



UAS and SmallSat Weekly News

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US election debate covered by CNN's DJI Matrice tethered drone APPLICATION DJI HEADLINE NEWS UNITED STATES ALEX DOUGLAS FEBRUARY 14, 2020



The US election debate covered by Elistair's tethered drone system supported **13 hours** of live aerial footage for the first Democratic event of 2020.

On January 14, for the first U.S. Democratic debate of the year held on Drake University campus in Des Moines, Iowa, CNN deployed an Elistair tethered system with the support of Vector Solutions.

During the Democratic debate, CNN Air flew its DJI M210 tethered to the Ligh-T at a height of 60 meters for 8 hours on the first day and 5 hours the second day. The images were instantly fed to the control vehicle and then live transmitted via a 4G link to the production team.

Howe Hildebrand, Vector Solutions pilot, said: "This solution provides excellent results for any venue that requires constant, uninterrupted over-watch. It allows for constant, coverage of the subject area." https://www.commercialdroneprofessional.com/us-election-debate-covered-by-cnns-tethered-dji-matrice-drone/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-323747-Commercial+Drone+Professional+DNA+-+2020-02-14

17 Days Left to Comment on Remote ID for Drones: What the Comments Look Like So Far Miriam McNabb February 14, 2020



The FAA announced a long-awaited Notice of Proposed Rulemaking on Remote ID for drones on 12/31/2019. The comment period required by federal law is open until March 2, 2020. Over 13,000 comments have been submitted so far – and from "over-regulation at its finest" to "unreasonable" and "deeply concerned," the comments are overwhelmingly negative.

The Recreational Drone Community: "Deeply Concerned" The vast majority of individual comments come from the recreational drone community. Many of these comments say "I am deeply concerned that some elements of the proposal could impose significant costs on the model aviation community and unnecessarily restrict existing, safe model aircraft



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operations.” Many tell stories about involvement in a hobby that they see disappearing overnight as a result of the rule.

Professional Operators: “Increasing Costs” For farmers flying over their fields daily to monitor crops to drone service providers gathering aerial data for construction sites, many Part 107 operators don’t see a safety benefit to outweigh the costs of compliance. While flying in remote areas, the lack of a reliable communications network could require them to carry hardware: that could shorten flight endurance and add to their costs.

Hardware Manufacturers: “Deeply Flawed” DJI has commented that the rule is “deeply flawed.” DJI has long championed the concept of remote ID and tracking as a critical step to integrating drones into the airspace. With over 60% of the commercial market, DJI will bear a large burden in making compliance easy for their customers. <https://dronelife.com/2020/02/14/17-days-left-to-comment-on-remote-id-for-drones-what-the-comments-look-like-so-far/>

DJI is Using Drones to Help in the Fight Against Coronavirus - Spraying Drones

Disinfect Public Spaces Miriam McNabb February 14, 2020



Chinese public health officials and China-based drone manufacturer DJI have been willing to adopt new tools to meet the challenge. DJI has pledged their time, money and expertise to bring drone technology to the fight.

Together with agricultural technology think tanks, DJI has been working to fight the disease. On February 4, we pledged almost \$1.5 million in aid to help contain the outbreak. We have also adapted our Agras series of agricultural spraying drones to spray disinfectant in potentially affected areas. Drones can cover far more ground than traditional methods, while reducing risk to workers who would otherwise spend more time exposed to both the virus and the disinfectant.

Drones for spraying offer many critical advantages, especially in an emergency – they can be up to 50 times faster than traditional methods, and they can keep human operators out of harm’s way. DJI recently demonstrated [another humanitarian use of spraying](https://dronelife.com/2020/02/14/dji-is-using-drones-to-help-in-the-fight-against-coronavirus-spraying-drones-disinfect-public-spaces/) drones in Tanzania, with the use of drones to help fight against malaria bearing mosquitos.

<https://dronelife.com/2020/02/14/dji-is-using-drones-to-help-in-the-fight-against-coronavirus-spraying-drones-disinfect-public-spaces/>



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Parrot and RIIS Partner to Develop AI Programs for ANAFI Drone Platform

February 14, 2020 News

Parrot and RIIS are focused on exploring the use of artificial Intelligence and computer vision technology, combined with drone data capture, to solve countless industry challenges using an efficient and cost-effective approach.

Parrot and RIIS are actively exploring use cases which could include municipal use of drones for assessing parking lots, public parks, and streetlights; crowd monitoring; warehouse inventory counting; automated inspection of cell phone towers and solar panels; property surveillance for real estate professionals and developers, and much more.



Parrot and RIIS’ whitepaper details one example of this technology in practice through an application called Cattle Counter. The app allows farmers and agriculture professionals to quantify the size of cattle herds to automate the monitoring and counting process. Cattle Counter is currently available for download on the Google

Play website. https://uasweekly.com/2020/02/14/parrot-and-riis-partner-to-develop-ai-programs-for-anafi-drone-platform/?utm_source=rss&utm_medium=rss&utm_campaign=parrot-and-riis-partner-to-develop-ai-programs-for-anafi-drone-platform&utm_term=2020-02-14

PLANE FINDER Launches Industry’s **First UAV Surveillance** Service February 14, 2020 News



The UAV Surveillance solution set can meet needs of commercial users such as Air Navigation Service Providers and enterprise UAV organizations.

In the United States alone, the FAA forecasts that commercial UAV traffic could triple between now and 2023, with an estimated 835,000 enterprise drones flying by that time. In 2020, worldwide shipments of enterprise drones will total 526,000 units, an increase of 50% from 2019. Global shipments are forecast to reach 1.3 million units by 2023.

Functionality includes Real Time Surveillance Beyond visual line of sight, Drone Identification, Historical ADS-B Data, Plane Finder Radar surveillance and customized user displays. With 86 million aircraft positions reported per day, Plane Finder is your solution to succeed.



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It is a trusted source of precision live global flight tracking information, customized products for aviation, business intelligence and emerging markets. For more information, please visit <https://planefinder.net/commercial-services/emerging-markets>
https://uasweekly.com/2020/02/14/plane-finder-launches-industrys-first-uav-surveillance-service/?utm_source=rss&utm_medium=rss&utm_campaign=plane-finder-launches-industrys-first-uav-surveillance-service&utm_term=2020-02-14

Black Swift Technologies Unveils American-Made UAS for Automated Industrial Inspections February 14, 2020 News



[Black Swift Technologies](#), a specialized engineering firm based in Boulder, CO, announced today availability of the [Black Swift E2™ UAS](#), an unmanned aerial system designed for automated industrial and structural inspections even in extreme environmental conditions. Leveraging advances in computer vision and machine learning, the drone can be combined with an inspection payload making it capable of completely autonomous flight. It can safely and reliably navigate around complex structures while delivering real-time data to its operator.

Designed, manufactured and serviced entirely in the USA, the E2 was engineered from inception for structural and industrial inspections. Its domestic roots mean that there are no open source software concerns and no Chinese components.

“The Black Swift E2 as our UAS platform of choice for conducting wind turbine inspections,” says Oier Peñagaricano, CEO of [Alerion](#), provides unparalleled performance, even in extreme conditions like heavy rains and high winds. It can be fitted with our patented laser navigation technology permitting high-precision navigation up close to structure like viaducts, airplanes, and commercial wind turbines, both onshore and offshore. With the press of a button, the Black Swift E2 can perform a fully-autonomous wind turbine inspection and real-time damage identification in as little as **15-minutes**.” https://uasweekly.com/2020/02/14/black-swift-technologies-unveils-100-american-made-uas-specifically-designed-for-automated-industrial-inspections/?utm_source=rss&utm_medium=rss&utm_campaign=black-swift-technologies-unveils-100-american-made-uas-specifically-designed-for-automated-industrial-inspections&utm_term=2020-02-14



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Developing Drone Standards Is Key to Successful Growth in the UAV Industry

JANUARY 28, 2020 Scott Campbell



As an industry, we need to develop a series of public standards, frameworks, and certifications. These are the conclusions that members of [CompTIA](#), the world’s largest non-profit IT association, have arrived at after nearly two years of research and collaboration. The first result is a set of [Drone Standards and Best Practices](#) developed by the organization’s [Drone Advisory Council](#).

The members of the Council also realize it is imperative for drone industry executives to work with government regulators and policy makers to identify, discuss and implement further measures that promote growth and innovation in the market.

“There aren’t any industry-recognized, vendor-neutral UAV frameworks or protocols in place,” said Mario Rebello, vice president of government relations at DJI. “And while it’s great to grow business in that sort of white board environment for a while, we’ve reached a point where government agencies and corporate businesses need more formality and industry norms to get involved with drone technology.”

In addition, a lack of regulations is the biggest drag on the industry, according to David Kovar, CEO and founder of URSA, a Manchester, N.H.-based risk management platform for the UAV industry. “Remote ID is a prime example,” he said. “Without Remote ID we will not get broad access to BVLOS, flights over people, and night operations.”

https://www.commercialuavnews.com/security/developing-drone-standards-is-key-to-successful-growth-in-the-uav-industry?utm_source=marketo&utm_medium=email&utm_campaign=uav20-news-comptia&utm_content=digital&mkt_tok=eyJpIjoiWWpjZD1pqSTJNMkv4TXpsayIsInQiOiJMY2NYd0J0dU5HWWF1ZXpScjI0T0h0QUYwbW4yeUlrSFwvVG1nTHFqTzlhNUhXZE0waGp3aTRhY3AzcW9QZ1YrZU1kSlZPd3RjXC9RZHRGeU16QVZqVjNqM0xINVjdjdnFcl2RnWXBBYXR0OVFwQ1wvTmxma3lLdTNyZnMwQVJWc2hMOVYifQ%3D%3D

Police Use Drone to Find Blind Man Who Left Home, Became Disoriented in

Enfield February 16, 2020



Enfield police said they were contacted by a family member of a blind man who lives in town on Saturday around 8:45 a.m. The family

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member told officers that they were not able to make contact with their brother.

Neighbors told police the man had not been seen since approximately 10 a.m. on Friday. Due to cold temperatures, police said there was a concern for hypothermia.

Enfield police contacted Vernon police, and a drone pilot responded to assist. After about **30 minutes** of searching, investigators said the man was found 100 yards into the woods, down an embankment and hidden from view. The man said he had become disoriented due to medical conditions and had been outside for approximately **33 hours** including overnight where temperatures were around **9 degrees**.

He was carried out of the woods by first responders and was transported to a local hospital for evaluation and treatment. <https://www.nbcconnecticut.com/news/local/police-use-drone-to-find-blind-man-who-left-home-became-disoriented-in-enfield/2224153/>

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Diverse UTM systems can manage manned/unmanned disaster response flights

February 16, 2020 Philip Butterworth-Hayes UAS traffic management news



Japan Aerospace Exploration Agency (JAXA) and NASA have successfully trialed a joint UTM system to support drone and manned flights for disaster response activities.

“Since 2016, JAXA and NASA have partnered to investigate the safe and efficient integration of UAS in disaster relief operations. “The flight tests conducted at the 2018 Ehime Prefecture disaster drill successfully demonstrated the application of UAVs to disaster response and showed **they can safely cooperate with manned aircraft** to improve response efficiency. Connecting two remote systems (D-NET and UTM) in real time validated the mobility of the concept. The integration of UTM enabled informed planning for safe operations and facilitated situation awareness.

It was the first time to have a manned aircraft as a planned operation in UTM. The disaster drill flight tests also exposed some of the challenges for D-NET and UTM in disaster response applications. Gaining an understanding of the ways in which operators would use the information from both manned and unmanned aircraft in such situations provided very valuable feedback for future development.”

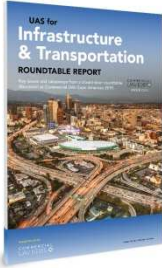
<https://www.unmannedairspace.info/uncategorized/diverse-utm-systems-can-manage-manned-unmanned-disaster-response-flights-nasa-jaxa-research/>



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UAS for Infrastructure & Transportation Roundtable Report

As part of 2019 Commercial UAV Expo Americas, high-level players operating within the commercial UAV space met in a series of closed-door roundtable discussions. . The



Infrastructure & Transportation roundtable consisted of state and local transportation departments and authorities. Their key concerns involved learning how to grow their drone programs and establish policy and standard operating procedures while addressing roadblocks like public opinion and regulatory hurdles.

Developing these programs has proven to be no easy task when dealing with multiple, siloed government agencies using drones in different ways, such as in public safety, emergency services and utilities. Discussions revolved around:

- Opening up operations near prohibited airspace
- Getting public support
- Developing standard drone policy and procedures

Fill out the short form to the right to gain access to these expert opinions. https://discover.divcom.com/uava20-infrastructure-transportation-roundtable-report.html?utm_source=marketo&utm_medium=email&utm_campaign=uav-roundtables-inf-2-17&utm_content=digital

Collins advances air-ground UAS data link in NASA partnership February 15, 2020 Jenny Beechener UAS traffic management news



United Technologies subsidiary Collins Aerospace Systems is entering the final stages of a nine-year project with NASA to enable unmanned aircraft systems to operate safely in the National Airspace System.

The prototype CNPC-5000 radio is expected to support NASA's System Integration Operationalization program through flights with General Atomics' SkyGuardian. Multiple demonstrations are planned throughout 2020.

"CNPC is critical to maintaining positive control of UAS within national airspace, such as flights beyond visual line of sight or above 500 feet," said Heather Robertson, vice president and general manager, Integrated Solutions for Collins Aerospace. "Our data links provide the reliable, safe and secure connection needed to maintain control of unmanned aircraft at all times while operating in the complex environment of controlled airspace."



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<https://www.unmannedairspace.info/latest-news-and-information/collins-advances-air-ground-uas-data-link-in-nasa-partnership/>

BAE Systems solar-powered unmanned aircraft makes first flight Harry Lye 17

FEBRUARY 2020 NEWS



The solar-powered aircraft (PHASA-35) was developed with the sponsorship of the UK's Defence Science and Technology Laboratory and Australia's Defence Science and Technology Group (DSTG). It made its first flight from the Royal Australian Air Force's Woomera Test Range in South Australia.

Designed to **stay airborne for up to a year**, it is touted by BAE Systems as being a 'game-changer' with the potential to bridge the gap between satellite and aircraft surveillance and reconnaissance capabilities.

The aircraft has undergone a rapid design and testing process, going from concept to first flight in 20 months under a partnership between BAE Systems and its subsidiary Prismatic.

The aircraft is designed to operate in the stratosphere providing a persistent and cheaper alternative to using satellites for the same operations. <https://www.airforce-technology.com/news/bae-systems-solar-powered-unmanned-aircraft-makes-first-flight/>

Swiss Army selects Parrot for micro-drone supply APPLICATION MILITARY NEWS ALEX DOUGLAS FEBRUARY 17, 2020



Announcing the news, Parrot says its expertise in professional drones, the performance of its solutions dedicated to Defense and Security, and the high level of cyber security required by the Swiss armed forces were decisive assets in the final choice.

The Parrot Group said the project marks a new step forward for the firm in the field of security and defense on which the group has been working since 2018. On this occasion, the group will be working with its subsidiary, senseFly, which will be in charge of operational support in Switzerland.



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It adds to the development contract signed with the United States Army in May 2019 for the new generation of compact drones, dedicated to the surveillance of the Short Range Reconnaissance program. https://www.commercialdroneprofessional.com/swiss-army-selects-parrot-for-micro-drone-supply/?utm_medium=push&utm_source=notifications

Bees to inspire the new age of delivery drones APPLICATION DELIVERY HEADLINE NEWS UK ALEX DOUGLAS FEBRUARY 17, 2020



In a presentation to the American Association for the Advancement of Science conference in Seattle on Sunday, Professor James Marshall of Sheffield University demonstrated how he and his team are reverse engineering bee brains to create the drone prototype.

He explained: “Bees are really consummate visual navigators. They can navigate a complex 3D environment with minimal learning very robustly, using only a million neurons in a cubic millimetre of brain. For us they’re at a sweet spot for brain size and intelligence.” The project has a **£4.8m** grant from UK Research and Innovation.

It detailed that researchers are carrying out two types of experiment to “reverse engineer” bee brains — work out how honeybees and bumblebees can reliably navigate over several kilometres, learning the features that will enable them to return to their nest. <https://www.commercialdroneprofessional.com/bees-to-inspire-the-new-age-of-delivery-drones/>

Drone Champions League Flies Manned Aerobatic Drone through the Hoops (You Can Too – Virtually) Miriam McNabb February 17, 2020



If you’ve ever fantasized about flying your own racing drone through the obstacles to glory – get ready to be totally addicted. The [Drone Champions League](#) (DCL), the world’s largest live drone racing league, will release their first online drone game, [DCL – The Game](#), on February 18. In preparation, they’ve made the fantasy real: with the launch of **the first aerobatic manned drone**. “The vision is to **race manned drones in the future**, and you can start training to fly them today on DCL – The Game.”

Check out the aerobatic manned drone here – then read on to see how you can get your hands on the game. <https://dronelife.com/2020/02/17/drone-champions-league-flies-manned-acrobatic-drone-through-the-hoops-you-can-too-virtually/>



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SoftServe showcases drone innovation for autonomous firefighting APPLICATION

NEW PRODUCTS NEWS ALEX DOUGLAS FEBRUARY 17, 2020



The Mohamed Bin Zayed International Robotics Challenge is organized by Khalifa University and will take place at the Abu Dhabi National Exhibition Centre on February 23-25, 2020.

SoftServe will utilize real-time computer vision algorithms on drones to enhance thermal cameras for firefighting and incorporate artificial neural networks to track multiple objects following complex 3D trajectories. A Robot Operating System will ensure drones **autonomously** complete each challenge.

Dr. Lyubomyr Demkiv, robotics lead, said, “Drones face a number of challenges due to limitations of sensors in smoke filled environments. Our collaborative approach with Czech Technical University combines information from LIDAR, RGB-D cameras, and lightweight thermal cameras to show an entirely new approach to fighting fires autonomously.

https://www.commercialdroneprofessional.com/softserve-showcases-drone-innovation-for-autonomous-firefighting/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-323862-Commercial+Drone+Professional+DNA+-+2020-02-17

Sydney’s New Year’s Eve fireworks could be replaced with drones [Josh Spires](#) Feb. 17th 2020



[Sydney’s](#) massive New Year’s Eve [fireworks](#) could be replaced by drones for good after Liberal councilor Craig Chung gave the go-ahead for the City of Sydney to report on the feasibility of using [drones](#). The proposal came up due to the [massive bushfires](#) that destroyed much of eastern Australia.

“As the first major city to celebrate New Year, all eyes are on us. It would be a great signal to the world that Sydney is progressive and looking for ways in which it can reduce emissions.”

The fireworks bring people from all over the world and make AUD\$130 million for business. Due to this, if the fireworks are replaced by drones, organizers must be sure that drones will provide a similar if not better experience than the current displays.

Matthew Chieng had the following to say: “My personal opinion is you could save the \$6.5 million for the fireworks, but you’re taking away \$130 million from businesses. What does that achieve? They’ve already planned for it all.”



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While it seems unlikely that drones will be replacing fireworks this year as planning has likely started already, there is a great chance that within the next few years, drones will be replacing the massive fireworks show. <https://dronedj.com/2020/02/17/sydney-fireworks-replaced-drones/>

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SpaceX launches 60 more Starlink satellites, but rocket misses landing Eric Mack

February 17, 2020

Elon Musk's space company achieved its primary objective of sending 60 more flying nodes for its nascent global broadband service into space, bringing the total number of Starlink satellites in low-Earth orbit to nearly **300**.



A secondary goal for the fifth Starlink mission, as with most SpaceX launches, was to recover the first stage of the Falcon 9 by landing it on a droneship stationed in the Atlantic Ocean. But this time the rocket missed the mark by a smidge.

SpaceX reported during the webcast that the rocket appears to be intact and floating on the ocean, but it remains unclear whether it can be recovered. The booster had a useful life, having already launched three earlier SpaceX missions in 2019 before Monday's Starlink mission. <https://www.cnet.com/news/spacex-launches-60-more-starlink-satellites-but-rocket-misses-landing/>

Drones to learn from flight path of butterfly February 15, 2020



In a finding that could benefit drone design, [award-winning research](#) by a doctoral student at The University of Alabama in Huntsville shows that the undulating flight paths of Monarch butterflies are actually more energy-efficient than a straight-line path.

Madhu Sridhar's paper won the 2019 AIAA Atmospheric Flight Mechanics Graduate Student Paper Competition. The finding that an undulating flight trajectory consumed less energy can be valuable in the bio-inspired design of long-range robotic miniature drones.

"This study shows that the coordinated wing and body motions following a bumpy trajectory require lower power for a flapping wing at the Monarch scale," he says. "We do not know why they choose to fly higher instead of at ground level heights."



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“So, to test this, we have performed experiments with Monarch butterflies inside the large vacuum chamber at UAH Propulsion Research Center where we recorded the flights at lower density air up to 4,000 meters above sea level. This helps us observe how their wing and body motions change as the air density is lowered.”

Additionally, researchers are using computer simulations to investigate how low-density air affects the flexibility of Monarch wings <https://gadget.co.za/drones-to-learn-from-flight-path-of-butterfly/>

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Bell Autonomous Pod Transport 70 Achieves First BVLOS Flight February 17, 2020 News



On Jan. 16, APT 70 flew its first Beyond Visual Line of Sight flight path 10 miles at [Choctaw Nation test site](#) under the Unmanned Aircraft Systems Integration Pilot Program.

The vehicle also completed an **18 mile flight** with **60lbs** of payload at Bell’s testing site near Fort Worth, Texas.

To date, the flight test program has completed over **120 flights**. The program will continue to test the vehicles’ endurance, range capabilities, and expand the mission sets.

https://uasweekly.com/2020/02/17/bell-autonomous-pod-transport-70-achieves-first-bvlos-flight/?utm_source=rss&utm_medium=rss&utm_campaign=bell-autonomous-pod-transport-70-achieves-first-bvlos-flight&utm_term=2020-02-18

Bomb-sniffing locusts are here and funded by the US Navy Josh Spires Feb. 18th 2020

Scientists funded by the US Navy have announced that they have successfully been able to control locusts and “hijack” their sense of smell. The bomb-sniffing locusts have electrodes in their brains to monitor signals concerning different gases smelled by the locusts. The research team was given \$750,000 to complete the testing from the US Office of Naval Research.



The locusts have been able to detect gases emitted from bomb-making substances such as TNT, RDX, and ammonium nitrate. While individual locusts were able to detect the gases, scientists found that using multiple

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locusts at the same time allows for a better and more accurate reading.

This means swarms of cyborg locusts could be flying around the skies very soon. Another possible use for the locusts could be for a bushfire detection system, which is currently being tested with DJI drones. Locusts could replace traditional drones if more research is completed, allowing them to pick up changes in the atmosphere related to fires.

Currently, the locusts' sense of smell is only able to be controlled, but scientists have plans to allow users to fully control the movement of the locust, essentially turning them into a biological drone. <https://dronedj.com/2020/02/18/bomb-sniffing-locusts-funded-us-navy/#more-24225>

Volocopter and Grab Conduct Air-taxi Feasibility Study in Southeast Asia February 18, 2020 News



German Urban Air Mobility pioneer Volocopter and Southeast Asia's largest everyday super app Grab announced that they will conduct a joint feasibility study on urban air mobility as part of a Memorandum of Understanding to explore the prospect of urban air mobility solutions in the region's megacities.

The feasibility study will look into the most suitable cities and routes to deploy air taxis in Southeast Asian cities; evaluate the best use cases for air taxis and explore the possibility of joint flight tests, among other things.

The findings will lay the groundwork for potential future cooperation between the companies which could include launching services for urban air mobility.

https://uasweekly.com/2020/02/18/volocopter-and-grab-conduct-air-taxi-feasibility-study-in-southeast-asia/?utm_source=rss&utm_medium=rss&utm_campaign=volocopter-and-grab-conduct-air-taxi-feasibility-study-in-southeast-asia&utm_term=2020-02-19

Drone Champions League launches drone racing game Josh Spires Feb. 19th 2020

The [Drone Champions League](#) has released its first [drone racing game](#), giving players the option to play live with others and even qualify for real-life races. The packs include 30 maps, including some of the past courses flown and the ability to fly with up to 29 other people.



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The [DCL game](#) allows new pilots to practice without the heavy price tag involved with crashing racing drones and even for seasoned pilots to practice on the courses to become faster.

As a part of the game's launch, DCL has created the "first aerobatic manned drone" with the ability to fly through maneuvers and hoops. That video can be watched [here](#).

The game comes with four flight modes to choose from: arcade, GPS, angle, and acro. The different modes allow for beginners to [learn to fly a drone](#) for the first time and allows for different types of drones to be flown, from camera drones like those from DJI to the [fastest racing drones](#).

The game also includes many of the flight characteristics found in real-life drone racing. The courses are identical to real-life ones, the physics is similar, prop wash, and drone controls are similar, all with the fast pace adrenaline-fueled racing. A noteworthy track included in the game is LAAX, where the 2019 DCL Drone Grand Prix was held. The track comprises of various pylons, gates, and even a gate made out of McDonald's famous golden arches.

The game is available right now, for PC and consoles, it will set you back [\\$29.99](#) and [\\$39.99](#), respectively, on Amazon. <https://dronedj.com/2020/02/19/drone-champions-league-launches-drone-racing-game/>

20Feb20

Dallas Aerospace Startup FusionFlight Takes Off With Fully Autonomous Drone

MADDIE PRESTON FEB 18, 2020



Alexander Taitis is the CEO and founder of FusionFlight

FusionFlight, a Dallas-based aerospace startup, has had the first successful flight of its fully autonomous drone called JetQuad after three years of extensive development. It is "the world's smallest and most powerful jet-powered drone with vertical take-off and landing capabilities."

FusionFlight has a patent pending for "Airbooster Technology," which was filed in the summer of 2016. During the same summer, the startup was also incorporated and received a **\$50,000** seed investment from GTD Capital.



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After three years of development, the drone has successfully taken flight, has “demonstrated commitment to achieving success with the seed funding provided” and is ready to move to the next level, Taits told *Dallas Innovates*.



The AB5 JetQuad is powered by four microturbine jet engines which produce a combined 200-horsepower at full throttle. Coupled with proprietary Thrust Vector Systems, the design is the first configuration to allow jet-engines to solely provide the power necessary for both vertical and horizontal flight, as well as altitude control.

“The drone is unique because it is the **only design in the world** that uses four microturbine jet-engines for all aspects of flight,” says Taits. “It has the vertical lift capabilities of a helicopter and the speed of a jet-aircraft, all the while being fueled by ordinary diesel.”

<https://dallasinnovates.com/dallas-aerospace-startup-fusionflight-takes-off-with-fully-autonomous-drone/>

Percepto’s End-to-End Drone Solution Is Autonomous, Smart, and Robust Danielle

Gagne FEBRUARY 18, 2020



Commercial UAV News has often talked about [the challenges big data analysis pose](#) for the enterprise and the [potential of AI/machine learning](#) as a solution. We have also highlighted the potential of [drone-in-a-box solutions](#) to fly fully autonomous missions. While we have focused on these topics independently, we are starting to see companies like [Percepto](#) bring these two technologies together to the end user via machine learning and computer vision.

Percepto’s drone, Sparrow, is capable of flying in almost any type of weather condition or climate and its box can withstand extreme weather conditions. The company demonstrated this recently by showing a video of the Sparrow flying in a [snowstorm](#). Being able to complete a mission in inclement weather where other drones may be grounded is a major differentiator and is an essential element for keeping up with scheduled autonomous missions.

This is not the only thing that differentiates Percepto’s solution, because they are capable of capturing data via autonomous drone flight, the data collection is consistent and reliable and at a level that would not usually be possible with a pilot. This data is then analyzed by Percepto’s AI, [PerceptoCore](#), to deliver meaningful insights to their clients about the state of their asset.



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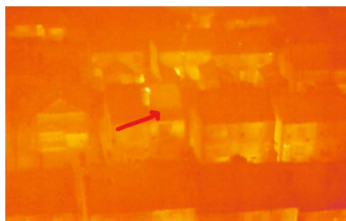
We spoke with Dor Abuhasira, Co-Founder and CEO of Percepto, to talk about how he has leveraged computer vision and machine learning to create a fully autonomous end-to-end drone-in-a-box solution for companies all over the globe. See the interview at:

[https://www.commercialuavnews.com/energy/percepto-s-end-to-end-drone-solution-is-autonomous-smart-and-](https://www.commercialuavnews.com/energy/percepto-s-end-to-end-drone-solution-is-autonomous-smart-and-robust?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiTvdGaE9EazNPREZqTXpBMSIsInQiOiIyU1k4NW1jZUVHSXRoNmhQcGpYUnRaQ1R6MTY0Qzg5NmRtXC9VbER2emJhYnpQWjF2Q1RtK3I0Y3ltV0hBMUiscTRCWVErUEFGV0Nsa0NwZG0xV3dWalZIMWJ6cjdJUVk2YW1zSW84TjJlYjYyVmJnRDVscVowYTVmWXJlQ0VMWjQifQ%3D%3D)

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Man sentenced after Derbyshire Police thermal drone spots cannabis farm

APPLICATION EMERGENCY SERVICES NEWS UK ALEX DOUGLAS FEBRUARY 20, 2020



In a post on Twitter, the Derbyshire Police drone team described how it discovered the heat source last November at an address in South Normanton.

This led to a warrant being issued and 148 cannabis plants being found, with a value of between £27,000 and £110,000.

Now, occupant Fatmir Milushi, has been sentenced to 18 months. See the tweet [here](#):

https://www.commercialdroneprofessional.com/man-sentenced-after-derbyshire-police-thermal-drone-spots-cannabis-farm/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-324139-Commercial+Drone+Professional+DNA+-+2020-02-20

Commercial UAV Expo tracking ahead on last year as it prepares for record-breaking 2020

APPLICATION COMMERCIAL UAV EXPO EVENTS HEADLINE NEWS UNITED STATES ALEX DOUGLAS FEBRUARY 19, 2020



The organizers have announced a list of hundreds of supporters for the 2020 event, which will take place September 15-17, 2020 at Paris Las Vegas, Las Vegas NV.

Commenting, Lisa Murray, director at Diversified Communications, organiser of the event, said: "More than half the exhibit floor already sold and over 200 media and association supporters signed on."



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The 2019 edition of Commercial UAV Expo Americas drew in 3,100 attendees, 200+ exhibitors, and 200+ presenters from over 50 countries and more are expected in 2020.

New in 2020 will be the first-ever Law Tech Connect workshop organized by P3 Tech Consulting. It is a continuing legal education program focused on U.S. and global legal, regulatory, policy, and ethical issues related to the UAS market.

Returning in 2020 will be the DRONERESPONDERS Public Safety Summit. Two full days of programming brings together drone operators and program managers across law enforcement, fire, search & rescue, and other emergency services for discussions and workshops. Registration for the 2020 event will open in March, 2020.

https://www.commercialdroneprofessional.com/commercial-uav-expo-tracking-ahead-on-last-year-as-it-prepares-for-record-breaking-2020/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-324139-Commercial+Drone+Professional+DNA+-+2020-02-20

PREPARING THE DRONE WORKFORCE CONFERENCE



A national conference entitled *Preparing the Drone Workforce* will bring together representatives of higher education institutions and UAS industry in Williamsburg, Virginia, to share emerging trends and best practices to create effective UAS courses/programs of study, and to discuss topics relevant to the goal of creating and sustaining a drone workforce pipeline. Conference

participants will learn about key UAS educational offerings and industry initiatives under development. Drone industry partners and UAS end-users will spotlight the growing demand for various applications, from package delivery to search and rescue, precision agriculture, real estate, transportation, infrastructure inspection, and many others. Click [here](http://events.constantcontact.com/register/event?llr=u4jtwc4ab&oeidk=a07egswih4y2e8377f5) to register. <http://events.constantcontact.com/register/event?llr=u4jtwc4ab&oeidk=a07egswih4y2e8377f5> <https://ctccdronezone.com/conferences>



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General Atomics tests space laser communication system for MQ-9 Garrett Reim 20 February 2020



From an optical observatory located on Tenerife in the Canary Islands in the Atlantic Ocean, the company's Airborne Laser Communication System recently established a link with a satellite in geo-synchronous Earth orbit on 20 February. The test was done in partnership with Tesat-Spacecom using that company's GEO Laser Communication Terminal, the LCT 135.

"This was the first demonstration of an air-to-space lasercom system with size, weight and power that is compatible with a medium-altitude, long-endurance [UAV]," says General Atomics. Using a laser instead of a microwave broadcast creates a lower probability that an adversary could intercept or detect a signal being sent or received by an MQ-9.

General Atomics says its laser has **300 times** the data-carrying capacity of conventional radio frequency SATCOM systems. <https://www.flightglobal.com/military-uavs/general-atomics-tests-space-laser-communication-system-for-mq-9/136859.article>

India buys drones, specialist equipment to avert new locust attack Mayank Bhardwaj, Rajendra Jadhav FEBRUARY 19, 2020



NEW DELHI/MUMBAI (Reuters) - Earlier this year, Indian authorities were able to bring swarms of desert locusts under control, but an outbreak in neighboring Pakistan has again raised concerns about the safety of crops such as wheat and oilseeds in India. "Other than ensuring the availability of large quantities of insecticides, we're buying drones and sprayers to beef up our readiness to deal with the attack."

Locust swarms can fly up to 90 miles a day, and adult insects can consume roughly their own weight in fresh food per day. A small swarm eats as much in one day as about **35,000 people**.

The plague has already caused extensive damage to pastures and crops and threatened food security in several countries over the Indian Ocean in east Africa, including Somalia, Ethiopia, Kenya Eritrea and Djibouti.



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<https://www.reuters.com/article/us-india-locusts/india-buys-drones-specialist-equipment-to-avert-new-locust-attack-idUSKBN20D1X9>

Pentagon wants a counter-drone SWAT team asap [Haye Kesteloo](#) Feb. 20th 2020



Drawing on the Defense Department’s in-house talent, DDS director Brett Goldstein has started to form rapid-response “SWAT teams” to counter the threat of small weaponized drones. The small unmanned aircraft are easy to build, but hard to detect and have become an outsized threat.

Exactly how Goldstein is planning to detect and bring down these drones is classified information, but a focus on hacking and jamming the drone control systems instead of physically stopping them is suggested by the team, according to an article in [Breaking Defense](#).

“One of the things that I’ve been doing over the past few months is bringing in some new skill sets,” Goldstein said. “It’s an interdisciplinary, multi-modal group ranging from electrical engineers to radiofrequency experts to software engineers — and that is real today. We have this team, they’re working on these types of problems as we speak,” he continued.

<https://dronedj.com/2020/02/20/pentagon-wants-a-counter-drone-swat-team-asap/>