



UAS and SmallSat Weekly News

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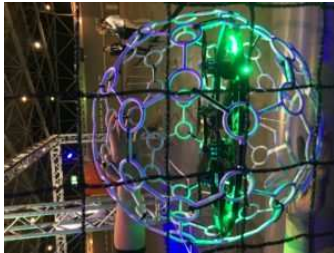


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7Dec19

Drone Soccer: The Awesome New Sport You've Never Heard Of Miriam

McNabb December 06, 2019



If you've never heard of drone soccer, you're not alone. Patrick Coumans of [The Drone Racing Federation](#), the organizer of the event, says that drone soccer was introduced to the Netherlands just this week – but so far, it's been a big hit.

Here's how it works. Two teams of drone operators face off at either end of a drone cage, representing the soccer field.



The goals are two rings suspended by ropes –they swing out of the way if struck on the sides. The soccer balls are drones suspended in a round cage, which protects the drone when it lands (or falls) to the ground. Different colored lights identify each team's ball. Operators must fly their drones through the goal at the opposite end of the cage – cooperating when they can, and adjusting their technique against the other team to get the most goals in a set time.



Unlike drone racing, drone soccer is flown by visual line of sight rather than first person view. Also unlike drone racing – which is a lot of fun to watch through projected FPV video but not so much from the outside – drone soccer is a great spectator sport.

"It's a lot of fun," says Coumans. "It's always fun to work as a team, and it's always fun to get better at the technique as you go along... and the people watching love it."

<https://dronelife.com/2019/12/06/drone-soccer-the-awesome-new-sport-youve-never-heard-of/>

Drone biosensor system for detecting biological hazards



A biosensor system attached to a UAV could prevent human contamination or exposure. Scientists at the Naval Surface Warfare Center, Corona Division, have recently invented a drone-biosensor system capable of detecting the presence of hazardous agents without putting a person in danger of contamination or exposure. The patented technology is available via patent license agreement to companies that would make, use, or sell it commercially.



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The threat of biological hazards often puts emergency responders at risk for infection or contamination. Navy researchers have created a drone-biosensor system that can wirelessly detect, monitor, and analyze harmful agents at incident scenes in real time. The system attaches to an unmanned aerial vehicle, and its operator can control the drone's path to identify potential threats or conditions of interest. The biosensor contains a sampling chamber to trap air in the environment which is then illuminated with laser light and analyzed for the signature absorption and fluorescence signals of known biomolecules.

Using a drone-sensor system can prevent unnecessary exposure to harmful agents, while also remotely scanning for signs of life to assist in evacuation near an accident or contamination scene. https://techlinkcenter.org/technologies/drone-biosensor-system-for-remotely-detecting-the-presence-of-biological-hazards-in-the-air/?utm_source=uas_newsletter&utm_medium=email&utm_campaign=technology

DARPA, Echodyne work together on Aerial Dragnet system DARPA December 04, 2019



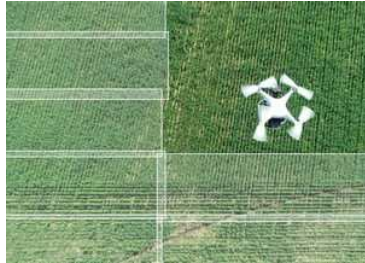
DARPA's Aerial Dragnet program aims to achieve the technically difficult goal of detecting and tracking small UAS in urban terrain. The program seeks innovative technologies to provide persistent, wide-area surveillance of all UAS operating below 1,000 feet in a large city. One of the participating companies, Echodyne, offered this on its role with the project.

The DARPA testing involved radar sensors on two large tethered aerostat balloons flying at up to 400 feet above ground level over San Diego and National City, as well as fixed building-top and tower mounted locations providing large-area coverage. The sensors were tuned to detect and track small drones and distinguish them from background objects such as buildings, vehicles, and birds. The testing assessed how well the system could detect, track and identify over **150 sorties** of drones including various commercial off-the-shelf models, similar to those available at electronics stores or online retailers, which simulated unauthorized / unidentified drones flying in the city. <http://www.uasmagazine.com/articles/2095/darpa-echodyne-work-together-on-aerial-dragnet-system>



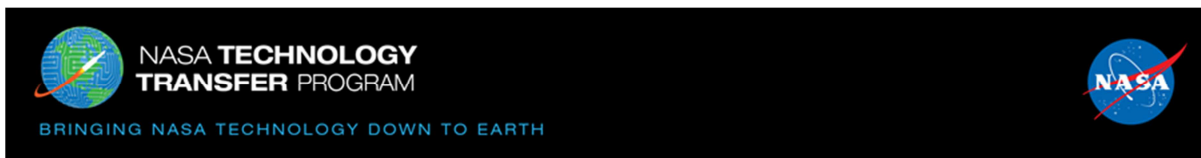
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With drones, Sony continues expansion into ag Sony Electronics Inc. December 04, 2019



Sony Electronics Inc. has announced a new Version 2.0 update for its Smart Agriculture Solution aimed at providing agricultural customers with new AI-based imaging capabilities. These new features, based on industry feedback, provide expanded functionality and are planned for rollout in March 2020.

With the launch of Sony’s Version 2.0 Software update, the enhanced agriculture solution consisting of a drone-mounted multispectral sensing unit and Fast Field Analyzer image analytics software for in-the-field crop management, monitoring and insights, will add Sony’s unique imaging and AI-based technology for stand counting. Stand counting allows growers to assess the planting quality, enabling replanting decisions to be made earlier and with greater accuracy. The Version 2.0 update will allow growers to precisely analyze large areas with ease. <http://www.uasmagazine.com/articles/2097/with-drones-sony-continues-expansion-into-ag>



- Unmanned Aerial Vehicle Technology - Developed by NASA. Available to You.

NASA is helping break down technical barriers to open up new capabilities for unmanned aerial vehicles. Check out the technologies below.



Safeguard

Safeguard alleviates the dangers of unmanned aircraft flying beyond their authorized perimeters. [Watch the video!](#)



Advanced VTOL Concept

NASA has developed an inexpensive, long endurance vertical takeoff and landing (VTOL) UAV. [Watch the video!](#)

NASA Technology Transfer Program nasa-tech-transfer@lists.hq.nasa.gov



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Dedrone tech secures UK infrastructure approval BUSINESS COUNTER-DRONE NEWS

UK ALEX DOUGLAS DECEMBER 6, 2019



Dedrone has been awarded certification from the UK's Centre for the Protection of National Infrastructure.

It received that award for its counter-drone DroneTracker platform which detects, tracks, and identifies drones by using **multi-sensor capability** combining RF, radar, and optical sensors.

The new CPNI drone detection standard is the **first official validation** of counter-drone technology.

It enables organizations deemed to be of critical national importance to adopt drone detection technology with the assurance that it has been tested rigorously.

https://www.commercialdroneprofessional.com/dedrone-tech-secures-uk-infrastructure-approval/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-318906-Commercial+Drone+Professional+DNA+-+2019-12-06

Fusion Flight's jet-powered drone produces 200 horsepower Josh Spires Dec. 6th 2019



The [AB5 JetQuad](#) is the latest product from Fusion Flight, a startup in Dallas. The company created it as a direct response to current drones with a limited payload capacity, slow top speed, and low energy density batteries.

The drone uses four jet engines in an H configuration along with thrust vectoring systems. The engines can swivel between vertical and horizontal positions, meaning it is a VTOL drone. It runs on common diesel fuel and has a capacity of five gallons. According to the company's website, diesel fuel has **40 times the energy density** of [Lithium batteries](#), taking only minutes to refuel rather than hours to charge. It hovers 15 feet above the ground and lowers the payload to the ground using four electric reels.

It has a modular design, allowing for easy manufacturing, repairs, and upgrades. The drone has only eight moving parts, four jet engines, and four servos, meaning it is less likely to break down. It currently makes 120 dB of noise if standing right next to it. Fusion Flight is currently exploring noise suppression technologies. <https://dronedj.com/2019/12/06/fusion-flight-jet-powered-drone-200-horsepower/>



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HOEVEN OUTLINES NORTH DAKOTA UAS LEADERSHIP, AIRPORT PROJECTS TO FAA ADMINISTRATOR Dec 08, 2019 [Chris Larson](#)



Senator John Hoeven, a member of the Senate Transportation, Housing and Urban Development Appropriations Committee, this week met with Federal Aviation Administration Administrator Steve Dickson to secure support for the continued advancement of North Dakota's unmanned aerial systems leadership and investment in the state's airports.

Among other things, the senator urged Dickson to ensure the FAA cooperates on beyond-visual-line-of-sight unmanned flights in North Dakota, including in the Red River Valley's **UAS Super Corridor** and using the statewide sensor network that is currently being developed. This builds on Hoeven's efforts to secure waivers for the state's **Integration Pilot Program (IPP)**, **Xcel Energy** and **General Atomics** to conduct a broader range of BVLOS activities. Hoeven also invited Dickson to North Dakota to see firsthand the state's efforts to safely integrate UAS into the national airspace. <https://www.am1100theflag.com/news/12992-hoeven-outlines-north-dakota-uas-leadership-airport-projects-faa-administrator>

Texas police use drone to nab burglary suspect Marc Nathanson December 6, 2019



The advent of **drone technology** is putting that capability into the hands of even **small law enforcement agencies**.

Now Bellaire police have three drones at their disposal, and officers say they're helping save lives. When police in the nearby town of West University were trying to locate a fleeing burglary suspect, the call went out to Officer Aaron Lysack, one of four licensed drone pilots with the Bellaire Police. Lysack, who was patrolling in his police cruiser, put his drone in the air sent it in search of the suspect.

"That drone was able to locate the suspect before the officers could, and basically lead officers to the suspect," Brown told KTRK. The drone located the suspect running through a backyard, and it recorded him as he tried to get rid of a backpack. When officers recovered it, authorities say the backpack was filled with the stolen items -- as well as a gun.



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"The drone was able to see that, document that on film, and have that video ready for court if needed," Brown said. For Lysack, drone technology represents a giant leap forward for law enforcement. <https://abcnews.go.com/US/chopper-problem-texas-police-drone-nab-burglary-suspect/story?id=67538438>

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Daejeon pilots drones to save ‘golden time’ in emergencies Special Reports 05 Dec 2019 by Sarah Wray: Editor, SmartCitiesWorld



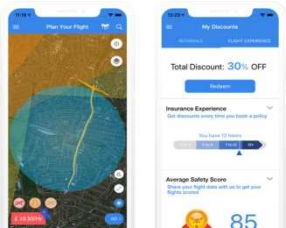
The South Korean city of Daejeon is trialing a drone service to make emergency response efforts more effective.

Daejeon, the fifth-largest metropolis in South Korea with a population of over 1.5 million, is piloting a system whereby a drone can reach any location in the city within two minutes. The drone captures real-time video footage and sends it back to the Smart City Integration Centre so that emergency services can be better prepared when they arrive and hit the ground running with treatment or other action.

The system is being trialed and, pending results, is scheduled to be rolled out more widely next year, with a drone placed on every **one of the 26** '119' emergency centre **rooftops** in Daejeon.

While operating these services, the drones will also collect data about air quality, parking availability, potential fire hazards and more. A weather information system detects whether it's safe for the drones to fly. <https://www.smartcitiesworld.net/special-reports/daejeon-pilots-drones-to-save-golden-time-in-emergencies>

SkyWatch.AI drone insurance launches partnership with ParaZero APPLICATION BUSINESS INSURANCE ALEX DOUGLAS DECEMBER 5, 2019



SkyWatch.AI drone insurance and ParaZero have entered into a collaboration that will allow drone pilots, **using the SafeAir Parachute**, to receive reduced rates on their drone insurance.

The companies have teamed up in order to further benefit safe pilots who take extra measures to reduce drone risks.

Pilots with the system can now share their flight data with SkyWatch.AI and receive a higher Safety Score that will provide them with a reduced rate. At the same time, SkyWatch.AI's pilots



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will be able to receive significant discounts for ParaZero's system in addition to their end-of-year prices.

The collaboration between SkyWatch.AI and ParaZero will allow drone operators to mitigate risk through the ASTM-compliant ParaZero system, reduce their insurance cost, and apply for a Flight Over People waiver with the FAA. <https://www.commercialdroneprofessional.com/skywatch-ai-drone-insurance-launches-partnership-with-parazero/>

Are drone swarms the future of aerial warfare? Michael Safi @safimichael Wed 4 Dec 2019



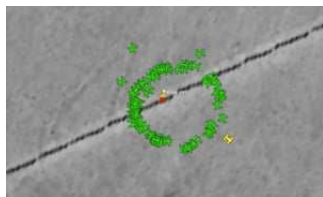
A US navy launch of multiple swarming drones.

For now, [military drone use is dominated by](#) lightweight surveillance unmanned aerial vehicles and larger attack UAVs.

The technology of swarming – drones deployed in squadrons, able to think independently and operate as a pack – is in its infancy, but armed forces around the world are investing millions of pounds in its development.

According to analysts, drone swarms of the future could have the capacity to assess targets, divide up tasks and execute them with limited human interaction.

“The real leap forward is swarming where ... a human says ‘Go accomplish this task’ and the robots in the swarm communicate amongst each other about how to divvy it up.



A test at China Lake, California, shows drone swarms forming an attack orbit.

Analysts predict we might see rudimentary versions of the technology in use within a decade. That might include swarms of drones operating on multiple different frequencies, so they are more resistant to jamming, or swarms that can block or shoot down multiple threats more quickly than the human brain can process.

“Two fielders running to catch a ball can [usually] coordinate amongst themselves,” Scharre says. “But imagine a world where you have 50 fielders and 50 balls. Humans couldn’t handle the complexity of that degree of coordination. Robots could handle that **with precision.**”

<https://www.theguardian.com/news/2019/dec/04/are-drone-swarms-the-future-of-aerial-warfare>



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Gartner: Enterprise drone shipments will increase 50% in 2020 IoT News 09

December 2019



Gartner predicts that global shipments of IoT enterprise drones will total **526,000 units**, an increase of **50%** from 2019. By 2023, the global research firm predicts that global shipments will reach 1.3m units. It will be the construction industry that will be making the most use of these drones between 2019 and 2023 – with shipments increasing from 141,100 in 2019 to 209,800 in 2020 to 509.5 in 2023.

Kay Sharpington, a principal analyst at Gartner, said: “The construction sector is an early adopter of drones, which causes construction monitoring to be the largest use case by shipments worldwide across the forecast. Drones are taking over tasks such as site surveying and earthworks management as they are faster and safer to carry out with a drone than on foot.” <https://www.iottechnews.com/news/2019/dec/09/gartner-enterprise-drone-shipments-2020/>

Raytheon's anti-drone laser system to be tested by U.S. Air Force EMMA HELFRICH, ASSOCIATE EDITOR



MCKINNEY, Texas. Raytheon Space and Airborne Systems won a \$13.1 million contract for the U.S. Air Force to purchase and test an additional high-energy laser weapon system (HELWS), adding a third to be deployed for testing, the Department of Defense announced.

The laser system uses a variant of Raytheon's Multi-Spectral Targeting System to detect and track drones before shooting them down. The system also has intelligence, surveillance, and reconnaissance capabilities.

In October, Raytheon first installed the HELWS systems on an all-terrain vehicle to test its maneuverability during a year-long overseas deployment. The new deal is a modification to a \$23.8 million contract to develop two prototype systems, bringing the total procurement for the program to \$36.9 million.

The contract funds testing of the additional laser system at an overseas location to assess its reliability, maintainability, and supportability data, as well as system operation against real-world or simulated hostile scenarios. <http://mil-embedded.com/news/raytheons-anti-drone-laser-system-to-be-tested-by-u-s-air-force/>



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DHS Continues to Warn Private Industry Against Using Foreign-Made Drones

Brian Garrett-Glaser December 9, 2019



Government cybersecurity officials continue to warn U.S. companies about the dangers of using unmanned aircraft systems designed or manufactured abroad, according to a sensitive document distributed to private industry by the FBI's Cyber and Infrastructure Security Agency on November 20.

"While companies operating within any country are typically expected to comply with applicable law and government regulations, foreign governments may require companies to disclose far more information without significant legal protection for customers," the bulletin reads. "UAS data is often sent to servers controlled by or accessible to the UAS manufacturing company or third-party application vendor ... Data servers run by or accessible to foreign companies, especially those located in foreign countries, may be susceptible to foreign law enforcement and government seizure without the benefit of the types of legal protections under US law." <https://www.aviationtoday.com/2019/12/09/dhs-continues-warn-private-industry-using-foreign-made-drones/>

Global Public-Safety Project Wants Data-driven Drones During Disasters

Jason Reagan December 09, 2019



[ResponDrone](#), an international project co-funded by the EU and the Korean government, recently surveyed first responders at a "Design Thinking" workshop in Greece last month.

Attendees agreed: constant, real-time data during a crisis is one of the top benefits of drone deployment. Workshop participants included regional and national authorities in charge of first-response, agencies, rescue services and fire departments from Greece, France, Armenia, The Netherlands, Latvia, Bulgaria and Israel.

"First responders wish to receive real-time data on current occurrences in the disaster area, on the position and status of potential victims and the first response units deployed in field, as well as the status and current location of available resources," ResponDrone project coordinator Max Friedrich said in a press release. <https://dronelife.com/2019/12/09/global-public-safety-project-wants-data-driven-drones-during-disasters/>



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Dielectric UAV Designed for the Utility Industry 10 Dec 2019



Oregon-based robotics company [Union Robotics](#) has unveiled the Meadowhawk DE, an industrial dielectric UAV designed specifically for the utility industry.

Built from ASTM F711 rated dielectric material, it is the result of two years field research working with electric companies, helicopter utility pilots and UAV utility inspection contractors, to tailor a UAV explicitly for use around high voltage assets.

Designed to considerably reduce the risk to human life while negating the need for investment in manned helicopters, it can be bought or leased and supplied with onsite training and a support line direct to the UAV engineers. The benefits of an industry-specific UAV include less pain points, reduced security risks and crucially the necessary electronic redundancy required for operating in high voltage and EMF environments.

The Meadowhawk Inspection Package comes with a high definition camera, can be equipped with a range of sensor options and a cargo release hook and features single and dual operator flight modes. <https://www.unmannedsystemstechnology.com/category/news/ugv-news/>

Seven Worlds One Planet: Drones reveal wonders of seven extraordinary continents Haye Kesteloo Dec. 9th 2019



The crew from Seven Worlds One Planet used drones to show the wonders of the seven extraordinary continents. The unmanned aircraft were deployed in some of the most beautiful and hostile environments on earth and include the ice of Antarctica and the scorching heat of the deserts of Africa.

As we know, modern drones are pretty quiet and have decent battery life, making them much more practical and environmentally friendly than helicopters. The crew from Seven Worlds One Planet took these unmanned aircraft to the corners of our planet to capture its beauty. [BBC One](#) shared a number of photos online that we would like to share with you below.

<https://dronedj.com/2019/12/09/seven-worlds-one-planet-drones-reveal-wonders-seven-continents/#more-22003>



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68% of Americans think drones are not safe, new poll suggests NEWS RESEARCH

UNITED STATES SAM LEWIS DECEMBER 10, 2019



The Hawthorn Group is a Virginia-based public affairs firm. Its chairman John Ashford spoke at Commercial UAV Expo Europe in Amsterdam recently, revealing data from a TargetPoint poll commissioned by The Hawthorn Group.

The poll stated that 58% think drones are a good idea, while 42% do not. Furthermore, 70% expect home delivery, of the type that Amazon has promised, within the next five or 10 years. Nearly half, however, think that such deliveries would be too dangerous to communities, while 82% think commercial drones used for deliveries will cause a serious accident sooner or later.

Another worry is the use of Chinese drones. 83% believe security concerns about Chinese manufacturers are valid, while 71% think they should be banned from use by the government. This follows news last month that the US government had grounded all of its Chinese-made drones amid fears that they could be transmitting US information to China.

https://www.commercialdroneprofessional.com/68-of-americans-think-drones-are-not-safe/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-319165-Commercial+Drone+Professional+DNA+-+2019-12-10

Fortem Technologies Snares NATO Counter-drone Agreement Jason Reagan

December 09, 2019



Counter-drone firm [Fortem Technologies](#) has been selected by NATO to demonstrate its SkyDome Network defense platform.

The Utah-based company will introduce the platform with a program titled “Comparative Analysis of Lethal, Low Collateral Damage Effectors Against Low, Small and Slow UAV.”

The SkyDome package encompasses Fortem’s autonomous drone interceptor, DroneHunter, as well as drone detection, classification and analysis capabilities.

When deployed, the system can neutralize drone attack threats against military or law-enforcement assets. <https://dronelife.com/2019/12/09/fortem-technologies-snares-nato-counter-drone-agreement/>

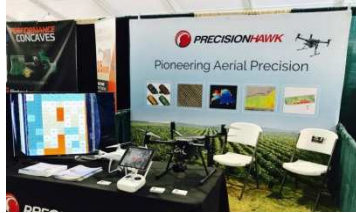


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PrecisionHawk bags \$32m in latest funding round BUSINESS FINANCIAL NEWS

SOFTWAREUNITED STATES SAM LEWIS DECEMBER 11, 2019



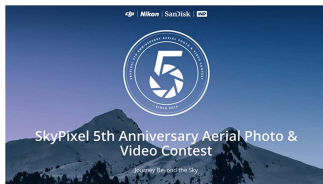
This brings PrecisionHawk's total funding to date to more than \$135m. Investors include Millennium Technology Value Partners, Third Point Ventures and Eastward Capital Partners.

The financing will accelerate sales initiatives and further market expansion, as well as continued innovation in PrecisionHawk's software tool, PrecisionAnalytics. The software uses artificial intelligence learning to help enterprises better utilize data collected by drones to solve business challenges.

This includes a heightened focus on high-quality drone services, the development of PrecisionAnalytics and enabling capabilities related to artificial intelligence and machine learning. https://www.commercialdroneprofessional.com/precisionhawk-bags-32m-in-latest-funding-round/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-319234-Commercial+Drone+Professional+DNA+-+2019-12-11

SkyPixel And DJI Launch Aerial Photo & Video Contest Celebrating 5th

Anniversary December 10, 2019 Photography & Videography



Running from December 3, 2019 to February 3, 2020, this year's contest introduces a special "Aerial Story" category to celebrate its 5th year and welcomes submissions from professional photographers, videographers, aerial enthusiasts and content creators around the globe. This year's contest is sponsored by the partner Nikon and Western Digital Corp.

"In the past five years, SkyPixel has seen millions of aerial photographers and content creators sharing their unique stories of the world, and also witnessed how drones unleash creativity and introduce fresh perspectives," said Basile David, Co-head of Marketing at DJI. "Through this year's contest, we hope to encourage more aerial enthusiasts to take their creativity and inspirations to new heights."

SkyPixel and DJI will give away more than **56 awards** worth a total of approximately \$117,000 USD, including products like the DJI Inspire 2, Nikon Z 6 camera, DJI Mavic 2, Mavic Mini, Ronin-SC and others. In addition, all the winners will be featured as SkyPixel recommended

Robert Rea | Axcel Innovation | Charlottesville and Portsmouth, VA
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photographers and have the opportunity to become a [DJI Creator](#). SkyPixel will also organize a series of exhibitions at different DJI Flagship Stores from the spring of 2020 to showcase the winning pieces. https://uasweekly.com/2019/12/10/skypixel-and-dji-launch-aerial-photo-video-contest-celebrating-5th-anniversary/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_12_11_2019&utm_term=2019-12-11

Making beyond visual line of sight drone operations commonplace in the UK

Haye Kesteloo Dec. 10th 2019



The UK Civil Aviation Authority has published its first guide aimed at supporting the industry to make unmanned aircraft flights beyond visual line of sight of the operator (BVLOS) an everyday occurrence.

Currently, BVLOS flights require permission from the Civil Aviation Authority and can only occur in specific, restricted cases.

Normalizing BVLOS will continue to push the UK forward as a world-leader in aviation innovation and technology.

- parcel delivery from a distribution center to a customer
- Long-distance aerial surveys of infrastructure such as power lines or highway construction
- Surveillance at the scene of an accident or incident, operated from an external control center
- Street mapping a whole city with optical and acoustic sensors

The guide details how future BVLOS operations can be achieved through testing and technology development. They set out the need for the regulator and innovators to build, test, learn and repeat in partnership in small steps to **work toward the vision** of safe BVLOS operations **becoming business as usual in the UK**. <https://dronedj.com/2019/12/10/beyond-visual-line-of-sight-drone-operations-commonplace/>



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Passenger Drone Company Ehang Announces IPO Miriam McNabb December 12, 2019

At Amsterdam Drone Week last week, a session discussion revealed that [Ehang is very close to commercial production](#) of passenger drones – ready to streamline production and processes to make drone taxis commercially priced and commercially viable. While the technology is there, infrastructure and regulations to support passenger drone use remains to be developed in most of the world – but the support that the company has received is indicative of the appetite for environmentally clean transportation alternatives around the globe. With this IPO, the company becomes one of the few drone specific companies to be offered publicly.



New York, December 12, 2019 – EHang Holdings Limited (“EHang”), an autonomous aerial vehicle technology platform company, announced today the pricing of its initial public offering of 3,200,000 American Depositary Shares representing 6,400,000 Class A ordinary shares at a public offering price of \$12.50 per ADS. In addition, EHang has granted the underwriters a 30-day option to purchase up to an additional 480,000 ADSs at the initial public offering price. The ADSs are expected to begin trading on the Nasdaq Global Market on December 12, 2019 under the symbol “EH”, and the offering is expected to close on December 16, 2019, subject to customary closing conditions.

<https://dronelife.com/2019/12/12/passenger-drone-company-ehang-announces-ipo/>

Major “Remote ID” Drone Tracking Standard Published by ASTM International

December 11, 2019 News



A highly anticipated ASTM International standard aims to satisfy the growing demand for better identification and tracking of unmanned aircraft systems in airspace systems worldwide.

The Remote ID standard supports technology that allows the general public and public safety officials to identify a drone using an assigned ID while preserving privacy of the operator’s personal identifiable information. The standard (to be published in the coming weeks with the designation F3411) was developed by the ASTM International unmanned aircraft systems (UAS) committee ([F38](#)).



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According to Gabriel Cox, drone system architect at Intel, the new specification outlines how drones will transmit the assigned ID, location, speed, and direction by broadcasting over the air and/or sending over a wireless internet connection to a UAS service supplier. “A receiver could be a common smartphone that will be able to associate the ID with the location of the drone,” he says. https://uasweekly.com/2019/12/11/major-remote-id-drone-tracking-standard-published-by-astm-international/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_12_12_2019&utm_term=2019-12-12

FlytWare Autonomous Drone Inventory Scan Deployed At European Air Cargo Company

December 11, 2019 News



At the leading edge of this innovation in inventory management is IAG Cargo, part of the same group that owns British Airways. With a vision to fully automate inventory counts at its air cargo facilities, IAG Cargo has been working closely with FlytBase on aerial inventory scans at its Madrid facility.

Inventory counting, while a critical business activity, consumes thousands of man-hours each year across IAG Cargo’s hubs in the UK, Spain, and Ireland. Increasing the frequency of such counts, a necessity in the age of global e-commerce and same-day delivery, is important – but impractical if done manually. Drones, however, can make this a reality – all packaged in the form of FlytWare, an autonomous aerial inventory scanning solution from FlytBase.

FlytBase’s [engagement with IAG Cargo](#) involved stakeholders from innovation, continuous improvement, warehouse operations, inventory management, digital transformation and business analysis. After prioritizing the key requirements for aerial inventory counts, FlytWare was trialed and tested by running dozens of indoor flights – the barcodes thus scanned were automatically mapped to their locations; making available the ‘ground truth’ data that could then be filtered for empty slots, compared with WMS data and analyzed for location accuracy.

Having thus been tested at IAG Cargo via proof-of-concept trials, and further refined during the pilot project, FlytWare is now being readied for production deployments at multiple IAG Cargo facilities. https://uasweekly.com/2019/12/11/flytware-autonomous-drone-inventory-scan-solution-deployed-at-european-air-cargo-company/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_12_12_2019&utm_term=2019-12-12



UAS and SmallSat Weekly News

Altitude Angel Wins Nationwide UTM Contract in the Netherlands Malek

Murison December 12, 2019

UK UTM provider Altitude Angel has announced the company has been awarded a contract to provide the Netherlands’ air traffic control authority, Luchtverkeersleiding Nederland (LVNL), with a nationwide UTM platform.



Altitude Angel’s solution will provide the Netherlands with a UTM platform aimed at safely integrating drones into Dutch airspace. Altitude Angel and LVNL have agreed to a three-year contract that will see the former provide several products and services, including a foundation U-Space platform that will be an important precursor to commercial drone use.

Altitude Angel will also provide LVNL with a drone registration system alongside web and mobile flight planning platforms. “Together with Altitude Angel, LVNL will deliver innovative functionality and facilitate new possibilities for the U-Space industry in the Netherlands, said Jurgen van Avermaete, LVNL, General Manager Procedures.

<https://dronelife.com/2019/12/12/altitude-angel-wins-nationwide-utm-contract-in-the-netherlands/>

Lift Aircraft says 13,000 people have signed up for drone rides; flights begin in beta mode in Texas ALAN BOYLE on December 11, 2019



A year after its [unveiling](#), Lift Aircraft says more than 13,000 people have signed up so far for rides on the Hexa passenger drone [that Amazon CEO Jeff Bezos checked out at a conference months ago](#).

Bezos had Hexa’s 18 rotors turning at Amazon’s MARS conference in March, turning heads in the process. Now [Lift Aircraft](#) — founded in Austin, Texas, by Matt Chasen, a former Boeing engineer and veteran entrepreneur — is letting experts fly the 432-pound, electric vertical-takeoff-and-landing craft for a series of beta tests.

Lift has built and tested three working Hexa prototypes, and it’s introducing an [ownership program](#) that would let backers purchase the aircraft and accessories for a cool **\$495,000**.



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The 13,000 signups are for joyrides that Lift plans to provide during a [25-city tour that's due to kick off next year](https://www.geekwire.com/2019/lift-aircraft-says-13000-people-signed-drone-rides-flights-begin-beta-mode-texas/). A ride lasting several minutes will cost \$149 to \$249, depending on which early-bird special is available. Lift says flight slots are sold out in New York, Los Angeles, San Francisco, Dallas and Austin — but for what it's worth, Seattle and Portland are still in play. <https://www.geekwire.com/2019/lift-aircraft-says-13000-people-signed-drone-rides-flights-begin-beta-mode-texas/>

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Rocket Lab inaugurates U.S. launch site Jeff Foust December 12, 2019



WASHINGTON — The U.S. Air Force will be the first customer for a Rocket Lab Electron launching in 2020 from a new launch site in Virginia, the company announced Dec. 12.

Rocket Lab formally opened Launch Complex (LC) 2, a launch pad at the Mid-Atlantic Regional Spaceport at Wallops Island, Virginia, adjacent to the pad used by Northrop Grumman's Antares rocket. The launch site, similar to the company's existing Launch Complex 1 in New Zealand, is specifically designed for U.S. government customers who prefer to launch from American soil and also want responsive launch capabilities.

The launch pad has additional features to support U.S. national security customers, like increased security. A separate integration facility down the road from the pad can support multiple Electron rockets with separate clean rooms for payload processing, part of efforts to be able to handle launches on short notice. The company estimates the site will support a staff of about 30 employees from engineering to office administration.

Rocket Lab announced that the first customer to launch on an Electron from LC-2 will be the U.S. Air Force, which will fly a **microsatellite** mission called STP-27RM for the service's Space Test Program in the second quarter of 2020. That program provides flight opportunities for advanced technologies seeking demonstrations in space. <https://spacenews.com/rocket-lab-inaugurates-u-s-launch-site/>



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Roswell approves local restrictions on flying drones NEWS Dec 12, 2019 David Ibata, For the AJC



Drone operators can no longer launch or land their unmanned aircraft on Roswell GA city property unless they have the city's permission.

The Roswell City Council approved on second reading an ordinance that gives local police the authority to regulate drone operations, prohibiting them from flying to or from city property, including parks, "whether owned, leased or otherwise possessed by the city, unless such is authorized."

The measure, added to a section of city codes concerning "Public Peace and Order," also states it is unlawful to operate a drone in violation of FAA restrictions.

Council Member Marie Willsey recommended that the city's Recreation, Parks, Historic & Cultural Affairs Department look at opportunities where drones might be permitted, or if a registration or approval process would be allowed, according to council meeting minutes.

<https://www.ajc.com/news/local/roswell-approves-local-restrictions-flying-drones/CuTYKV0W4JLo6ovS1gHmSJ/>