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Airspace Link Raises \$4 Million Seed Round



DETROIT, MICHIGAN, January 24, 2020 /<u>EINPresswire.com</u>/ -- <u>Airspace Link today announced</u> the launch of its AirHub™ for Pilots & Government platform. Additionally, the company has raised a \$4 million seed round led by Indicator Ventures with participation from 2048 Ventures, Ludlow Ventures, Matchstick Ventures, Detroit Venture Partners and Invest

Detroit.

Airspace Link's recent <u>FAA announcement</u> underscores how their platform is set to make a difference throughout the drone industry. As a supplier of the FAA's Low Altitude Authorization & Notification Capability, pilots using Airspace Link may receive airspace authorization in near real-time. Additionally, data provided by state & local governments is integrated into the platform, allowing pilots to make informed decisions about local governance, scheduled events, or active emergency situations. https://www.einnews.com/pr_news/507934659/airspace-link-raises-4-million-seed-round-debuts-faa-unmanned-aircraft-systems-uas-service-supplier-solutions

New ASTM Drone Pilot Training Standard Approved Kate O'Connor January 23, 2020



ASTM International has approved a new standard establishing minimum training requirements for unmanned aircraft systems operators. The new standard, which will be published as F3379, addresses general, field and search-specific knowledge and skills for UAS pilots operating from remote locations. It was designed to

support public safety agencies fielding UAS teams.

The standard was developed by its UAS committee with contributions from the homeland security applications committee and a joint working group on UAS public safety convened by ASTM and the National Fire Protection Association. The first version focuses on U.S. requirements with plans to "expand future editions to include international requirements." <a href="https://www.avweb.com/recent-updates/unmanned-vehicles/new-astm-drone-pilot-training-standard-approved/?MailingID=270&utm_source=ActiveCampaign&utm_medium=email&utm_content=Boeing+Pushes+Estimated+MAX+Return+To+Midyear%2C+Three+Dead+In+C-130+Crash&utm_campaign=Boeing+Pushes+Estimated+MAX+Return+To+Midyear%2C+Three+Dead+In+C-130+Crash+-+Friday+January+24%2C+2020



USS Montgomery uses unique unmanned aerial vehicle during live-fire exercise

Dylan Malyasov January 23, 2020 Aviation, Maritime Security, News, Photo

During a recent exercise, Sailors assigned to the Independence-variant littoral combat ship USS



Montgomery conducted flight operation of MQ-8B Navy Fire Scout of Helicopter Sea Combat Squadron 23.

The Fire Scout is the Navy's only unmanned aircraft to operate on land and at sea. The Fire Scout is a vertical take-off and landing UAV capable of carrying out surveillance, tracking and targeting missions.

The Navy has integrated a multi-mode maritime radar on MQ-8B and tested an onboard weapons capability, the Advanced Precision Kill Weapon System. The aircraft has also demonstrated the ability to operate concurrently with other manned aircraft while operating at sea. https://defence-blog.com/news/uss-montgomery-uses-unique-unmanned-aerial-vehicle-during-live-fire-exercise.html

Liteye Lights Up Military \$10M Contract with Counter-drone System Jason Reagan January 23, 2020



Colorado counter-drone firm <u>Liteye Systems</u> has won a \$10 million contract to deliver its Anti-UAS Defense Systems to an unnamed U.S. government agency.

The contract is the latest of several deliveries of the systems to the U.S. military and other agencies spanning the last three years to the tune of \$70 million.

AUDS deploys state-of-the-art radar, precision thermal and daylight cameras, advanced video tracking, and multiple non-kinetic defeat capabilities to neutralize hostile or errant drones. The company says AUDS has been used 1,000 times to defeat drones flown by ISIS and the Taliban overseas.

The Containerized AUDS variant the company sold features an operator suite. It is hardened for use in any climate and can easily be moved between locations.

https://dronelife.com/2020/01/23/liteye-lights-up-military-10m-contract-with-counter-drone-system/



Swiss Post's drone deliveries will resume this month Josh Spires Jan. 24th 2020



Swiss Post's <u>drone delivery</u> program will resume on January 27 after being <u>suspended last May</u> due to crashes. The drones were used to transport medical supplies and samples between two hospitals in less time compared to standard delivery methods.

Swiss Post and drone partner company Matternet

brought in a group of independent aviation experts to take a closer look at the built-in safety mechanisms of the drones. In late December, the experts concluded the investigation, giving Swiss Post and <u>Matternet</u> suggestions for improvements before flying again

One of the crashes took place because the drone's parachute system didn't deploy correctly. Matternet and <u>Swiss Post</u> are sticking with the parachutes, stating, "There is no such thing as zero risks in aviation," further saying that if the drone was to deviate from specified values, a controlled parachute landing will take place. https://dronedj.com/2020/01/24/swiss-post-matternet-drone-deliveries-resume/#more-23251

Recreational drone pilot assists in search and rescue operation and finds missing girl Haye Kesteloo Jan. 24th 2020



A recreational drone pilot assisted in a police-organized search and rescue operation and found a missing girl with his drone in the UK. The hobbyist drone operator has received a Chief Constable's Citizen's Commendation Award from the police for his help.

For more than 15 hours, a 14-year-old girl had been missing from her home, when officers received intelligence that she might be near Irlam Locks on the Manchester Ship Canal. When the police arrived at the location, they ran into recreational drone pilot Michael Hooper, 59, who was flying his unmanned aircraft.

The National Police Air Service and the Drone Unit were both unavailable to assist in the search and rescue mission, so the officers asked for Hooper's help. After a short period of time, the hobbyist drone pilot found the missing girl, who was sitting behind trees along the waterside. He kept her in his sights until the officers approached.



Hooper has been rewarded by Greater Manchester Police for his actions last August with a Chief Constable's Citizen's Commendation Award. https://dronedj.com/2020/01/24/recreational-drone-pilot-assists-in-search-and-rescue-operation-and-finds-missing-girl/

Central NY company gets FAA approval to spray crops with drones Jan 23 Rick Moriarty rmoriarty@syracuse.com



Fulton, N.Y. -- The Federal Aviation Administration has given a small company in Fulton the green light to begin spraying crops with drones. <u>Empire Drone Co.</u> said Wednesday it has received approval from the FAA to begin offering the service to farmers.

"We've joined just a handful of drone companies in the U.S. with this certification," said Sean Falconer, who operated an

aerial photography business before founding Empire Drone with retired Fulton firefighter John McGraw in 2018. The company plans to begin offering crop-spraying service around New York starting this spring, using drones to apply pesticides, herbicides and seeds to orchards and farms.

Spraying by drones is faster and saves farmers money because it requires less equipment, chemicals and labor compared with spraying from the back of a tractor, he said. That's especially true in hilly terrain where it is difficult for tractors to reach.

The company's drones can spray up to 24 acres an hour and can fly along a pre-programmed path or be operated manually for spot spraying, the company said. With the help of an onboard radar system, they can maintain a consistent elevation a few feet above a field. https://www.syracuse.com/business/2020/01/central-ny-company-gets-faa-approval-to-spray-crops-with-drones.html

Swiss trader makes drone aerial inspection firm acquisition APPLICATION BUSINESS EUROPE NEWS ALEX DOUGLAS JANUARY 23, 2020



DXT Commodities, a Swiss commodity trader operating internationally and specialized in the management of renewable power, has signed an agreement for the acquisition of a significant share of WESII S.r.l.

WESII S.r.l. is an Italian start-up, established in 2016 by a team of people with extensive international experience in optical and multispectral analyses.



The company carries out aerial inspections using drones equipped with thermal and infrared sensors capable of analyses that are mainly used in the renewable sector.

With the acquisition, DXT Commodities says it intends to expand its range of services to meet the increasingly complex requests of renewable power plants owners, including monitoring, predictive analysis of potential failures and supporting a plant's profitability.

https://www.commercialdroneprofessional.com/swiss-trader-makes-drone-aerial-inspection-firm-acquisition/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-322095-Commercial+Drone+Professional+DNA+-+2020-01-23

A Social Entrepreneur's Defense of Simple Solutions TEMIE GIWA-TUBOSUN | Founder and CEO, LifeBank IFEOLUWA OLOKODE | Partnerships and Growth Lead, LifeBank AISHA ABIOLA | Chief of Staff, LifeBank

When we began building <u>LifeBank</u>, a Nigeria-based startup that delivers essential medical supplies, we launched an app through which hospitals could order blood on demand. When we modified our strategy and set up our 24/7 call center, orders rose by over 300 percent.



When it came to delivery, we were determined to work within the regulatory, geographical, and financial realities of our market. We chose to use motorcycles to navigate the congested, traffic-laden streets of Lagos, and we use boats to reach rural islands off the

coast. And as of a few weeks ago, we added drones to our suite of delivery solutions.

Together, this simple, tech-powered solution has enabled us to move over 17,000 products to over 450 hospitals and save over 6,000 lives. We're proud to be a Frontlines of Health Solver.

Read more <a href="https://solve.mit.edu/articles/social-entrepreneurship-defense-of-simple-solutions?utm_source=MIT+Solve&utm_campaign=e9f536fac2-CROWDSOLVE_2020_01_23&utm_medium=email&utm_term=0_66eabb650a-e9f536fac2-62297401&mc_cid=e9f536fac2&mc_eid=449c147be9



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Surviving tsunamis with Nokia drone networks Arnaud Legrand Jan 22 2020



The Tohoku Region has been recognized internationally by the United Nations as a symbol of disaster risk reduction and reconstruction. The unusual strength of the 2011 earthquake, the largest ever experienced in Japan, and the unprecedented height of the tsunami that followed, led to 19,000 deaths, with over 1,000 just in the area around Sendai.

It was with this recent and painful history in mind that Sendai City and Nokia set out to test whether a Nokia drone network could solve some of these problems. The drones were equipped with speakers, HD cameras and thermal cameras. During the simulated disaster, the testers were able to issue a major tsunami warning to evacuees in the coastal areas through the drone speaker, and monitor the tsunami arrival zone and coastal areas through drone camera images.

They also guided people to evacuation sites using the drones to convey directions, and monitored the movements of evacuees using the drone cameras. The infrared cameras are able to see people in the dark and when visibility is obscured. The test was successful and highlighted how first responders can facilitate disaster prevention and mitigation without risk to the personnel managing the evacuation activities.

One of the technical challenges of the solution is to provide reliable, mission-critical communications for controlling drones over large distances and at speeds of 80–110km/h. The network also has to carry streaming HD video and infrared imaging from drones back to the regional emergency response center and transmit audio traffic to the drone speakers.

We invite you to <u>watch the video</u> on the Sendai City smart city project and download the case study <u>here</u>. <a href="https://www.nokia.com/blog/surviving-tsunamis-nokia-drone-networks/?utm_source=Airborne+International+Response+Team+%28AIRT%29+News+List&utm_campaign=d7aed2ee2e-

<u>EMAIL CAMPAIGN 2020 01 26 01 39&utm medium=email&utm term=0 2ecada6f57-d7aed2ee2e-</u> 33089729



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XQ-58A Valkyrie expands flight envelope and safely recovered in fourth testGarrett Reim 24 January 2020



The AFRL says that the XQ-58A met all its test objectives and expanded its flight envelope, including flying at an undisclosed higher altitude as part of an effort to gather data in representative real-world flight conditions.

"Flying at this altitude helped us gather important data such as vehicle response to temperature and vibration, which will prepare us as we move toward our next flight test," says program manager Michael Wipperman. "We were able to show recovery for a successful flight at even higher altitudes. Given that we have overcome these challenges, we have confidence that the aircraft can continue its progression into flying in more representative conditions."

"A total of five flights are planned for the XQ-58A, with objectives that include evaluating system functionality, aerodynamic performance, and launch and recovery systems. The fifth flight, scheduled for later this year, will be a capability demonstration showcasing the ability of the vehicle to support operational needs." https://www.flightglobal.com/fixed-wing/xq-58a-valkyrie-expands-flight-envelope-and-safely-recovered-in-fourth-test/136364.article

Maine woman stalked by drone; police unable to help AP January 25, 2020

GORHAM, Maine (AP) — Mary Dunham says a drone tracked her in her car on Tuesday as she drove to a gas station, where she called police, and then to her home in Gorham. It followed her eight miles to her brother's house in Standish the following day.

It was an "unnerving" experience, she said. "The officer arrived and said, 'Yeah, I see it. I don't know what to tell you though. We can't do too much,'" she said.

Some states have laws that make it a crime to use drones for surveillance that violates a person's reasonable expectation of privacy, but Maine is not one of them, the Portland Press Herald reported. https://www.boston.com/news/local-news/2020/01/25/maine-woman-stalked-by-drone-police-unable-to-help



Playing traffic cop for drones in cities and towns nets Airspace Link \$4 million Jonathan Shieber@jshieber January 23, 2020



Companies like <u>Airmap</u> and <u>KittyHawk</u> have raised tens of millions to develop technologies that can help cities manage congestion in the friendly skies, and now they have a new competitor in the Detroit-based startup, <u>Airspace Link</u>, which just raised \$4 million from a swarm of investors to bring its services to the broader market.

The financing follows the company's reception of a stamp of approval from the <u>Federal Aviation Administration</u> for low-altitude authorization and notification capabilities.

According to chief executive Michael Healander, what distinguishes Airspace Link from the other competitors in the market is its integration with mapping tools used by municipal governments to provide information on ground-based risk. "We're creating the roads based on ground-based risk, and we push that out into the drone community to let them know where it's okay to fly." https://techcrunch.com/2020/01/23/playing-traffic-cop-for-drones-in-cities-and-towns-nets-airspace-link-4-million/

Use of drones for deliveries is becoming more common in Virginia town Kristi King @KingWTOP January 21, 2020

"We're doing that in Christiansburg, near the Virginia Tech campus, on a daily basis; and I would have thought that was something that would never happen," said Mark Blanks, director of the <u>Virginia Tech mid-Atlantic Aviation Partnership</u>, a drone test site designated by the Federal Aviation Administration. "Wing is the name of the company, and they are the sister company of Google."

Wing has partnered with FedEx, Walgreens and a local company called Sugar Magnolia. It has been delivering packages weighing 3.5 pounds or less in the greater Christiansburg area since October 2019. Deliveries include things such as chocolate, over-the-counter medicine and sunscreen.

Wing and UPS now have certification as commercial air carriers, and <u>FAA certification</u> is a big next step. "It's everything from how they train the pilots, how they operate the aircraft, how they maintain it. If they approve all those details, and that is the first time ever the FAA has stamped approval for a drone operation," Blanks said. https://wtop.com/tech/2020/01/use-of-drones-for-deliveries-becoming-more-common-in-va/



Japan Airlines and Terra Drone to test delivery of emergency goods by drone in Yabu City January 27, 2020 Jenny Beechener UAS traffic management news



JAL and Terra Drone plan delivery of pharmaceuticals and other emergency supplies in mountainous terrain. The demonstrations are due to take place in Spring 2020 over a 25km route.

JAL is providing operational knowledge and Terra Drone is providing a fixed wing small UAV and Terrra Unmanned Traffic Management system. Yabu City is coordinating activity with the local community and related parties. Medicao Corporation is providing test equipment.

The purpose is to demonstrate the use of UAV technology to deliver medical care in remote areas. Yabu City also investigating drone use in agriculture and hopes to expand into other areas such as disaster, logistics and medical care assistance. Through these demonstrations, Yabu City will work on the deregulation of UAV technology, aiming to assist unpopulated regional areas in Japan. https://www.unmannedairspace.info/latest-news-and-information/japan-airlines-and-terra-drone-to-test-delivery-of-emergency-goods-by-drone-in-joint-project-with-yabu-city/

Launchers Get Ready for the Small Satellite Gold Rush TEREZA PULTAROVA

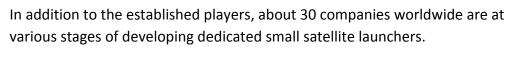


Just five years ago, small satellite operators would say "yes" to any possibility to get into orbit at a reasonable price, says Stephen Eisele, vice president of Business Development at Virgin Orbit.

Where cost used to be the single decisive factor, the requirements to get into orbit on time and into a specific orbit are becoming more

important. Established launch providers, that may have regarded small satellites in the past only as filler for spare capacity, are embracing the new trend and tailoring their offerings specifically to the new customers' needs, partly to offset the decline in the geostationary

satellite market.



SpaceX launched the Spaceflight SSO-A: SmallSat Express mission in December 2018, carrying 64 spacecraft from 34 organizations.



According to Arun Kumar Sampathkumar, industry manager for Aerospace & Defense at consulting firm Frost & Sullivan, 873 small satellites were launched in the three-year period between 2015 and 2018, out of which 499 were commercial. The firm estimates the next decade will see nearly 10,000 small satellites launched, over 9,000 of which will be launched by entities that have already started launching. http://interactive.satellitetoday.com/via/february-2020/launchers-get-ready-for-the-small-satellite-gold-rush/

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Drones to deliver lab samples for San Diego children's hospital APPLICATION DELIVERY EMERGENCY SERVICES HEALTH NEWS UNITED STATES SAM LEWIS JANUARY 27, 2020



Replacing courier delivery services that can be affected by high traffic volume, the drones will bridge the last five miles between San Diego International Airport and the Rady Children's Institute for Genomic Medicine. The hospital uses whole genome sequencing to uncover rare

diseases in critically ill newborns.

Currently in early planning stages, the Deloitte and RCIGM teams will work on the plan for their drones to deliver lab samples alongside the FAA, which will help minimize flight risk and optimize the route. The operation will then be used as a blueprint internationally.

Mathew Rommel, commercial market leader for Deloitte U.S. Drone Services, commented to *FierceBiotech*: "Don't think of the flight path simplistically as flying the shortest straight-line distance from airport to hospital, but instead navigating an efficient path that takes into account terrain of the ground being flown over."

https://www.commercialdroneprofessional.com/drones-to-deliver-lab-samples-for-san-diego-childrens-hospital/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-322252-Commercial+Drone+Professional+DNA+-+2020-01-27

A Day in the Life Of Flirtey: The Future Of Delivery January 27, 2020 News



Flirtey, the industry-leading drone delivery service, released today a rare, inside look at the startup company's headquarters and operations. The company's ability to manufacture its aircraft from the ground up within its own facility has



accelerated the safety, reliability and production of its technology.

As shown in the video, its technology includes the Eagle, a delivery drone; the Portal, a sophisticated takeoff and landing platform that enables scalable operations; and an autonomous software platform that enables drones to deliver safely to American homes.

The technology is designed to safely deliver 75% of packages in less than 10 minutes. <a href="https://uasweekly.com/2020/01/27/a-day-in-the-life-of-flirtey-the-future-of-delivery/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_01_27_2020&utm_term=2020-01-27_

Open Source Drone Operating Systems Continue to Gain Ground Miriam McNabb January 27, 2020



Auterion – a company which helps drone companies put increasingly complex open source elements of drone operation together so they can focus on their differentiators – received a \$10 million funding round in September of 2018. Run by the originators of the open source PX4 drone operating ecosystem, their growth since then is evident on their website – the list of fixed wing, quads, multicopters, and heavy lift drones, all powered by open source operating

systems, keeps growing.

While Auterion is the leading contributor to the PX4 ecosystem, they aren't the only ones: and that's meaningful to the drone industry. Continued contributions from universities and research institutions indicate that research projects continue to use and develop the ecosystem. And more diversity in the list from corporate institutions means that the industry can expect to see more open source powered hardware offerings on the market either this year or next.

The following is taken from a DRONELIFE exclusive peek at Auterion's PX4 contribution statistics which they will publish later this week: https://dronelife.com/2020/01/27/open-source-drone-software-is-continues-to-gain-ground-the-year-in-review-for-px4/

AiRXOS Adds a Slew of New Partners for End-to-End Drone Solutions Miriam McNabb January 27, 2020



AiRXOS, a provider of Unmanned Traffic Management solutions, announced the expansion of their Air Mobility Platform Ecosystem with the addition of 11 Unmanned Aircraft System technology, service, and business



partners to help scale and accelerate the adoption of UTM solutions for agencies and enterprises. Joining current partner, Measure, new partners include: Adams and Reese LLP, AeroVironment, Inc., AIRT, Inc., Avitas Systems, a Baker Hughes venture, DeTect Inc., Fortem Technologies, Kongsberg Geospatial, NUAIR and The New York UAS Test Site, SRC, Inc., SPH Engineering, and Syniverse. The expanded group provides integrated technology & functionality, built-in regulatory compliance and an integrated view of airspace for real-time operations.

AiRXOS is launching two Innovation Centers at the company's headquarters in Boston, MA, and at the GE Aviation offices in Pinellas Park, FL. Both sites will showcase operations in a Command Center setting. https://dronelife.com/2020/01/27/airxos-adds-a-slew-of-new-partners-to-provide-customers-with-end-to-end-drone-solution/

OneWeb, U.S. senator, urge FCC to act on 2018 request for 1,260 more satellites Caleb Henry January 27, 2020



WASHINGTON — As OneWeb prepares to begin monthly launches at the Baikonur Cosmodrome in Kazakhstan for its broadband constellation next month, the company and a U.S. senator are pushing the FCC to act on an application filed nearly two years ago for 1,260

more satellites.

OneWeb and Sen. Tim Kaine (D-Va.) contacted the U.S. Federal Communications Commission about the application, which if approved would allow OneWeb to provide internet access in the United States with a total of 1,980 satellites. The company is currently authorized for service with 720 satellites, of which six are in orbit and the next 34 launch Feb. 7. In a letter filed with the FCC Jan. 24, the company said it will soon need to arrange more launches so it can continue expanding its constellation after 2021. The company has secured rides to orbit for roughly 720 satellites already with Arianespace on 20 Soyuz rockets and the inaugural flight of the Ariane 6 late this year.

OneWeb, headquartered in the United Kingdom, does not need FCC approval to launch satellites, but views the U.S. market as significant enough to influence its constellation plans. https://spacenews.com/oneweb-senator-urge-fcc-to-act-on-2018-request-for-1260-more-satellites/

DroneUp Launches Airspace Planner with Native LAANC Integration



Virginia Beach, VA (January 28, 2020) -- DroneUp, LLC, an end-to-end drone pilot service provider for aerial data collection, is pleased to announce that

lobert Rea | Axcel Innovation | Charlottesville and Portsmouth, VA robert.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com



it has been named an Unmanned Aircraft System Service Supplier to provide the Low Altitude Authorization and Notification Capability initiative for the Federal Aviation Administration. DroneUp's LAANC capability will be available in-app through Airspace Planner providing its client base the next level of efficiency for complete drone pilot management.

DroneUp's Airspace Planner provides pilots the capability to create plans within FAA controlled Flight Information Regions, to seek LAANC approval and to verify insurance for their DroneUp missions. In addition to executing missions, Airspace Planner is also available to anyone that wants to create a plan and request airspace authorizations. While this release will only integrate authorizations FAA FIRs, the platform was built to be extended to allow for authorizations globally. www.droneup.com

Drones to deliver spare parts and tools to wind turbines at sea APPLICATION DELIVERY EUROPE INTERNATIONAL NEWS SAM LEWIS JANUARY 28, 2020

Companies Orsted, Siemens Gamesa and Esvagt have announced collaboration on a project to deliver spare parts and tools to wind turbines at sea.

The drones would cover the last mile between service operations vessels and technicians working on wind turbines, delivering small components needed for repair.

Esvagt head of new services business development Flemming Hjorth said: "When we transfer a WTG technician from vessel to WTG, they bring both spare parts and tools with them. But it often happens that the technician needs additional equipment, tools or spare parts while inside the WTG. Today, such a scenario requires the vessel to return to the WTG, or that we send a transfer boat over to the WTG with the necessary gear, which the technician then has to get down and get. This process can be optimized."

https://www.commercialdroneprofessional.com/drones-to-deliver-spare-parts-and-tools-to-wind-turbines-at-sea/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-322376-Commercial+Drone+Professional+DNA+-+2020-01-28

Drones are measuring wildlife losses in the Australian bushfires Josh Spires Jan. 28th 2020



Animal rescue group WIRES has partnered with Australian UAV to get drones into the air to measure and track the <u>wildlife</u> that managed to survive the devastating Australian bushfires. <u>The</u>



Ripper Rescue Alliance has deployed its drones to help with the massive task ahead.

The first drones to hit the skies were <u>deployed last Thursday</u> in the early hours of the morning. The drones were equipped with infrared and vision cameras to look for injured wildlife.

Group coordinator for the Ripper Rescue Alliance Ben Trollope said there is a possible future for the drones to be deployed with food and water to be dropped at feeding stations around the affected areas. The drones can cover 100 hectares and were deployed in the early hours of the morning to get the best results from the <u>infrared cameras</u> locating wildlife on the ground. They were able to locate patches where the fires didn't reach, and within those patches, they would spot up to 20 Kangaroos and Wallabies, a great sight in such devastation.

Drones were also brought in to https://dronedj.com/2020/01/28/drones-measure-wildlife-losses-australian-bushfires/

29Jan20

'Skyborg' Wingman Drones Are Coming, and F-35 Pilots Couldn't Be Happier January 28, 2020 David Axe Follow @daxe on TwitterL



Skyborg is the overarching program for developing small, low-cost, high-performance armed drones that can accompany manned fighter jets into combat.

Commanded by a nearby fighter pilot or some other remote operator with a big assist from onboard artificial intelligence, the wingman drones could fly ahead of manned planes in order to extend sensor coverage. They could fire their own weapons at targets that the operators designate. A swarm of wingman drones also could absorb missile shots from enemy forces.

A new version of the Air Force's F-35A stealth fighter, as well as the heavily upgraded version of the F-15 that the flying branch hopes to acquire could function as flight leads for the service's wingman drones. https://nationalinterest.org/blog/buzz/skyborg-wingman-drones-are-coming-and-f-35-pilots-couldnt-be-happier-117881



Aerobotics CEO says business is ready to build on US launch and lead the way in agritech AGRICULTURE APPLICATION HEADLINE NEWS ALEX DOUGLAS JANUARY 29, 2020



The company's CEO, James Paterson, says the business is ready to build on its highly successful launch in the US and strategically drop further roots and extend services in numerous regions around the world. This includes both North and South America, South Africa and Australia, in addition to riding the demand for its world-leading technology, Paterson says strategic partnerships throughout the

agriculture value chain could become "game changers".

He commented: "The awards are obviously a testament to the solid proposition we offer and validation of the technology that we have and continue to develop. Beating out international counterparts in the InVivo Quest Iberia awards, for instance, proves to us that we really are onto something great, leading our international peers.

"However, we like our work to speak for itself. We are offering real products that work and deliver value. Globally, we have more than 140 000 hectares of farmland on the platform, and growing every week. We have a real product stack, delivering real value to real clients." https://www.commercialdroneprofessional.com/aerobotics-ceo-says-business-is-ready-to-build-on-us-launch-and-lead-the-way-in-

agritech/?utm source=Email+Campaign&utm medium=email&utm campaign=45819-322424-Commercial+Drone+Professional+DNA+-+2020-01-29

Autonomous drone wireless charging market to grow 400% INNOVATION INTERNATIONAL NEWS TECHNOLOGY UNITED STATES SAM LEWIS JANUARY 10, 2020



The autonomous drone wireless charging and infrastructure market has been forecast to grow from \$47m at the end of 2018 to \$249.3m in 2024, according to a report by BIS Research.

This would constitute an impressive CAGR 34.78%, as noted by the report, titled 'Global Autonomous Drone Wireless Charging and Infrastructure Market – Analysis and Forecast 2019-2024'. High growth rate in the market, BIS says, signals desire to further automate UAV operations.

With the drone wireless charging technology, autonomous drones will automatically find a predetermined landing pad that also acts as a wireless charger. This removes the need for a



person to manually plug in the drone after every operation. The technology is particularly useful for beyond-visual-line-of-sight (BVLOS) drone use.

Sudheer Uniyal, lead analyst at BIS Research, commented: "The increasing demand for BVLOS drones in different commercial applications in future is expected to help in fueling the market for the wireless drone charging system. This is because a drone with high payload capacity and endurance needs more power backup for continuous operations."

https://www.commercialdroneprofessional.com/autonomous-drone-wireless-charging-market-to-grow-400/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-322424-Commercial+Drone+Professional+DNA+-+2020-01-29

30Jan20

Drones May Someday Deliver Genetic Tests to Save Kids' Lives Jason Reagan January 28, 2020



<u>Deloitte</u> and <u>Rady Children's Institute for Genomic Medicine</u> are teaming up to explore drone delivery for medical samples from the hospital to the lab for genomic testing. When minutes count, an aerial delivery soaring high above snarled-up traffic can provide Rady doctors with

timely <u>whole-genome sequencing</u> tests to diagnose newborns and children with rare genetic diseases.

Rady CEO Stephen Kingsmore said. "When minutes matter, we can't afford to have a sample delayed in transit. Josh Nelson, principal, Deloitte Consulting, said, "Together with Rady, we plan to go from strategy to testing to operational and develop a blueprint for other health care organizations to use."

As testing ramps up, the team will work with the FAA to validate the drone system's safety as well as to consider issues such as temperature control and flight protocol during deliveries. If successful, the group could expand the program to deliver other types of samples over farther distances – especially to rural, underserved regions. https://dronelife.com/2020/01/28/drones-may-someday-deliver-genetic-tests-to-save-kids-lives/



Airspace Link: A New Player in UTM Solutions Raises \$4 Million Miriam McNabb January 29, 2020



Unmanned Traffic Management (UTM) solutions are a fast growing sector in the drone industry right now — as evidenced by new funding for <u>Airspace Link</u>. The Detroit-based startup has just won an additional \$4 million on top of initial seed funding to bring their services to market, having already received FAA approval to

provide low altitude authorization and notification capabilities.

Their differentiator in the increasingly crowded field of airspace management is a partnership with ESRI, the geographic information giant, and integration with the ground-based mapping tools that most local and state governments use. This combination of airspace intelligence, which could inform pilots of potential conflicts with manned flights and other unmanned flights; and ground intelligence, which could inform pilots of the locations of parks, schools and other areas that might be off limits, makes sense. As local governments fight for more influence over where drones can and cannot fly, pilots may need a way to be informed of local temporary or permanent restrictions, such as flight over parade routes or town offices. https://dronelife.com/2020/01/29/airspace-link-a-new-player-in-utm-solutions-raises-4-million/

31Jan20

Fully Automated Drone Solutions and 5G Networks are a Game Changing Combination Miriam McNabb January 30, 2020



Of all of the buzz words used in the drone industry in 2019, "automation" was one of the biggest. Along with AI, drone companies touted automation in every aspect of drone use. There are not many drone companies, however, for whom autonomous flight truly means flight without the presence of a human operator – and Percepto is one of them.

Percepto offers a "drone-in-the-box" solution: one designed for heavy weather and industrial environments. The Sparrow can be remotely scheduled to launch from the base, follow a predefined flight path, and then return to the base for battery charge and data upload. It can also be remotely launched on demand as a response to an emergency or anomaly. Truly automated drones mean no pilot skills required, and no changing the batteries or dealing with the



hardware. https://dronelife.com/2020/01/30/fully-automated-drone-solutions-and-5g-networks-are-a-game-changing-combination/

After delaying Remote ID three times, FAA denies request to extend comment period Haye Kesteloo Jan. 30th 2020



After delaying Remote ID for drones three times themselves, the FAA has denied a request from commenters to extend the 60-day commenting period that ends on March 2. The agency states that "subsequent delays in promulgation of a final rule implementing remote identification of UAS would not be

consistent with the safety and security objectives of the proposed rule."

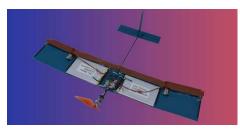
On December 26 the FAA released its proposed rules, or NPRM for Remote ID for Drones. Before these new, overly restrictive, expensive, and privacy-invading rules go into effect, hobbyist and commercial drone pilots have a 60-day window that ends on March 2, 2020, to submit their comments to the FAA in the hope that the rules might be changed. After the FAA has delayed issuing these proposed rules three times themselves, they have denied a request from commenters to extend the commenting period beyond March 2.

The 319-page document is not easy to understand, at times even confusing, and it raises many questions about exactly how these new rules will be implemented. For instance, what will these new rules mean for different kinds of drone applications ranging from drone racing to search and recovery missions, or just a parent who would like to fly a drone with their child?

DroneDJ has been working behind the scenes with a number of drone organizations to make sense of these new rules and to come up with feedback, ideas, and a <u>Drone Advocacy Kit</u> to help other drone pilots understand these rules and inform them about what they can do to take action. https://dronedj.com/2020/01/30/faa-denies-request-to-extend-commenting-period-for-nprm-remote-id/



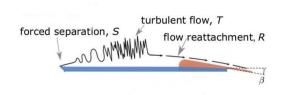
Bio-inspired wing design reduces small-drone turbulence Josh Spires Jan. 30th 2020



<u>Researchers</u> from Brown University developed a new wing design for small drones that's inspired by the wings of birds and insects. The new wing allows <u>small drones</u> to fly more efficiently and makes them more "robust to atmospheric turbulence."

The bio-inspired wing, dubbed as the "Separated Flow Airfoil," reduces the effects of turbulence and improves flight efficiency.

The design is <u>patented</u>, and the researchers plan on refining the design to squeeze even more performance out of the "Separated Flow Airfoil" design.



The wing is designed to separate the flow of air at the leading edge. The flow is then reattached to the airfoil with the help of a small rounded flap located on the wing's trailing edge. The airfoil allows for a more efficient and stable flight for

drones with wingspans of one foot or less.

Do you think we should be looking at nature more often to further develop drones? Let us know in the comments below. https://dronedj.com/2020/01/30/bio-inspired-wing-design-reduces-small-drone-turbulence/