercialdroneprofessional.com/category/news/) [MATTHEW TRASK](https://www.commercialdroneprofessional.com/author/matthew-trask/) OCTOBER 24, 2019

[](https://2e2de02um3hsz26s7iwe817v-wpengine.netdna-ssl.com/wp-content/uploads/2019/07/terradroneindiabvlos.jpg)The Japan-based company carried out a visual inspection of three flare stacks for energy company ENAP Aconcagua. Drones were used to inspect each 70m tall stack for 45 minutes, saving on the money and manpower required by the conventional method of using a photographer in a helicopter.

Terra Drone Chile used a DJI M210 RTK with 2 cameras to perform check the stacks in advance of planned maintenance after discovering black smoke coming from one of the flares.

“The drone captured the images of the flares from different angles to facilitate an inspection report that would show each part’s crack, deformity, and integrity.”

ENAP will be continuing to partner with Terra Drone Chile on the next maintenance cycle and hopes to perform inspections more regularly than the usual 3-year time frame to improve efficiency. <https://www.commercialdroneprofessional.com/terra-drone-launches-new-chile-branch/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-315625-Commercial+Drone+Professional+DNA+-+2019-10-24>

**RedTail Launches Hi-Res LiDAR System for Small Drones** [Betsy Lillian](https://unmanned-aerial.com/author/betsy-lillian) October 23, 2019

[](https://unmanned-aerial.com/wp-content/uploads/2019/10/RedTail_LiDAR_Systems_Excavator-1.jpg)*A RedTail LiDAR Systems RTL-400 image generated at an altitude of 100 feet and speed of 13 mph.*

West Virginia-based RedTail LiDAR Systems has introduced the RTL-400 LiDAR mapping system. It is designed to provide high-resolution, 3D images of objects on the ground from small drones flying at an altitude up to 400 feet.

*RedTail LiDAR Systems RTL-400 flying on a small drone.*

Developed with technology licensed from the U.S. Army Research Laboratory, the RTL-400 incorporates a microelectromechanical system mirror-based laser scanner that rapidly and evenly distributes laser pulses to the ground, moving side-to-side 400 times each second. This rapid line scan rate, coupled with a laser pulse rate of up to 400,000 pulses per second, yields point clouds that are “unprecedented in resolution and density,” the company claims.

Unlike other LiDAR systems, it can be operated in two scanning modes. In addition to the line scan mode, it offers a raster scan mode for “stand and stare” missions that can be selected on the fly.

“This product has been optimized for use on small drones, providing high-quality point clouds to meet the needs found in the numerous fields where LiDAR is used,” comments Brad DeRoos, president and CEO of RedTail LiDAR Systems. <https://unmanned-aerial.com/redtail-launches-high-res-lidar-system-for-small-drones?utm_medium=email&utm_source=LNH+10-24-2019&utm_campaign=UAO+Latest+News+Headlines>

**New Boeing-Led Consortium Focuses on Remote Sensing in the Arctic** [Betsy Lillian](https://unmanned-aerial.com/author/betsy-lillian) October 23, 2019

[](https://unmanned-aerial.com/wp-content/uploads/2019/10/polar-bear-404314_960_720.jpg)Spearheaded by Boeing, a new remote sensing network aims to advance safety and security applications in the Arctic, including drones. The IRSA Development Group is a global collaboration among Arctic nations and providers of advanced remote sensing technologies. IDG’s objective is to develop and commercialize its Integrated Remote Sensing for the Arctic (IRSA) solution as a service for safety and security in the Arctic. It is a scalable, civilian, all-domain, system-of-systems remote sensing system designed to provide more persistent monitoring of the Arctic.

The network comprises satellites, high-altitude long-endurance drones, medium-altitude long-endurance drones, small unmanned aircraft systems, sea-surface and sub-sea platforms, and ground stations. Technology development for each segment, and their integration, is underway. Initial IRSA services are expected to be available to clients in early 2020.

The partner organizations are C-CORE (Canada), MyDefence System Integration (Kingdom of Denmark), Andøya Space Center (Norway), VTT (Finland), Scott Polar Research Institute (U.K.), Karl Osen (Switzerland), ViaSat Antenna Systems (Switzerland) and Boeing Phantom Works (U.S.). <https://unmanned-aerial.com/new-boeing-led-consortium-focuses-on-remote-sensing-in-the-arctic?utm_medium=email&utm_source=LNH+10-24-2019&utm_campaign=UAO+Latest+News+Headlines>

**FAA falling behind EASA on UAV integration, expert warns** *Oct 23, 2019* [Ben Goldstein](https://atwonline.com/author/ben-goldstein)

Numerous delays in the rollout of FAA’s [remote identification rulemaking](https://atwonline.com/regulation/faa-delays-release-remote-id-draft-rule-drones) for unmanned aerial vehicles have caused the agency to fall behind EASA in efforts to implement a comprehensive UAV traffic management system.

EASA has a draft regulation that is presently out for comments to define what the framework will look like for U-space services in Europe,” McNeal said, using EASA’s term for airspace populated with UAVs. “I can tell you what U-space services will look like in Europe in terms of implementation, timeline and framework, but I can’t tell you what UTM will look like in the US.”

McNeal said EASA’s decision to issue a package of UTM regulations at once—including rules related to remote ID, geo-awareness and traffic information requirements—is working better than FAA’s incremental approach, which effectively bars the agency from proceeding with rulemakings until a foundational remote ID rule has been issued. <https://atwonline.com/aeropolitics/faa-falling-behind-easa-uav-integration-expert-warns>

**Airborne Response Launches Caribbean and Latin America BVLOS Testing Program** [October 25, 2019](https://uasweekly.com/2019/10/25/) [News](https://uasweekly.com/category/news/)

The AirborneBeyond program offers coordinated UAS fight testing at aviation facilities in Colombia, the Dominican Republic and other locations throughout the Caribbean and Latin America. It was created to offer additional flight-testing options for UAS manufacturers and enterprise users with specialized requirements. Some of the characteristics include over 100 nm distances, operating ceilings up to 30,000 ft, asphalt runways, air traffic control towers and an array of local engineering and fabricating services.

“UAS manufacturers and specialized enterprise customers will now have a fast-track option to test developmental aircraft and BVLOS operations within foreign airspace jurisdictions,” said Andy Jaques, Vice President of International Operations for Airborne Response.

A large Spanish UAS manufacturer recently completed their initial testing phase which validated proof-of-concept for the program.  Airborne Response will now expand the program with the assistance of local partners throughout the Western Hemisphere. <https://uasweekly.com/2019/10/25/airborne-response-launches-airbornebeyond-bvlos-uas-testing-program-at-select-caribbean-and-latin-america-locations/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_10_25_2019&utm_term=2019-10-25>

**A2Z Drone Delivery to Demonstrate its Minimally Invasive Drone Delivery System** [October 25, 2019](https://uasweekly.com/2019/10/25/) [News](https://uasweekly.com/category/news/)

A2Z Drone Delivery, LLC, developer of a patented freefall delivery mechanism and long-endurance flight platform will demonstrate the benefits of its minimally invasive drone delivery solution at [Commercial UAV Expo 2019](https://www.expouav.com/exhibitor/a2z-drone-delivery/) (Las Vegas, October 28-30, 2019). Company founder, Aaron Zhang will participate in the startup launch pad presentations.

Seeking to address some of the consumer-protection concerns with drone delivery, A2Z Drone Delivery has developed a tethered delivery mechanism currently targeted to packages of five pounds and smaller. Whether paired with the company’s own ICE Flight Platform or incorporated into other delivery airframes, the platform allows a UAV to maintain a safe hover from 400 feet above a target before its tethered delivery system controls the package’s free-fall for a safe and accurate touch down. With this approach, consumers are safe from spinning UAV propellers, while privacy concerns and associated noise are mitigated by maintaining sufficient altitude. <https://uasweekly.com/2019/10/25/a2z-drone-delivery-to-demonstrate-its-minimally-invasive-drone-delivery-system-at-commercial-uav-expo-2019/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_10_25_2019&utm_term=2019-10-25>

**[How missing six-year-old Ethan was found with DJI Matrice 210 and Zenmuse XT2](https://dronedj.com/2019/10/25/missing-six-year-old-ethan-dji-matrice-210-and-zenmuse-xt2/)** [Haye Kesteloo](https://dronedj.com/author/hayekesteloo/) Oct. 25th 2019

It was about 30 degrees outside when Fines arrived at the volunteer meeting spot. More than 700 people had gathered to start searching for missing Ethan and his dog Remington. Around 10 pm that night Fines sent his drone up in the air and monitored the screen to see what the thermal camera was picking up. Over the course of a few hours, he spotted three others, a deer, a bear, raccoons, and other animals. But unfortunately still no Ethan. Around 1 am the next morning, Fines took a thermal photo of the cornfields that showed an entire line of 250 volunteers walking through the area looking for the missing Ethan.

Around 1:30 that morning a volunteer had found a footprint in the cornfields that looked like it might have been from a child.

*Fines said: “I didn’t know what it was but I saw movements. I saw what I thought was the shape of a dog’s head and that was exciting the dog’s head looked different from a deer head. It looked really promising.”*

As the drone pilot was watching his monitor, two volunteers, and their teenage sons sped over to the spot where Fines had seen the dog. He had positioned to drone directly over the location where he thought he might have seen the dog making it easier to find it for the volunteers.

*Fines said: “I could see the four heat spots approaching when they got about 50 feet away, I saw the dog get up and start running around. Then you could see one of the rescuers run up to the boy and pick him up.”*

A little later it was confirmed over the radio that after 10 hours in the cold the missing six-year-old Ethan had indeed been found, lying down shivering in a cornfield with his dog at his side. As soon as the happy news broke a chorus of hooting and happy screaming erupted from the more than 700 volunteers. <https://dronedj.com/2019/10/25/missing-six-year-old-ethan-dji-matrice-210-and-zenmuse-xt2/>

**[New drone technology can tell if a body is dead or alive from a distance](https://dronedj.com/2019/10/24/drone-technology-body-is-dead-or-alive/)** [Haye Kesteloo](https://dronedj.com/author/hayekesteloo/) Oct. 24th 2019

In a world-first study, university researchers from Adelaide, Australia, and Iraq have been working on drones with special cameras and software that can tell if a person is dead or alive, for instance in disaster-stricken areas.

Researchers from the [University of South Australia](https://www.unisa.edu.au/Media-Centre/Releases/2019/world-first-study-with-drone-cameras-now-separates-living-from-the-dead/) and Middle Technical University have developed a technique that can detect vital signs remotely with a drone. It can distinguish survivors from deceased bodies from about 15 to 20 feet away.

The camera mounted on the drone can detect the slightest movements in the chest cavity, which would indicate a heartbeat or a breathing rate. So as long as the upper parts of the torso are visible, this technology can help distinguish deceased from living people.

Unlike earlier studies, this new system does not rely on changes in skin color or body temperature to be able to tell the difference. The researchers say that this new technology is a breakthrough and is more accurate in its ability to detect signs of life. <https://dronedj.com/2019/10/24/drone-technology-body-is-dead-or-alive/>

**27Oct19**

**DroneUp expansion in Virginia Beach will create 41 jobs** October 24, 2019  *Kate Andrews* [*kandrews@virginiabusiness.com*](mailto:kandrews@virginiabusiness.com)

DroneUp, founded in 2016, created Mission Match to connect clients, including commercial, government and military organizations, to drone pilots on demand. Virginia competed with North Carolina for the project.

The company plans to invest $130,000 to expand its headquarters on Newtown Road, near the intersection of interstates 64 and 264, where it moved in January. Construction is expected to conclude for the most part by the end of the year, the company says, although there will likely be minor projects in 2020.

This year, DroneUp added Chief Revenue Officer Tripp Shannon to its leadership team to oversee sales and marketing. By year end, they expect to hire more salespeople. The new jobs in 2020 will be in the areas of sales, marketing, app development and flight operations, according to Amy T. Wiegand, DroneUp’s marketing and communications director.

The Virginia Economic Development Partnership’s Virginia Jobs Investment Program is supporting the company’s addition of jobs with consulting services and state funding. In August, DroneUp announced it had been awarded a state contract to provide drone services to state agencies, universities and other public entities. <http://www.virginiabusiness.com/news/article/droneup-expansion-in-virginia-beach-will-create-41-jobs>

**28Oct19**

**The Drones Are Coming! How Amazon, Alphabet and Uber Are Taking to the Skies** [BUSINESS](https://www.wsj.com/news/types/business?mod=bigtop-breadcrumb) Sebastian Herrera and Alberto Cervantes Oct. 25, 2019

Companies are firing up fleets of unmanned aircraft in a race to deliver everything from electronics to food. Flying robots that deliver packages to people’s doorsteps are no longer science fiction. Companies including [Amazon.com](https://quotes.wsj.com/AMZN) Inc., [Alphabet](https://quotes.wsj.com/GOOG) Inc.  Wing and [Uber Technologies](https://quotes.wsj.com/UBER) Inc are starting the most advanced trials of drone delivery in U.S. history.

While commercial drone delivery faces many hurdles, government-approved tests by the tech giants will mark the first time consumers in parts of the country experience the technology. Wing this month started tests in Christiansburg, Va., while Uber says it will experiment in San Diego before the year ends. Amazon hasn’t revealed where it is operating but said in June it would begin delivering packages to consumers via drone “within months.”

Amazon, Uber and Wing are hardly the only players tinkering with the technology. This month United Parcel Service Inc. gained approval from the Federal Aviation Administration to build out a fleet of unmanned aircraft to deliver health supplies and eventually consumer packages in the U.S.

Experts say wide-scale drone delivery operations will take years to build out. The FAA predicts sales of drones for a wide range of commercial purposes to grow from 600,000 in 2016 to 2.7 million by 2020.

The approaches vary, and success is anything but assured. <https://www.wsj.com/articles/the-drones-are-coming-11571995806>

**[Vermont’s Agency of Transportation uses drones in emergency exercise](https://dronedj.com/2019/10/25/vermonts-agency-of-transportation-uses-drones-in-emergency-exercise/)** [Haye Kesteloo](https://dronedj.com/author/hayekesteloo/) Oct. 25th 2019

Drones are being used by the Vermont Agency of Transportation as part of a statewide emergency preparedness exercise that is designed around a pretend flooding that resulted from a catastrophic tropical storm. During the three-day exercise this week, the agency used drones and special software to project damage estimates in real time.

The use of drones in combination with the special software enabled officials to monitor roadways from an incident command center located for this particular exercise in Berlin, Vermont. Joe Flynn, transportation secretary, told the *Times Argus* that part of the system that was tested is a new piece of software that enables the state to project damage estimates in real time, according to [NBC5](https://www.mynbc5.com/article/dream-house-of-the-week-the-addams-family-mansion/29590825).

Dan Delabruere said that the agency hopes to have four of these drones operational by the end of this year. Two unmanned aircraft will likely be stationed in Montpelier, one in Rutland, and one at the Lyndonville airport. <https://dronedj.com/2019/10/25/vermonts-agency-of-transportation-uses-drones-in-emergency-exercise/>

[**Drone helps rescue hiker and dog in Arnprior, Canada**](https://dronedj.com/2019/10/25/drone-helps-rescue-hiker-arnprior-canada/) [Haye Kesteloo](https://dronedj.com/author/hayekesteloo/) Oct. 25th 2019

A hiker and dog became disoriented and lost in a terrain laden with swamps and marshes in Canada on Thursday night. A drone from the Renfrew County Paramedic team played a key part in the dramatic rescue of the duo.

Mike Nolan, the paramedic chief, said that his crew was called out to a section of bush south of Arnprior in Canada on Thursday night, along with Ontario Provincial Police, to help rescue a hiker and his dog. The duo had become disoriented and couldn’t find their way back out of an area laden with swamps and marshes.

According to [Renfrew Today](https://www.renfrewtoday.ca/2019/10/25/drone-hiker-and-pet-rescue/), Nolan said that the [drone played a critical part in the rescue](https://dronedj.com/guides/drones-for-good/) of the duo, and that a timely rescue would not have been possible without a run through paramedic drone technology. <https://dronedj.com/2019/10/25/drone-helps-rescue-hiker-arnprior-canada/#more-20584>

**Flock Partners with Skyports to Insure Safe Urban Drone Flights** OCTOBER 25, 2019 [João Antunes](https://www.commercialuavnews.com/author/joao-antunes)

****To quickly transport medical products, dispatch packages to logistics hubs or directly to customers, and speed up logistics operations, [Skyports](https://skyports.net/) is developing, implementing and operating end-to-end drone deliveries globally. The company is currently working in North America, Africa, Asia, and Europe, including London where it owns vertiports on 15 sites so far - which is where [Flock](https://flockcover.com/) comes in.

Founded in 2015, Flock is using Big Data to quantify, intelligently price, and mitigate drone flight risks in real-time, providing drone pilots with fairer insurance pricing tailored to individual risk profiles. Since the launch of [Flock Cover](https://www.commercialuavnews.com/europe/flock-defines-flight-risk-drone-insurance), Europe’s first Pay-as-you-fly drone insurance mobile app geared towards drone SMEs, and [Flock Enterprise](https://www.commercialuavnews.com/europe/flock-enterprise-drone-insurance-enterprises), Flock has insured over 3,000 commercial drones businesses, and analyzed over 1,000,000 flight paths.

“We have one of the most in-depth understandings of urban air mobility risks in the world, and are able to leverage an enormous amount of data to benefit our customers and open up the UK’s skies for safe, fully insured drone deliveries,” Ed Leon Klinger, CEO of Flock told Commercial UAV News. “Our mission is to make the world a smarter and safer place. This means we don’t just provide passive insurance documents to our customers; we actively work with them to analyze flights and provide guidance on how to better mitigate their own risks.” <https://www.commercialuavnews.com/infrastructure/flock-partners-with-skyports-to-insure-safe-urban-drone-flights?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiWkRFME1tUm1NVFkyWmpnMCIsInQiOiJXWFdPejZ6eXphNzdvTXFkMlJVWms4Z2h6RFdFZkNNU2RlZTU2eXY4Tk9HQVQzNGR0blwvb0g0SDAybzZtZ2wrUkRiZk1ZTm52QWFQXC83MmZlWFBNS1lMYyt0VGJOalwvb3g5MkJjOWdGN1Jnd1ZiaXdqZjFBNGdlZVgwZGxFeVZtTSJ9>

**29Oct19**

**High-flying legal questions on tap as drones become more common** Oct. 28, 2019 [Samantha Masunaga](https://www.seattletimes.com/author/samantha-masunaga/) *Los Angeles Times*

Imagine you’re standing in your front yard when a drone flies overheard, delivering a package to one of your neighbors. The drone goes over your house, flying much lower than a helicopter could. Would that be considered trespassing? What if it malfunctioned and fell on your head — who would be at fault?

Alphabet subsidiary Wing this month became the first company to operate a commercial drone delivery service in the United States: It ferried tissues, bottled water, cough drops and other products to people in Christiansburg, Va. Christiansburg is small — it has only about 21,000 residents — and Wing’s delivery service is only for the last mile of a package’s journey, but there are plans for more coverage in the future.

This month, UPS got permission from the Federal Aviation Administration to operate delivery drones at university, hospital and corporate campuses. Amazon, meanwhile, has long been working on its own robotic delivery service, and this summer it unveiled a new drone that it said was optimized for courier work.

There are still questions about how drone delivery systems will navigate privacy and trespassing issues and concerns about noise. “Legal precedent is very thin here,” said Arthur Holland Michel, co-director of the Center for the Study of the Drone at Bard College. “Little of the existing law is based specifically on drones.”

It’s also unclear who will be the ultimate arbitrator for these concerns. The FAA is in charge of aircraft safety, but questions of privacy or trespassing could be left up to the states, said William Breetz, vice president of the Uniform Laws Commission, a nonprofit organization that drafts model legislation for states and began tackling drone laws more than two years ago. Here’s more information about some of these undetermined issues. <https://www.seattletimes.com/business/what-if-a-delivery-drone-falls-on-your-head-thorny-legal-questions-loom-as-services-increase/>

**Uber unveils a new look for its food delivery drones** [Andrew J. Hawkins](https://www.theverge.com/authors/andrew-j-hawkins)[@andyjayhawk](https://www.twitter.com/andyjayhawk)  Oct 28, 2019

Uber is revving up to test its [new drone delivery service](https://www.theverge.com/2019/6/12/18662524/uber-drone-delivery-fast-food-san-diego-summer-2019-trial) for Uber Eats in San Diego in 2020. Today, the company unveiled a new look for its drone, which utilizes “innovative rotating wings with six rotors” to better enable the transition between vertical takeoff and forward flight. Uber explains that the rotors are positioned vertically for takeoff and landing, but can then rotate into the forward position (pictured above) “for increased speed and efficiency during cruise flight.”

Both the drone and the air taxi project are part of Uber Elevate, the firm’s ambitious play to bring its ride and delivery service to the sky. It wants to perform [test flights of the taxis in 2020](https://www.theverge.com/2017/11/8/16613228/uber-flying-car-la-nasa-space-act), with a commercial launch in 2023.

The cargo capacity for the drone is a meal for two, Uber says, adding that the drone has already passed its “critical design review” and is expected to take flight before the end of the year.

The drone is designed to perform a maximum delivery leg in eight minutes including loading and unloading. Its cruising altitude will be below 400 feet in order to comply with existing drone rules. It will have a total flight range of 18 miles without a delivery, and 12 miles with one. And the drone can hover in wind speeds up to 30 mph. <https://www.theverge.com/2019/10/28/20936410/uber-eats-food-delivery-drone-design>

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| **UAS Operations Restricted At More Federal Facilities**  **C:\Users\Bob\Downloads\unnamed (65).jpg**WASHINGTON – The [Federal Aviation Administration](https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDIsInVyaSI6ImJwMjpjbGljayIsImJ1bGxldGluX2lkIjoiMjAxOTEwMjkuMTIxODk3MzEiLCJ1cmwiOiJodHRwczovL3d3dy5mYWEuZ292LyJ9.b0evtmpz1LeBD3Gcjhpp7poqOfGui4nn3aATU6drrOU/br/70682808788-l) today announced [Unmanned Aircraft Systems](https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDMsInVyaSI6ImJwMjpjbGljayIsImJ1bGxldGluX2lkIjoiMjAxOTEwMjkuMTIxODk3MzEiLCJ1cmwiOiJodHRwczovL3d3dy5mYWEuZ292L3Vhcy8ifQ.ln6BnpB3bcpwUEt0X0kncfY4io9UDqz5os8ZaEE8n2k/br/70682808788-l) airspace restrictions over additional national security sensitive locations, effective November 7.  In cooperation with its federal partners, the FAA will restrict UAS operations in the airspace over 60 additional [Department of Defense](https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDQsInVyaSI6ImJwMjpjbGljayIsImJ1bGxldGluX2lkIjoiMjAxOTEwMjkuMTIxODk3MzEiLCJ1cmwiOiJodHRwczovL3d3dy5kZWZlbnNlLmdvdi8ifQ.K0FJieOtuSslbHfKvIiEpEkzUbIvRkwZeN9v7Givg6s/br/70682808788-l) and [Department of Justice](https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDUsInVyaSI6ImJwMjpjbGljayIsImJ1bGxldGluX2lkIjoiMjAxOTEwMjkuMTIxODk3MzEiLCJ1cmwiOiJodHRwczovL3d3dy5qdXN0aWNlLmdvdi8ifQ.O8jqNvzfTuwJZ-EFtwGli8NFTpVcKyE4HHERoKv6-qw/br/70682808788-l) facilities to address concerns about malicious drone activity. An FAA Notice to Airmen defines these special security instructions. UAS operators are strongly advised to review these NOTAMs, as well as important supporting information provided by the FAA’s [UAS Data Delivery System](https://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDcsInVyaSI6ImJwMjpjbGljayIsImJ1bGxldGluX2lkIjoiMjAxOTEwMjkuMTIxODk3MzEiLCJ1cmwiOiJodHRwczovL3d3dy5mYWEuZ292L2V4aXQvP3BhZ2VOYW1lPVVBUyUyMERhdGElMjBEZWxpdmVyeSUyMFN5c3RlbSZwZ0xuaz1odHRwcyUzQSUyRiUyRnVkZHMlMkRmYWElMkVvcGVuZGF0YSUyRWFyY2dpcyUyRWNvbSUyRiJ9.tkKKd6_V_Vcj8-WtM55L-bO8Hb2Vb15TcLbjQi8pBZI/br/70682808788-l) (UDDS) website. This website contains the text of FDC 9/7752 (click on “UAS NOTAM FDC 9/7752” on scroll bar along the top of the page). <https://mail.google.com/mail/u/0/#inbox/WhctKJVZsZdZWBPslsvVLqXnxkkpQjlNTjWjzsrBvnLSZGvzfXKZFxRCDvHXKRKkWlGDjTG> |

**30Oct19**

**NASA wants city skies filled with drones delivering packages and people** [Stephen Shankland](https://www.cnet.com/profiles/shankland/) October 29, 2019

In less than a decade, the air above at least one United States city will be buzzing with unmanned electric aircraft delivering people and packages -- at least if [NASA's](https://www.cnet.com/tags/nasa/) plan for the future of [drones](https://www.cnet.com/topics/drones/) comes true. Jim Bridenstine, NASA's administrator, touted the idea Tuesday but knows it won't be easy.

"We are moving fast," Bridenstine said in a speech at the Commercial UAV Expo in Las Vegas. "We want to see by 2028 at least one city -- maybe more than one -- have the ability to control hundreds of unmanned aerial systems. They could be carrying cargo or could be carrying people, doing thousands of missions every day."

To turn the vision into reality, NASA is using a "grand challenge" incentive program to improve the technology's maturity. Bridenstine likened the approach to the US government's robotic vehicle grand challenge in 2004 that ultimately led to today's self-driving car efforts from companies including Waymo, Cruise and Uber. NASA is working on a more modest [urban air mobility grand challenge for 2022](https://www.nasa.gov/uamgc) intended as a steppingstone to a grander future.

Plenty of companies are working on drone technology. [Amazon Prime Air has a new delivery drone](https://www.cnet.com/news/amazon-reveals-its-newest-prime-air-drone-design/) design, and [UPS wants to deliver medical supplies](https://www.cnet.com/news/ups-wants-to-bring-drone-deliveries-to-hospitals-across-the-us/) to hospitals and [to homes](https://www.cnet.com/news/ups-and-cvs-team-up-to-develop-drone-deliveries-right-to-your-house/). For shuttling people, startup efforts like [Uber Elevate](https://www.cnet.com/news/how-uber-is-getting-flying-cars-off-the-ground/), [Kitty Hawk](https://www.cnet.com/roadshow/news/kitty-hawk-flyer-electric-ultralight/) and [NFT](https://www.cnet.com/news/aska-flying-car-could-whisk-you-to-work-in-2025/) are joining aerospace powers including Airbus and [Bell](https://www.cnet.com/roadshow/news/the-bell-nexus-air-taxi-concept-could-be-ubers-first-flying-car/). <https://www.cnet.com/news/nasa-wants-city-skies-filled-with-drones-delivering-packages-and-people/>

**31Oct19**

**Interior Department Grounds Aerial Drone Fleet, Citing Risk From Chinese Manufacturers** Timothy Puko and Katy Stech Ferek Oct. 30, 2019

WASHINGTON—The Interior Department is grounding its entire fleet of aerial drones, one of the largest in the federal government, citing increasing concerns about the national security risk from Chinese manufacturers.

The department has more than 800 drones, all of which are either made in China or have Chinese parts, according to a person familiar with the matter. The machines are used to fight forest fires, survey erosion, monitor endangered species and inspect dams.

Under an order from Interior Secretary David Bernhardt on Wednesday, the drones will be grounded until the department completes a review of potential security risks of Chinese drones, said department spokesman Nick Goodwin.

Officials worry that U.S. reliance on Chinese drones might be putting critical infrastructure at risk. They are concerned the drones may be sending information back to the Chinese government or hackers elsewhere to use for cyberattacks or other offenses.

DJI, the world’s largest maker of consumer drones, based in China’s tech-concentrated city of Shenzhen, disputes the security concerns. It has said users can prevent their drones from transmitting data back to the company or connecting to the internet—and that the Chinese government has never sought the data that DJI does have. It said Wednesday it will help the Interior Department with its review. <https://www.wsj.com/articles/interior-dept-grounds-aerial-drone-fleet-citing-risk-from-chinese-manufacturers-11572473703?mod=itp_wsj&ru=yahoo>

**Commercial UAV Expo’s Pitch the Press: The 3 Drone Companies that Stood Out from the Crowd** [Miriam McNabb](https://dronelife.com/author/miriam-mcnabb/) October 30, 2019

[](https://dronelife.com/wp-content/uploads/2019/10/20191029_150942-e1572454078476.jpg)**Las Vegas, NV, October 29, 2019**– Three companies were selected as the winners of Pitch the Press at Commercial UAV Americas 2019: A2Z, Agrowing, and SolSpec. Their latest products, which were pitched to a press panel at the show, were deemed the most innovative and promising technology among 15 presenters.

[Agrowing](http://www.agrowing.com/) showcased their AI-enabled, 12 narrow band multispectral sensor with [12 megapixels per band](https://www.youtube.com/watch?v=8scVvhVvCMc). This product stuck out to the panel for its precision and for being a leader in the number of spectral bands it offers. The ability to examine assets in as many spectral bands as possible provides its users with more specific visual data.

The [package delivery solution from A2Z](https://www.a2zdronedelivery.com/) lowers packages in a controlled manner via a tether. This enables the drone to stay in flight without having to go through landing and takeoff. The panel found this to be a novel solution thataddresses several issues such as noise and privacy.

[SolSpec](https://solspec.io/) presented its new [drone analytics software platform](https://www.oilandgas360.com/solspec-transforms-risk-assessments-for-civil-infrastructure-inspections-with-new-aerial-data-geoprocessing-platform/). The panel selected it for its ability to take data and generate an actionable report. Many solutions out there are gathering the data but provide little to no support with analyzing that data. It was unique in that it packages data into actionable items so users can focus on what needs to get done. By not simply giving users a “data dump” they’ll be able to take a proactive approach that enables stakeholders to address issues before they become problems. <https://dronelife.com/2019/10/30/commercial-uav-expos-pitch-the-press-the-3-drone-companies-that-stood-out-from-the-crowd/>

**Study: Encroaching Drone Not Usually Visible to Pilots Approaching Runway** [Betsy Lillian](https://unmanned-aerial.com/author/betsy-lillian) October 30, 2019

[](https://unmanned-aerial.com/wp-content/uploads/2019/10/0.jpg)Manned aircraft pilots approaching a runway usually cannot spot an encroaching small unmanned aircraft system, especially if it’s not moving, claims a new study from Oklahoma State University and Embry-Riddle Aeronautical University.

During an airborne human factors experiment, certificated pilots failed to see a common type of quadcopter during 28 of 40 close encounters, according to the researchers. In other words, the pilots got a bead on the invading drone in 12 out of 40 cases, or only about 30% of the time. When the drone was not moving, the task became even more difficult: A mere three out of 22 motionless drones were spotted by the pilots. Drones were detected at distances of between 213 and 2,324 feet.

These findings, published in the International Journal of Aviation, Aeronautics, and Aerospace (IJAAA), illustrate a threat to aviation safety, according to Dr. Ryan J. Wallace, assistant professor of Aeronautical Science at Embry-Riddle.

“Dangerous close encounters between aircraft and drones are becoming an increasingly common problem,” Wallace says. “Statistics on pilot sightings of drones continue to increase year over year, and what is being reported by pilots is probably just the tip of the iceberg. The vast majority of the time, unmanned aircraft are not being seen by pilots.” <https://unmanned-aerial.com/study-encroaching-drone-not-usually-visible-to-pilots-approaching-runway?utm_medium=email&utm_source=LNH+10-31-2019&utm_campaign=UAO+Latest+News+Headlines>

**NUAIR Hosts Drone “Fly-In” for More Than 100 N.Y. Public Safety Officials** [Betsy Lillian](https://unmanned-aerial.com/author/betsy-lillian) October 30, 2019

[](https://unmanned-aerial.com/wp-content/uploads/2019/10/nuair-2.jpg)On Oct. 29, Northeast UAS Airspace Integration Researchhosted its first New York UAS Public Safety Fly-In, bringing more than 100 public safety officials from across New York State to the State Preparedness Training Center in Oriskany.

New York State Division of Homeland Security and Emergency Services and the SPTC staff had a successful day of learning and flying drones in multiple emergency scenarios set up throughout the center.

“Unmanned aerial systems have rapidly become a critical component of emergency response operations, making it essential first responders have the training they need to utilize these devices in the field,” says New York State’s homeland security and emergency services commissioner, Patrick A. Murphy. “Our expert staff has developed and delivered one of the nation’s strongest curriculums to more than 750 public safety officials.”

Indoor flights led by law enforcement officials from the Albany County Sheriff’s Office and New York State Police taught participants indoor flights, tactical flights, the use of thermal cameras and crime scene investigation.

“If we can deploy a drone during an active situation where firearms or explosives may be in play, we’re going to do it,” notes Lee Bormann, chief deputy of the Albany County Sheriff’s Department. “Being able to fly a drone around a corner or through a window to gather potentially lifesaving intel is invaluable.” <https://unmanned-aerial.com/nuair-hosts-drone-fly-in-for-more-than-100-n-y-public-safety-officials?utm_medium=email&utm_source=LNH+10-31-2019&utm_campaign=UAO+Latest+News+Headlines>

**FEMA Funds Drone Compliance Initiative for National Fire Protection Association** [Betsy Lillian](https://unmanned-aerial.com/author/betsy-lillian) October 30, 2019

[](https://unmanned-aerial.com/wp-content/uploads/2019/10/fire-engine-388008_960_720.jpg)The National Fire Protection Association has received just shy of $1 million in Fire Prevention and Safety Grant money from the Federal Emergency Management Agency to develop a free public safety drone compliance program that will include educational training and a searchable knowledge base to track fire service drone programs and usage.

NFPA says fire departments have rapidly expanded the use of drones as more communities have realized the lifesaving impact that aerial technology can have in response to structural fires, wildland firefighting, search and rescue efforts, hazardous material responses, natural disaster efforts, and any other events that would benefit from increased situational awareness.

Although drone safety policies and standards continue to evolve, says NFPA, many U.S. fire departments are without the proper information, knowledge and experience needed to establish and maintain a legally sound public safety program that is compliant with federal regulations and the standards produced by ASTM International, the National Institute of Standards and Technology, and NFPA.

Without proper understanding of how to integrate drones into public safety efforts, fire departments may deploy drones inaccurately; may inappropriately gather information during an incident; and may interfere with manned and unmanned flight operations in the area. All these missteps needlessly expose fire departments to liability, explains NFPA. <https://unmanned-aerial.com/fema-funds-drone-compliance-initiative-for-national-fire-protection-association?utm_medium=email&utm_source=LNH+10-31-2019&utm_campaign=UAO+Latest+News+Headlines>

[**Drone footage shows the aging PG&E transmission towers in California**](https://dronedj.com/2019/10/29/drone-footage-shows-aging-pge-transmission-towers/) [Haye Kesteloo](https://dronedj.com/author/hayekesteloo/) Oct. 29th 2019

This year’s fire season in California has started out with massive fires in Los Angeles and near San Francisco. PG&E’s aging transmission lines form a huge risk as failing equipment can potentially start wildfires as was the case last year. The [Camp Fire in 2018](https://dronedj.com/2018/11/19/15-drone-teams-deployed-camp-fire-paradise/) was started by a powerline that came down from a transmission tower after one of the hooks that hold up the lines broke. An article in the Wall Street Journal investigates the status of the PG&E towers and lines in California and uses drone footage to show the aging equipment.

The campfire in 2018 was the result of a broken hook from one of the PG&E transmission towers. After the hook had failed, the powerline came down and sparked the fire, according to the company and state investigators. Once the fire took hold below the tower, strong winds whipped it up and it spread quickly towards Paradise, California. The WSJ reports:

Currently, PG&E operates about 40 hydroelectric facilities in California that were built before 1950. Many of the transmission towers are about the same age. The article in the Wall Street Journal includes a number of short drone shots that show you the rusty and aging state of the PG&E transmission towers and lines.

“PG&E acknowledges it has work to do. Since the Camp Fire, it has inspected all its towers, lines and substations. It identified 1,200 immediate safety risks and another 10,000 less urgent repairs, and is making fixes. It has also committed to sharing results of its inspections with state regulators and the public.”

To reduce the risk of accidentally starting wildfires, the utility company has shut off the power to millions of people in California. The company also disclosed that one of the powerlines had malfunctioned in Sonoma County right before the start of the Kincade Fire. <https://dronedj.com/2019/10/29/drone-footage-shows-aging-pge-transmission-towers/#more-20705>

**SimActive Software Used for Determining Financial Assistance After Hurricane Dorian** [October 29, 2019](https://uasweekly.com/2019/10/29/) [News](https://uasweekly.com/category/news/)

SimActive Inc., a world-leading developer of photogrammetry software, announces that Correlator3D™ has been used by Air Data Solutions in Florida to determine financial assistance following Hurricane Dorian. Aerial imagery was collected before the storm for pre-hurricane assessment and after for damage analysis.

An aerial camera owned by ADS was flown to gather high resolution images of the affected areas. The data was then processed by SimActive software to create mosaics of orthophotos. The resulting geospatial data helped government authorities calculate recovery aid funds.

“We have been impressed by the accuracy and speed of Correlator3D to support such a time-critical mission”, said Don Cummins, President of ADS. <https://uasweekly.com/2019/10/29/simactive-software-used-for-determining-financial-assistance-after-hurricane-dorian/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_10_29_2019&utm_term=2019-10-30>

**1Nov19**

**Thousands of cops to guard NYC Marathon, Police Commissioner James O'Neill says** Anthony M. DeStefan o[anthony.destefano@newsday.com](mailto:anthony.destefano@newsday.com?subject=Thousands%20of%20cops%20to%20guard%20NYC%20Marathon,%20Police%20Commissioner%20James%20O%27Neill%20says&body=The%20NYPD%20will%20deploy%20thousands%20of%20uniformed%20cops%20and%20more%20than%20600%20vehicles%20to%20safeguard%20the%2050,000%20runners%20and%20millions%20of%20onlookers%20at%20Sunday%27s%2049th%20New%20York%20City%20Marathon,%20officials%20said.%20Briefing%20%0D%0Ahttps://www.newsday.com/news/new-york/nyc-marathon-security-1.38079525) October 31, 2019

The NYPD will deploy thousands of uniformed cops and more than 600 vehicles to safeguard the 50,000 runners and millions of onlookers at Sunday's 49th New York City Marathon.

Briefing reporters Thursday, NYPD Commissioner James O’Neill said the race, which grew from a miniscule 127 Central Park runners in 1970 to a veritable army of athletes from around the world in 2019, will get the full treatment from the department’s counterterrorism unit.  Even police drones will be pressed into service to monitor the 26.2-mile five-borough race. Cops will also be able to use counter-drone technology to intercept and neutralize any errant drones that try to penetrate the race route, O’Neill said.

“Despite the growth we have seen over the last half-century, the men and women of the NYPD are more than prepared for it,” the police commissioner said. <https://www.newsday.com/news/new-york/nyc-marathon-security-1.38079525>

**3-2-1-Cookoff! Astronauts to bake cookies with new test oven** Marcia Dunn AP Oct. 31, 2019

 CAPE CANAVERAL, Fla. — Forget reheated, freeze-dried space grub. Astronauts are about to get a new test oven for baking chocolate chip cookies from scratch.

The next delivery of supplies for the International Space Station — scheduled for liftoff this weekend — includes the Zero G Oven. Chocolate chip cookie dough is already up there, waiting to pop into this small electric oven designed for zero gravity.

As a tantalizing incentive, sample cookies baked just this week are also launching Saturday from Virginia on Northrop Grumman’s Cygnus capsule, for the six station astronauts.

The experiment explores the possibility of making freshly baked goods for space travelers. With NASA eyeing trips to the moon and Mars, homemade food takes on heightened importance. What’s in orbit now are essentially food warmers.

Also collaborating on this first-of-its-kind space bake: Texas-based Nanoracks, which designed and built the oven and arranged the flight, and DoubleTree, which supplied the same cookie dough used by the hotel chain for welcome cookies.

Nanorack manager Mary Murphy anticipates a baking time of 15 to 20 minutes per cookie at about 325 F. The first cookie will be the real test; it could end up looking like a blob or a mini pancake in the absence of gravity. Three of the space-baked cookies will be returned to Earth for analysis. <https://www.washingtonpost.com/national/health-science/3-2-1-cookoff-astronauts-to-bake-cookies-with-new-test-oven/2019/10/31/a9e4c740-fc18-11e9-9e02-1d45cb3dfa8f_story.html>