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UAS and SmallSat Weekly News

Contents

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

21Mar20

Flock Joins Fight: £10,000 Drone Insurance for Companies Working in Coronavirus Response Miriam McNabb March 20, 2020

UK-based insurtech firm Flock is joining the fight against coronavirus. The company has pledged £10,000 of free drone insurance to pilots working on COVID-19 crisis response. Pilots can learn more and find out if they are eligible here. Flock is also allowing customers to freeze their annual policies during the crisis, in support of businesses who have taken a hit due to the numerous global shutdowns.

Many drone companies are contributing to the crisis. Drones have been used to deliver medicines and supplies to quarantined areas in China. DJI and JD have also used drone technology to spray disinfectant over public areas .   DJI has converted crop spraying drones to be able to spray disinfectant, covering more area in less time – and with lower risk of exposure to workers.

Drones equipped with loudspeakers have also been used to make public announcements and to enforce government lockdowns. And throughout the crisis, aerial photographers have provided dramatic images of empty streets and cities. If you are a pilot interested in learning more about how to help, AIRT and DRONERESPONDERS have started a Covid-19 task force. https://dronelife.com/2020/03/20/flock-joins-fight-10000-of-drone-insurance-for-companies-working-in-coronavirus-crisis-response/

French Riviera police use drones to give coronavirus orders Haye Kesteloo Mar. 20th 2020

After China and Spain, the French Riviera police are now using drones as well to inform people about the dangers of the coronavirus and to order them to keep a safe distance.

If you were to venture out onto the deserted beaches below the Promenade des Anglais in Nice, there is a good chance you will be shouted at from above. The French Riviera police have started to use drones to give coronavirus orders, such as "Keep a

safe distance of at least one meter between people" to the general public. The police in Nice has partnered with a local drone operator to warn the public about the virus. Apparently warning people by drone
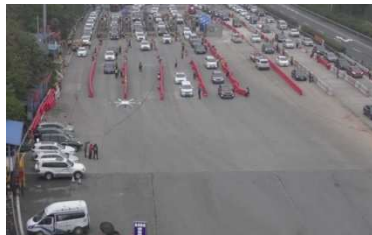
has been effective since the police are about to use a second drone in the nearby town of Cannes.

The drone armed with a loudspeaker is used over some of the city's most popular beaches and other locations, informing people of the government's confinement order, according to Reuters. https://dronedj.com/2020/03/20/french-riviera-police-use-drones-to-give-coronavirus-orders/

MMC drones spraying disinfectant to fight coronavirus APPLICATION INTERNATIONAL NEWS SURVEILLANCE ALEX DOUGLAS FEBRUARY 10, 2020

MicroMultiCopter (MMC) has been working with the country's government in a number of ways including spraying disinfectant to support cities afflicted by the coronavirus. The Shenzhen-based company is deploying drone teams to cities like Shanghai, Guangzhou, Zhaoging and Foshan. This means that people do not have to risk going into public spaces to do the job.

Other roles for the drone teams – which together equal more than 200 people with over 100 drones – include broadcasting public service announcements via onboard megaphones and assessing traffic flow and congestion faster and more effectively than a static camera or a vehicle could do. They are also being used for the evacuation of work sites, with thermal imaging cameras being used to identify all persons onsite. https://www.commercialdroneprofessional.com/mmc-drones-spraying-disinfectant-to-fight-coronavirus/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-326513-Commercial+Drone+Professional+DNA+-+2020-03-21

Video: Man uses drone to walk his dog, practice social distancing Mar 20, 2020
National Desk Staff

While it is not believed your pet could contract the novel coronavirus, they can still carry the virus on their fur or skin. This has made the daily walk, once a leisurely chore, now a task to worry over.

Vakis Demetriou, a local resident of Cyprus which is currently in a government-mandated lockdown, found a creative way to practice social distancing, but still take his dog for a walk.

In the video, Demetriou's dog, Oliver, walks along an empty street as it is guided by a drone. The camera pans to show Demetriou operating the drone from the balcony. In a Facebook post,

Demetriou advised other pet owners to consider their pets in the pandemic, as well. "5th day quarantine. Stay home safe but don't forget your dog's happiness."

Watch the video! https://www.koat.com/article/video-man-uses-drone-to-walk-his-dog-practice-social-distancing/31831054

23Mar20

Rocket Lab launch preparations continue despite coronavirus travel restrictions
Jeff Foust March 20, 2020

WASHINGTON — Rocket Lab is continuing with preparations for a launch later this month despite the coronavirus pandemic, although another small launch company's plans for a launch this month remain unclear.

Rocket Lab spokesperson Morgan Bailey said March 19 that the company was still planning to launch an Electron rocket from New Zealand later this month. That mission, called "Don't Stop Me Now" by the company, will carry three payloads for the National Reconnaissance Office. It will also place into orbit ANDESITE, a cubesat built by students at Boston University and whose launch is being provided by NASA, as well as a cubesat from the University of New South Wales in Australia.

The launch is proceeding despite an order by New Zealand Prime Minister Jacinda Ardern to close the country's borders to those who are not citizens or residents of the country. The move is intended to stem the growth of cases of the coronavirus disease COVID-19, which reached 39 in New Zealand as of March 20. https://spacenews.com/rocket-lab-launch-preparations-continue-despite-coronavirus-travel-restrictions/

Drone plays dodgeball to demo fast new obstacle detection system Michael Irving
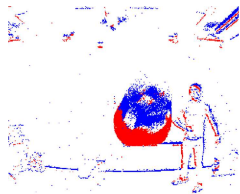March 19, 2020

Engineers at the University of Zurich have developed a new system that gives drones such fast reflexes that they can play – and win – at dodgeball. Researchers kitted out a quadcopter drone with cameras specially designed to detect fast movement, as well as new algorithms that made them even faster.

Rather than analyzing every pixel in a scene to determine if something has moved, event cameras respond only when they detect a change in light intensity. That means pixels without movement stay "silent," reducing the processing load and speeding up reaction times.

An event camera image, clearly showing the incoming ball (and the person throwing it)

The drone successfully dodged incoming objects more than 90 percent of the time, including a ball thrown from 3 m away that was traveling at 10 m per second.. The team says it could translate to an increase of up to 10 times faster. "Our ultimate goal is to make autonomous drones navigate as good as human drone pilots," says Davide Falanga, primary author of the study. https://newatlas.com/drones/drone-dodgeball-obstacle-detection-system/

Southern California police to patrol with drones during coronavirus lockdown

David Aaro Fox News

Some police departments in California plan on using drones to enforce a coronavirus lockdown and monitor the homeless population, according to a report on Friday.

The Chula Vista Police Department, located just south of San Diego near the California-Mexico border, recently purchased two $11,000 drones -- doubling its fleet -- that will be outfitted with speakers and night vision cameras.

One of the reasons for the drones will be to monitor the homeless population in the city, who Sallee believes have a lack of reliable information on the severity of the coronavirus outbreak. "We need to tell them we actually have resources for them -- they are vulnerable right now," Sallee said. "It might be impractical or unsafe for our officers to be put into those areas." https://www.foxnews.com/tech/southern-california-police-use-drones-amid-coronavirus-lockdown

Researchers collect, publish drone radar signatures to identify security threats

March 20, 2020 Philip Butterworth-Hayes Counter-UAS systems and policies

The UK's *Institute for Mechanical Engineers* reports that radar data from drone scans has been publicly released to help counter the privacy and security threats from unmanned aircraft. "Based at Aalto University in Finland, UCLouvain in Belgium and New York University, the team gathered radar measurement data aiming to improve the detection and

identification of unmanned aerial vehicles amid concern about malicious use. Researchers measured various Radar Cross Sections which can help identify the size, shape and material of a drone.

"The publicly-accessible data could be used in the development of radar systems and machine learning algorithms for more complex identification. "There is an urgent need to find better ways to monitor drone use. We aim to continue this work and extend the measurement campaign to other frequency bands, as well as for a larger variety of drones and different real-life environments," said Semkin. The research was published in _IEEE Access_. The measurement data is online here. https://www.unmannedairspace.info/latest-news-and-information/researchers-collect-publish-drone-radar-signatures-to-identify-security-threats/

Stuck at Home? Why not study for the Part 107 Drone Test? MARCH 23, 2020 JASON REAGAN LEAVE A COMMENT

As public officials continue to urge people to stay home and practice social distancing amid the coronavirus outbreak, many are seeking novel ways to pass the time behind closed doors over the next few weeks (and maybe beyond).

While some turn to video games or pet fostering, drone enthusiasts considering Part 107 commercial pilot certification can take this opportunity to prep for the multi-part test. Here are some free and paid resources to help you bone up while you're shut in. Stay healthy!

FAA The FAA offers a Remote Pilot Knowledge Test Guide downloadable as a PDF. In addition, the agency offers a free Remote Pilot – Small Unmanned Aircraft Systems Study Guide, also downloadable as a PDF. You can also take a sneak peek at sample test questions.

3DR Drone company 3DR offers a variety of free resources, including a "cheat sheet," aeronautical chart legend and a "What to Expect" section.

Tony Northup Award-winning author and photographer Tony Northrup has created a study guide that also includes a video tutorial. His guide includes a by-the-numbers cheat sheet, a PDF offline guide and several sub-headings covering most every topic.

AOPA The Aircraft Owners and Pilots Association provides a wide variety of resources for drone pilots: education, training, discounts, and networking opportunities. The group offers a test-prep section as well as a pre-test checklist.

Jonathan Rupprecht Florida-based aviation attorney Jonathan Rupprecht, known for his recent release of a drone-law database, offers a free Part 107 study guide to help the drone community based upon his experience as a FAA certificated flight instructor and aviation attorney. The guide includes a practice test.

Others offering paid support are listed here: https://www.droneflyers.com/stuck-at-home-why-not-study-for-the-part-107-drone-test/

The Inside Scoop on Draganfly's Exclusive Deal to Distribute Aerovironment's Quantix Miriam McNabb March 23, 2020

Last week, Aerovironment announced an exclusive distribution partnership with enterprise solutions provider Draganfly for Aerovironment's commercial drone offering, the Quantix™ Mapper. It's a significant deal that makes sense for both companies. As the market for drone solutions grows, the deal is also an indication of how major drone industry players are differentiating themselves and their expertise in an increasingly crowded field.

DRONELIFE interviewed Draganfly Chief Operating Officer Patrick Imbasciani for the insider's view on the Aerovironment deal, the outlook for the drone industry – and even the effect of the coronavirus on the market. Read the interview at: https://dronelife.com/2020/03/23/the-inside-scoop-on-draganflys-exclusive-deal-to-distribute-aerovironments-quantix/

CORONAVIRUS: Malaysia to use drones to control public movement APPLICATION EMERGENCY SERVICES INTERNATIONAL NEWS SAM LEWIS MARCH 23, 2020

Under Malaysia's Movement Control Order (MCO), the country will use drones to monitor and control its citizens in a bid to combat the coronavirus outbreak. The government said that this will continue until at least the end of March.

Malaysia's armed forces will be running the drone program, and will also be aiding police efforts on the ground to manage the coronavirus situation. Military medical facilities and resources will also be opened up to the public.

Chief general Tan Sri Affendi Buang commented on Malaysian television: "We will utilize technology by way of drones and UAVs to undertake the task of surveillance." Drones are

expected to become a part of the country's efforts to keep the problem at bay in the coming days. https://www.commercialdroneprofessional.com/coronavirus-malaysia-to-use-drones-to-control-public-movement/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-326622-Commercial+Drone+Professional+DNA+-+2020-03-23

Dotterel Technologies secures Drone Fund investment APPLICATION BUSINESS
FINANCIAL NEWS UK ALEX DOUGLAS MARCH 23, 2020

The fund, managed by Kotaro Chiba and Soki Ohmae in Tokyo said it made the investment into Shaun Edlin's New Zealand-based firm after looking at the "incredible benefit it can add to a future drone-enabled society."

Commenting on the company's solutions, Edlin said: "Dotterel develops noise reduction and aerial audio recording solutions for UAVs. Our solutions include propulsion systems (shrouds and propellers) designed for low noise, safer and efficient flight, and also unique microphone and filtering payloads for capturing intelligible audio directly from the UAV in real-time."

"We're based in Auckland, New Zealand, although we're primarily working with customers in the USA and Australia. The team is comprised of talented UAV aeroacoustic and electronics engineers, along with commercialization experts. We also work with pioneering acoustic research groups in New Zealand, Australia and the USA."

"For UAVs to truly achieve their commercial potential, they will need to be quiet and have two-way audio communication. It's inevitable that these two challenges will be solved as so many use cases are enhanced, and new uses created. At Dotterel, it's our mission to solve these hard challenges and allow UAVs to fulfil their commercial promise." https://www.commercialdroneprofessional.com/dotterel-technologies-secures-drone-fund-investment/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-326622-Commercial+Drone+Professional+DNA+-+2020-03-23

eHang Electric Aircraft Gets Approval In Norway And Spain March 23, 2020 News

eHang just got its operational permit for its eHang 216 in Norway and Spain. While the world comes to a halt with the spread of the COVID-19 pandemic, eHang gets the go-ahead from the Civil Aviation Authority of Norway to fly its two-seater passenger-grade AAV

(Autonomous Aviation Vehicle), the eHang 216. According to CAA Norway, the country 's geographic conditions are perfect for the testing of unmanned aircraft systems. The vast country is sparsely populated with unused airspace.

The company will use this project to gather real-time data with its command-and-control platform. It will also test point-to-point delivery, maintenance and inspection of wind-power plant servicing. The Chinese aviation startup says its safety track record, as well as automation, vertical takeoff and landing, big payload, cluster management, efficiency and low cost will play a significant role in Europe's future. https://uasweekly.com/2020/03/23/ehang-electric-aircraft-gets-approval-in-norway-and-spain/?utm_source=rss&utm_medium=rss&utm_campaign=ehang-electric-aircraft-gets-approval-in-norway-and-spain&utm_term=2020-03-23

24Mar20

High hopes for air taxis as Lilium raises $240m in spite of economic turmoil
Market Line 24 MARCH 2020

 A funding round brings Lilium closer to deliver on 2025 service launch promise.

The Munich-based start-up raised $240m from current investors to kick-start the production of its electric five-seater air taxi. Initially, this Series B funding round intended to bring in new investors and raise between $400m and $500m.

Although it failed to achieve both of its main objectives, the round was regarded as successful amid the current unfavorable investment climate caused by coronavirus crisis and recent start-up financial and organizational woes. Lilium counts on the Chinese tech giant Tencent as its main backer.

The company looks like the frontrunner to establish a city-to-city electric air taxi service in the most-likely key market for this new industry. Considering the potential synergies with other Tencent-backed companies, and the preferential treatment that the tech giant receives from the Chinese Government, investing in the German start-up looks like a safe bet.

Despite the incident where one of its two prototypes went up in flames during flight demonstration, the model would comply with the current regulations for urban air mobility vehicles and is on track to meet its deadline to start production within three years.

https://www.aerospace-technology.com/comment/high-hopes-for-air-taxis-as-lilium-raises-240m-in-spite-of-economic-turmoil/

Rocketeers target cubesat market and conventional wisdom DEBRA WERNER MARCH 23, 2020

Hybrid rocket would launch cubesats one at a time — pending licenses

A small hybrid rocket that will burn solid and liquid propellants gleams on a stand in a municipal airport hangar in Hollister, California, about 150 kilometers south of San Francisco.

The vehicle is the brainchild of William Colburn, 83, a former Apollo engineer and National Security Agency veteran, and Ronald Winston, 79, a Massachusetts Institute of Technology-trained chemist and former luxury jeweler. They established Celestium Space to deliver a payload to orbit aboard a hybrid rocket, something that Colburn and my review of the record says has never been done.

Plans call for selling cubesat launches for $1 million apiece, a price so low "it would break all barriers," Winston says. Because one cubesat would be launched on each rocket, customers could choose when and where to launch, rather than hitchhiking on larger rockets.

A mutual friend introduced the men about a decade ago, after Winston combined a rubber solid rocket propellant with a high-energy solid additive to achieve performance comparable with that of liquid propulsion. Colburn, whose love of amateur rocketry dates to his childhood in the 1940s, performed a few calculations and told Winston, "We could go into orbit with this propellant."

Winston and Colburn say their three-stage rocket with a kick motor will reach orbit because of its unique solid propellant and a hydrogen peroxide liquid propellant that requires no catalyst. "We are some of the only people who've ever figured out how to make hydrogen peroxide work without a catalyst." https://aerospaceamerica.aiaa.org/rocketeers-target-cubesat-market-and-conventional-wisdom/

Drones are the Ideal Tool for Keeping the Economy Moving Despite Social Distancing. Here's How. Miriam McNabb March 24, 2020

As quarantines, shutdowns, and social distancing regulations are implemented around the globe to deal with the current pandemic, drone companies are stepping up. Drones are an ideal tool to keep business going despite social distancing measures. Read on for a deep dive on how the drone industry is participating in response to current global challenges; and what needs to happen next. *The following is a guest post by Grant J. Guillot, who leads the Unmanned Aircraft Systems practice at the regional law firm of Adams and Reese LLP.*

Drones are ideal for facilitating social distancing and have significant potential to assist with the public safety and economic impacts of COVID19. As explained by Luke Fox, Founder and CEO of WhiteFox Defense Technologies, "This technology can work as a force multiplier to ensure people get medical supplies, food, and other life-saving essentials all while minimizing potentially infectious human contact."

Government decision-makers, industry stakeholders, and drone organizations are collaborating to determine the extent to which drones can assist with relief efforts during the pandemic. "The Commercial Drone Alliance's focus right now is ensuring that member companies are able to assist the COVID-19 response in the same way that other companies are stepping up to do so," explains Lisa Ellman, Executive Director of the Commercial Drone Alliance. There are many uses for drones that can aid the nation from delivering test kits to areas in need to delivering medical goods to quarantined individuals. UAS provide essential services that can mitigate the need for extensive human interaction and can expedite logistics which can help prevent the spread of the disease and enhance efficiencies as personnel are forced to stay home." See the interviews at: https://dronelife.com/2020/03/24/drones-are-the-ideal-tool-for-keeping-the-economy-moving-despite-social-distancing-heres-how/

Resources for the Drone Industry in Response to Coronavirus MARCH 20, 2020
Danielle Gagne

There have been many reports in the last months about the many ways that drones are helping to support the global community and curb the spread of COVID-19. The adoption of drone technology to help with Coronavirus has spread from China, to Spain and France and beyond.

With all of these efforts emerging globally, various companies are stepping up to lend a hand to support those who are working to address the pandemic.

Flock drone insurance, for example, is dedicating £10,000 of free insurance to organizations using drones to combat coronavirus and the issues it is causing. And Flock isn't the only company to be offering access and services to the industry, both ESRI and HxGN are offering some of their services for free in support of those who are aiding in the COVID-19 response.

The widespread efforts of emergency response drone pilots and organizations require a lot of expensive resources that can take its toll on an already hurting economy. By providing financial support for insurance as well as free access to high-quality aerial imagery and GIS data, emergency response pilots have one less cost to worry about.

For those who could use their assistance, you can access more information below:

- Flock COVID-19 Initiative Application Form: https://flockcover.com/application
- ESRI GIS Assistance Request: https://www.esri.com/en-us/disaster-response/request-assistance
- HxGN Assistance Information: https://hxgncontent.com/about/news/2020/03/2020_03_19_free-data-for-covid19-response

We would like to keep this list growing. If your company, or a company you work with, has extended support to those impacted by COVID-19, please contact Commercial UAV News at info@commercialuavnews.com. https://www.commercialuavnews.com/author/danielle-gagne

Italy approves drones for local police to monitor citizen movement APPLICATION EMERGENCY SERVICES HEADLINE NEWS ALEX DOUGLAS MARCH 24, 2020

The Italian Civil Aviation Authority confirmed the process on Monday after it reportedly received requests for additional support from many local police units. A Euronews report detailed how the authorization for the use of drones will last until 3 April, when the travel restrictions in Italy will theoretically be lifted.

The drones can be used in urban areas and where there are small populations exposed to the risk of impact. Euronews went on to explain that several regions of Italy, including Emilia-Romagna and Lombardy, are already using drones and other equipment to help enforce quarantine restrictions.

Italy has been in lockdown since March 10, and citizens can only leave their homes to go to work, buy basic necessities or for health reasons.
https://www.commercialdroneprofessional.com/italy-approves-drones-for-local-police-to-monitor-citizen-movement/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-326727-Commercial+Drone+Professional+DNA+-+2020-03-24

We visited a small Virginia town where drone deliveries have begun for real Hart Fowler 3.23.2020

The whining drone slows, descends, steadies, then hovers about 23 feet above the front yard of Paul and Susie Sensmeier, two retirees in their eighties. The drone carries a three-pound plastic package, attached by a cord and a hook. It lowers the package until it softly touches down on the turf. The hook detaches, the line is reeled back in, and the craft zooms off into the horizon at 70 mph.

Paul Sensmeier awaits his drone delivery.

"There's been no complaints that I know of from the neighborhood, and there's quite a few customers that live here," says Paul, a retired engineer. In fact, the Sensameirs became part of aviation history in October, when Wing, a subsidiary of Alphabet (aka Google), delivered a winter fleece vest they'd ordered from Dick's Sporting Goods. A FedEx truck delivered it to Wing's launching station, the Nest, and the drone brought the package the last two miles. It was the first-ever commercial drone delivery to a customer's doorstep in the U.S. Wing has been making deliveries within a three-mile radius — the distance allowed by the Federal Aviation Administration — ever since.

 "This is a great place to build synergy," says Mark Blanks, director of Virginia Tech's Mid-Atlantic Aviation Partnership which played a key role in helping Wing obtain from the FAA its unmanned flight license to make commercial deliveries. "Most importantly, we live in this community, and we have a vested interest in making this a positive relationship."
https://www.inputmag.com/features/wing-google-alphabet-drone-delivery-christiansburg-virginia-medicine-supplies

25Mar20

UPS Partners with Wingcopter to Develop, Certify Drone Delivery Fleet Brian Garrett-Glaser March 24, 2020

UPS' drone delivery venture is partnering with German drone-maker Wingcopter to develop and certify new tiltrotor package delivery drones for a wide range of use cases in the United States and internationally.

UPS Flight Forward, which earned the first Standard Part 135 drone air carrier certification from the Federal Aviation Administration in October 2019, has used Matternet's M2 quadcopter for initial testing and limited medical deliveries since the company's inception. Capable of carrying up to 4.4 pounds a distance of 12.4 miles, at speeds reaching 22 mph, the M2 has been employed by the Swiss Post as well as UPS to carry lab samples short distances, such as across a hospital campus.

The company wants to switch from quadcopters to tiltrotors able to fly faster, more efficiently and longer distances, while minimizing fly-over acoustic pollution. "You can start and land in the smallest of spaces, which is essential for package delivery in populated areas," a representative for Wingcopter told *Avionics International*. "The combination of the two drone types allows for a smooth transition from high-speed long-range flight into full-stop, allowing to land or hover and lower a package through a winch without having to land. In that case, you don't even need basic landing infrastructure." https://www.aviationtoday.com/2020/03/24/ups-partners-wingcopter-develop-certify-drone-delivery-fleet/

Skybound Rescue Helping Parents Stuck in the House: Rescue Drone Homeschooling Project Harry McNabb March 25, 2020

Gemma Alcock is a big name in the drones for good community – and now, she's coming to the rescue of all of us parents looking for interesting things to do with our kids while schools are closed.

The Rescue Drone Homeschooling Project is a great way to introduce kids to the benefits and and applications of drones in public service.

Alcock is the founder of the UK-based Skybound Rescuer Project. Skybound Rescuer researches, innovates and educates in drones for public safety applications. The homeschooling project is a creative coloring, drawing and writing project for both beginner and intermediate levels that will get kids thinking about how drones can be used to save lives. Submitted stories and drawings will be shared on the Skybound Rescuer Instagram channel, @SkyBoundRescuer. There is even a drone-related prize for a deserving student with the best entry!

Drones have been a useful tool in the Coronavirus epidemic: helping in public communication, drone delivery, and disinfecting public areas. Giving kids a creative outlet centered on rescue drones helps them "look for the helpers" in the crisis – and enjoy their time indoors. https://dronelife.com/2020/03/25/skybound-rescue-helping-parents-stuck-in-the-house-the-rescue-drone-homeschooling-project/

TerraView looks to get US industry off the ground with new American-made drone NEW PRODUCTS NEWS TECHNOLOGY UNITED STATES SAM LEWIS MARCH 25, 2020

The US government has made moves in recent months to step away from the use of Chinese-made drones, which largely dominate the world market.

This has left a void for drone manufacturers from the rest of the world to fill, and TerraView hopes to step up to the plate with its new RangePro X8P Pixhawk American-made UAS. The drone is designed specifically for industrial, first responder and government enterprise data capture and comes with more-than 70-minute flight time and a standard sensor payload. It also promises longer life compared with the original RangePro X8 and lower operating cost.

"We designed the RangePro X8P based on US market and federal government demand," said TerraView president Bruce Myers, "aligning with the American Security Drone Act of 2019. If this bill is passed, it will ban federal departments and agencies from purchasing any commercial drone or unmanned aircraft system manufactured or assembled in China or other countries identified for national security concerns. https://www.commercialdroneprofessional.com/terraview-looks-to-get-us-industry-off-the-ground-with-new-american-made-drone/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-326818-Commercial+Drone+Professional+DNA+-+2020-03-25

Deserted streets in Chicago and Zurich as coronavirus continues to spread [drone video] Haye Kesteloo Mar. 24th 2020

Some of our readers have sent us these drone videos that show the deserted streets in Chicago and Zurich as the coronavirus continues to spread around the world. By now almost all countries seem to have implemented some form of social distancing and governments are strongly advising people to stay home in an effort to slow down the spread of the COVID-19 virus and to flatten the curve.

These two drone videos capture a sight that you won't see very often, if ever at all. The streets of both Chicago and Zurich are almost completely deserted as governments have strongly urged people to stay home. Social distancing and voluntary quarantines are meant to slow down the spreading virus and to flatten the curve, i.e. to prevent too many people from getting sick at the same time and therefore overloading the medical system.

The drone video that shows Chicago's deserted streets was shot by Antoine Tissier earlier this month. The second drone video was sent to us by Andy Krischan & Nico Leuthold from Drone Air Media in Switzerland.

What do you think about these drone videos that show the deserted streets in Chicago and Zurich? Do you have videos that you'd like to share with us? Email us at tips @ dronedj.com. https://dronedj.com/2020/03/24/deserted-streets-in-chicago-and-zurich-as-coronavirus-continues-to-spread/

New Drone Boxes Can Be Used for Transporting Swabs and Medicine March 24, 2020 News

The Italian company Elite Consulting was the first in the world to design a box suitable for the transport of swabs and small medicines with the DJI Matrice 200 series drone. Thanks to the resistance of the box, in the event of an accident, the biological material cannot come into contact with the surrounding environment. Through BVLOS operations, it will be possible in this case to enter the outbreak areas and help people in quarantine without the need to send staff that could be at great risk of infection.

If an old person needs urgent medicine we can reach him within a municipality in two minutes and deliver the medicine to him. We can then land and give him instructions by phone on how to get it out of the box.

Swabs, on the other hand, could be delivered together with instructions on how to make them. In the United States, swabs for various tests are already delivered by post and then carried out independently by the patient and subsequently sent to the laboratory.

The box had already been tested in 2019 together with ENAC and the Monandi hospital in Naples. It was intended for the transport of biological samples but has currently been adapted for the Coronavirus emergency. https://uasweekly.com/2020/03/24/new-drone-boxes-can-be-used-for-transporting-swabs-and-medicine/?utm_source=rss&utm_medium=rss&utm_campaign=new-drone-boxes-can-be-used-for-transporting-swabs-and-medicine&utm_term=2020-03-24

Remote, Autonomous Drones a Tool in the Global Battle Against COVID-19 March 23, 2020 News

Whether for aerial monitoring, emergency response or delivery of medicines, unmanned aerial vehicles can be deployed to help those in need without putting human helpers at risk of contracting the coronavirus.

As national and local governments are rapidly closing public spaces, there remains a need to monitor and enforce such shutdowns. Drones, equipped with payloads such as beacons, loudspeakers and sirens, can serve as a public safety aid – sending live video feeds to COVID- 19 control centers, warning people of the need to stay indoors and spraying disinfectants.

Drone deliveries – whether food, medicines or emergency aids – can be planned, executed and monitored remotely by drone operators, thus ensuring timely aid to the elderly, rural and remote populations. Since FlytNow supports most major drone hardware platforms, drone service providers can easily adopt it to manage remote drone operations over 4G/LTE/5G networks for surveillance and emergency response. Our focus is on automation and autonomy i.e. removing humans from the risk equation by using software to remotely manage drone public health operations. https://uasweekly.com/2020/03/23/remote-autonomous-drones-a-tool-in-the-global-battle-against-covid-19/?utm_source=rss&utm_medium=rss&utm_campaign=remote-autonomous-drones-a-tool-in-the-global-battle-against-covid-19&utm_term=2020-03-24

26Mar20

When you run out of toilet paper during the coronavirus lockdown…Haye Kesteloo
Mar. 25th 2020

What do you do when you run out of toilet paper during the coronavirus lockdown? Well, you contact your buddy and have it delivered to you by drone.

Ian Chan had run out of toilet paper, so he contacted his friend David, who promptly got his DJI Mavic 2 and made a quick cross-city delivery. Ian later added on Twitter:
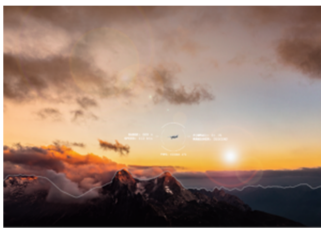
"Thank you @chenosaurus for the speedy cross city delivery- I owe you one."

"There's lots of people out there (here in US and other countries) in not good spots. I'm taking it very seriously. But hopefully this dumb tweet added some brief humor / happiness into your timeline/day. Stay safe & healthy everyone." In times like these, you have to get creative!
https://dronedj.com/2020/03/25/when-you-run-out-of-toilet-paper-during-the-coronavirus-lockdown/

Making BVLOS Flight a Practical Reality: Onboard Sense and Avoid Miriam
McNabbon: March 26, 2020

As enterprise drone applications grow, the industry awaits a rule on flight beyond visual line of sight. DRONELIFE spoke with Iris Automation CEO Alex Harmsen about Iris' onboard sense and avoid technology – and building trust with regulators.

 "We're looking at a potential 500 objects at a time and classifying them." The system captures what a potential conflict looks like, how it moves, and then determines a classification. "Then we do trajectory planning and take evasive action – and all of that happens in milliseconds."

Iris Automation's CASIA system is designed for commercial drones that weigh between 10-55 pounds and is ideal for enabling BVLOS flight for a wide range of commercial applications. "We are getting a lot of traction with railroad, utility, and pipeline inspections – long line linear infrastructure. We also get a lot of interest from people

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

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doing large area surveys, and package delivery."

Currently, Iris Automation is working with the Kansas Department of Transportation with an FAA BVLOS waiver. "This is a time for us to raise the tide for the entire industry – so many people have been waiting for this." https://dronelife.com/2020/03/26/making-bvlos-flight-a-practical-reality-onboard-sense-and-avoid/

South Australian researchers create coronavirus detection drones Josh Spires Mar. 26th 2020

Researchers at the University of South Australia are working on coronavirus drones capable of detecting temperature, heart, and respiratory rates as well as detecting people sneezing and coughing in crowds. The "pandemic drone" is being created in partnership with Draganfly Inc. It will be fitted with a specialized sensor and a computer vision system capable of detecting vital signs that are linked to coronavirus.

So far, the team has been able to accurately measure heart rate and breathing rate of people from a distance of five to 10 meters, up to 50 meters with a fixed camera. An algorithm has also been developed to detect sneezing and coughing. https://dronedj.com/2020/03/26/south-australian-researchers-coronavirus-detection-drones/

27Mar20

Early eVTOL Deliveries Boost EHang's Revenues in 2019 Charles Alcock March 25, 2020

Most eVTOL aircraft developers are several years away from even generating revenues and any sort of meaningful cash flow and profitability. But on March 24 China's EHang published fourth-quarter and full-year 2019 unaudited financial results showing growth, albeit from a low starting point for the Nasdaq-listed company.

As of the end of December, EHang had delivered 61 examples of its 216 Autonomous Aerial Vehicle even though the model has yet to achieve type certification. Deliveries have been made to a number of "partners" worldwide who appear to be acting as dealers for the two-seat all-electric aircraft. The company also earns some money from conducting light displays using drones and other services.

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

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UAS and SmallSat Weekly News

Total revenues for 2019 reached $17.5 million, which was an increase of 83.2 percent on 2018. Revenues from sales of the 216 model accounted for $12.3 million. In the process, EHang reduced its operating loss by 37.7 percent to $6.7 million and its adjusted operating loss by 39.3 percent to $4.5 million.

EHang appears to be focusing on achieving type certification through the Civil Aviation Administration of China. However, it is unclear when this process will be completed—especially in view of the disruption caused by the Covid-19 pandemic. https://www.ainonline.com/aviation-news/business-aviation/2020-03-25/early-evtol-deliveries-boost-ehangs-revenues-2019

Derbyshire Police tweet drone footage to shame locals into staying home
APPLICATION EMERGENCY SERVICES NEWS SURVEILLANCE UK SAM LEWIS MARCH 27, 2020

Peak District walkers in the footage were seemingly oblivious to the lockdown ordered by Prime Minister Boris Johnson this week in response to the coronavirus outbreak.

The police force posted the video to its Twitter account in a bid to shame the walkers. It also used its number plate recognition technology on walkers' vehicles and found that some of them had driven over half an hour to get to Curbar Edge in the Peak District.

The *Guardian*, which contacted the Cabinet Office for clarification, found that the government has not forbidden driving to reach an area where one can take exercise.

This news comes after police were granted powers to issue fines starting at £30 to enforce the lockdown. On Thursday March 26 they were also given the option of using force to make people stay at home. https://www.commercialdroneprofessional.com/derbyshire-police-tweet-drone-footage-to-shame-locals-into-staying-home/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-327052-Commercial+Drone+Professional+DNA+-+2020-03-27

UAS and SmallSat Weekly News

VIDEO: Italian mayor uses drones to scream profanities at residents ignoring lockdown APPLICATION INTERNATIONAL NEWS SURVEILLANCE VIDEO SAM LEWIS MARCH 27, 2020

Drones have been used in many parts of the world to help with the current coronavirus outbreak, from spraying disinfectant in China to posting drone footage on Twitter of UK citizens flouting the lockdown.

A mayor in Italy has taken another novel, drone-based approach to encouraging Messina residents to stay indoors during the coronavirus crisis, which has affected Italy worse than any other country. In a video from Euronews, mayor Cateno de Luca can be heard shouting profanities at Italians venturing outdoors through speakers attached to a drone.

 "Where the **** are you going? Go home," he tells two men in the video, who run in apparent fear from the drone. https://www.commercialdroneprofessional.com/video-italian-mayor-uses-drones-to-scream-profanities-at-residents-ignoring-lockdown/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-327052-Commercial+Drone+Professional+DNA+-+2020-03-27

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