



UAS and SmallSat Weekly News

Contents

- 2 Ehang obtains operational permit for autonomous air taxi test in Norway
- 2 Wingcopter to Fly Deliveries for Merck
- 3 DARPA seeks to develop "virtual headlight" sensors for UASs
- 4 Impossible Aerospace launches Air Support for first responders
- 4 The Best Pairing for Wine May be a Drone
- 5 Jaw-Dropping Drone Films Returning to Big Screen in New York
- 5 Drone Remote ID Draft Rule Draws 45,000+ Comments
- 6 The flying taxi market is ready for takeoff, changing the travel experience forever
- 7 EHang Receives 'Operational Flight Permit' from Norway CAA
- 7 Kepler's decision to build its own cubesats surprises manufacturers
- 8 NASA invites small business to demonstrate technology to safeguard autonomous flight
- 8 Indian researchers develop AI-powered counter drone solution
- 9 This Drone Can Map Pipes and Underground Tunnels from Above
- 9 Navy Develops Autonomous System for UAS Tracking
- 10 China uses drones to enforce the world's largest quarantine to contain coronavirus
- 11 Mothers search for missing children in Mexico's 'killing fields' with DJI Phantoms
- 11 Altitude Angel strengthens offering with 'space-based UTM'
- 12 Skyports sees capital raise hit £6m with Irelandia Aviation investment
- 13 Countries use drones and other tech to fight Coronavirus
- 13 Spanish Quaternium sets drone flight time record of eight hours and ten minutes
- 14 Rwanda Launches Anti-Malaria Pesticide Spray Using Drones
- 14 VoltAero begins flight testing of Cassio e-aircraft
- 15 Here's Matternet's Idea For The Kind Of Docking Station That Could End Up On Your Block
- 16 XAG resumes drone production as China "steadily recovers" from coronavirus outbreak
- 16 Impossible Aerospace unveils 911 responder drone
- 17 US is preparing to ban foreign-made drones from government use
- 17 Money Talks: 2019 Drone Investments Break New Records
- 18 France Chooses 8 UTM Providers for a "Best of Breed" Solution: "U-Space Together"
- 18 U.S. Military Exploring eVTOL Solution to Resupplying Troops
- 19 Businesses Are Rethinking How They Use Drones in the Face of Novel Coronavirus, COVID-19

UAS and SmallSat Weekly News

7Mar20

Ehang obtains operational permit for autonomous air taxi test in Norway 6 March 2020 Sam Mehmet (Intelligent Transport)



[EHang](#), the autonomous aerial vehicle technology platform company, announced that it has obtained an operational flight permit for its two-seat passenger-grade AAV, the EHang 216, from the [Civil Aviation Authority of Norway \(CAA Norway\)](#).

After assessment of test flight and contingency plans, the CAA Norway issued a permit for EHang to conduct flights with a local customer for testing and certification.

Covered with a long strip of land with abundance of sparsely populated areas and free airspace, the country has started to build a network of small airports since 1960's, connecting most territories throughout the country.

Bente Heggedal, the Head of section for unmanned aviation, CAA Norway, commented: "EHang is an exciting and forward-looking project that shows the rapid development of UAM and AAV technology. The autonomous passenger aircraft of the future can contribute to more efficient transport, particularly in urban areas, and the electric models are a great contribution to the green shift. We look forward to EHang demonstrating a well-proven and secure system so passenger AAVs can be a safe alternative for passenger transport."

<https://www.intelligenttransport.com/transport-news/96948/ehang-obtains-operational-flight-permit-for-autonomous-air-taxi-norway-test/>

Wingcopter to Fly Deliveries for Merck Jason Reagan March 05, 2020



[Wingcopter](#) is teaming up with Merck to pilot a drone-delivery program.

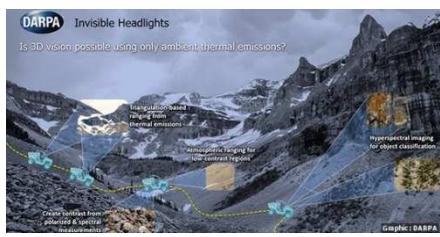
In partnership with the Frankfurt University of Applied Sciences, the German UAV startup and the Big Pharma giant will create a program to transport pigment samples from a Merck site in Gernsheim, Germany to a lab in Darmstadt – a distance of **15.5 miles**. The drone transport will replace a slower, more expensive van-delivery program.

UAS and SmallSat Weekly News

The goal of the pilot program is to “evaluate this shipment solution for inter-site use and develop it into a long-term business model, based on factors such as time savings, sustainability, cost and flexibility,” according to a press release.

Operating in 10 countries, Wingcopter develops and produces autonomous delivery drones for social and civilian applications, fulfilling the company’s mission of “Technology with a Purpose.”
<https://dronelife.com/2020/03/05/wingcopter-to-fly-deliveries-for-merck/>

DARPA seeks to develop "virtual headlight" sensors for UASs LISA DAIGLE, ASSISTANT MANAGING EDITOR



ARLINGTON, Va. Autonomous systems need active illumination to navigate at night or underground, but switching on visible headlights or some other emitting system like lidar runs the risk of alerting adversaries to detect a vehicle’s presence, in some cases from long distances.

Since **everything** -- animate and even inanimate objects -- **emits some thermal energy**, the goal is to discover what information can be captured from even an extremely small amount of thermal radiation and develop novel algorithms and passive sensors to transform that information into a 3D scene for navigation.

The object of Invisible Headlights is to enable completely passive navigation even in pitch-dark conditions, stated Joe Altepeter, program manager in DARPA’s Defense Sciences Office. “In the depths of a cave or in the dark of a moonless, starless night with dense fog, current autonomous systems can’t make sense of the environment without radiating some signal -- whether it’s a laser pulse, radar or visible light beam -- all of which we want to avoid.”

“If we’re successful, the capability of Invisible Headlights could extend the environments and types of missions in which autonomous assets can operate – at night, underground, in the arctic, and in fog. The fundamental understanding of what information is available in ambient thermal emissions could lead to advances in other areas, such as chemical sensing, multispectral vision systems, and other applications that exploit infrared light.”

A Proposers Day is scheduled for March 16, 2020, in Arlington, Virginia, with a webcast available for those participating online at <https://go.usa.gov/xddrT>. <http://mil-embedded.com/news/darpa-seeks-to-develop-virtual-headlight-sensors-for-uass/>



UAS and SmallSat Weekly News

Impossible Aerospace launches Air Support for first responders Josh Spires Mar 5, 2020



[Impossible Aerospace](#) has launched its latest product, Air Support, a new service aimed at helping first responders respond to emergencies using a fleet of [Impossible US-1 drones](#) located on the roofs of various buildings. Air Support will allow cities to respond to emergencies **10 times faster** and allows crucial information to get to [first responders](#) before arriving on the scene.

The Impossible US-1 has a flight time of 78 minutes while flying with a standard payload and a max speed of 45 mph. The drone is equipped with Tesla's battery technology and has batteries lining the arms of the drone. The remote controller is equipped with a [Samsung Tab S5E tablet](#) and an HDMI output to allow other first responders to take a look at the footage captured by the drone.

Impossible Aerospace will visit the site where you want to deploy the drones and provide a proposal on the coverage, aircraft, hardware, and anything else required to get up and running. The team will also help out with training the pilots required for [beyond visual line of sight](#) flights along with the Certificate of Authorization required by the FAA.

<https://dronedj.com/2020/03/05/impossible-aerospace-air-support-first-responders/#more-24797>

The Best Pairing for Wine May be a Drone Miriam McNabb March 06, 2020



With a wide and global customer base, drone mapping platform [DroneDeploy](#) is continually identifying new uses for drone technology. Drones are helping growers identify and flag diseased plants before they are able to spread and infect the rest of the crop.

What could take workers a week walking up and down the rows takes a drone only minutes to achieve with 95% accuracy. Gathering the data quickly also ensures that diseases are dealt with quickly. While there are many diseases that commonly attack wine grapes, research published in [California Agriculture](#) says that just one of these – Pierce's disease – costs California growers over \$100 million a year: a few years ago, [Wine Spectator](#) called the spread of vine disease "A Dire Threat to Grapevines and Wine."



UAS and SmallSat Weekly News

"In agriculture broadly, we're seeing greatest adoption from service providers – agronomists who go on site to provide information to growers," says DroneDeploy co-founder and CEO, Mike Winn. "And they're starting that whole process with a drone." Growers are looking for variances in color that could indicate an issue. "Customers can spot variances immediately," says Winn, "and some of them start walking out to the affected area while the drone is still in the air." Winn says that the majority of agricultural data is processed through LiveMap, which has progressed to the point that it can be hard to distinguish between LiveMap and fully processed data. <https://dronelife.com/2020/03/06/the-best-pairing-for-wine-may-be-a-drone/>

Jaw-Dropping Drone Films Returning to Big Screen in New York March 5, 2020 News



The 6th Annual New York City Drone Film Festival will be returning to show the best drone films in the world. The festival will be held **July 25-26** at the Liberty Science Center in Jersey City, NJ. The festival will include a tech expo, drone racing exhibition, drone piloting workshops, filmmaking and drone-centric masterclasses, and the world's best drone films on the big screen.

"Drones have become the go-to tool for filmmakers to add mind-blowing camera motion and production value to their work," said Randy Scott Slavin, NYCDFF founder and festival director. "The NYCDFF brings the most impressive filmmakers together from around the world to show their work on the big screen and award their skills and creativity."

In early 2020, the New York City Drone Film Festival was acquired by [AirVuz.com](#), the premier website for drone video content. To celebrate the acquisition, submissions to the 2020 New York City Drone Film Festival are free when uploaded to [AirVuz.com](#). The **submission deadline** for the 2020 festival is **May 25, 2020**. [https://uasweekly.com/2020/03/05/jaw-dropping-drone-films-returning-to-big-screen-in-new-york&utm_term=2020-03-06](https://uasweekly.com/2020/03/05/jaw-dropping-drone-films-returning-to-big-screen-in-new-york/?utm_source=rss&utm_medium=rss&utm_campaign=jaw-dropping-drone-films-returning-to-big-screen-in-new-york&utm_term=2020-03-06)

9Mar20

Drone Remote ID Draft Rule Draws 45,000+ Comments Bill Carey March 02, 2020

More than 45,000 respondents have commented on the FAA's draft regulation for remote identification of drones as of the March 2 deadline. The public comment period for the so-called "Remote ID" notice of proposed rulemaking closed as expected with an avalanche of reaction to proposed requirements that are considered onerous by drone hobbyists but

UAS and SmallSat Weekly News

tolerable to commercial interests. The FAA released the draft rule on Dec. 31, 2019, giving the public 60 days to respond.



Activists from "Help Save Our Hobby" protest at FAA headquarters on Feb. 29

There were **45,468** comments recorded by the regulations.gov website by the evening of the deadline. By way of comparison, the comment period for the FAA's draft regulation for the commercial use of drones weighing less than 55 lb., now established as Part

107, drew **4,597 responses in 2015**. <https://aviationweek.com/shows-events/world-atm-congress/drone-remote-id-draft-rule-draws-45000-comments>

The flying taxi market is ready for takeoff, changing the travel experience forever

MAR 7 2020 Tim Hornyak@ROBOTONIA



Lilium says its five-seater jets can travel up to 186 mph in one hour.

Flying cars, now known as electric air taxis, have been around for a long time in our dreams. Now, as major brands like [Toyota](#), [Uber](#), [Hyundai](#), [Airbus](#) and [Boeing](#) are promising to whisk riders through the skies in flying

taxis, the dream is getting closer to reality. The goal is to link urban centers with suburbs while leapfrogging traffic — air taxis could cruise at 180 mph at altitudes of around 1,000 ft to 2,000 ft. NASA has reported they can go at an altitude up to 5,000 ft.

It's a market that should continue to mature during this decade and then boom globally. The autonomous urban aircraft market may be worth \$1.5 trillion by 2040, according to a Morgan Stanley Research [study](#). Another [study](#) by Frost & Sullivan, sees air taxis **beginning in 2022 in Dubai** and expanding with a compound annual growth rate of about 46% to more than 430,000 units in operation by 2040.

It's not surprising that companies — from venture-backed start-ups and Uber to major auto and aviation companies — are rushing to grab a foothold in this nascent market. The business has the potential to significantly disrupt the landscape of urban mobility, and investors are pouring millions into commercialization efforts. They are attracted to the fact that electric air taxis have



UAS and SmallSat Weekly News

the potential to lower operating and maintenance costs dramatically.

<https://www.cnbc.com/2020/03/06/the-flying-taxi-market-is-ready-to-change-worldwide-travel.html>

EHang Receives ‘Operational Flight Permit’ from Norway CAA Brian Garrett-Glaser

March 6, 2020



Chinese autonomous aerial vehicle maker EHang has obtained an ‘operational flight permit’ from the Civil Aviation Authority of Norway for its two-seat EHang 216 — its first such approval in Europe.

The permit allows EHang to “conduct flights together with a local customer for the purpose of testing and certification,” according to the company’s [press release](#), with flights beginning at Salangen Airport in Elvenes.

The regulatory agency believes Norway’s geographic conditions — an abundance of sparsely-populated areas and free airspace, with a network of small airports — could be well-suited for the testing of unmanned aircraft, according to EHang’.

The company is taking an unmanned, networked approach to its eVTOL aircraft development, seeking to provide simultaneous control of many aircraft with a command-and-control center operating constantly. The EHang 216 can reach speeds up to 81 mph, carry two passengers and has a max range of 22 miles. It needs 120 minutes to recharge its batteries.

<https://www.aviationtoday.com/2020/03/06/ehang-receives-operational-flight-permit-norway-caa/>

Kepler’s decision to build its own cubesats surprises manufacturers Caleb

Henry and Debra Werner March 8, 2020



Blue Canyon Technologies, AAC Clyde Space, GomSpace, NanoAvionics, Tyvak and several others are ready and willing to build cubesats en masse. So it came as a surprise to many manufacturers when Kepler Communications announced plans to manufacture its constellation of **140** Internet of Things satellites in-house. Kepler is poised to become **one of the world’s largest** cubesat operators once its constellation is fully in orbit, a target set for the end of 2022. Only Planet currently operates a fleet that large.

Instead of formally soliciting bids from a wide range of cubesat builders, Toronto-based Kepler turned to the University of Toronto Institute for Aerospace Space Flight Laboratory for help setting up its own manufacturing line. Kepler also received 1 million Canadian dollars (\$760,000) from the Canadian Space Agency to mature its bus design and production



UAS and SmallSat Weekly News

techniques, leading some observers to conclude national pride could play a role.

<https://spacenews.com/keplers-decision-to-build-its-own-cubesats-surprises-manufacturers/>

NASA invites small business to demonstrate technology to safeguard autonomous flight

March 4, 2020 Jenny Beechener UAS traffic management tenders



Applicants can now apply to participate in the Safeguard with Autonomous Navigation Demonstration (SAND) Challenge launched by NASA Langley Research Center in August 2019. The challenge addresses safety critical risks associated with flying UAVs in the national airspace system including:

flight outside of approved airspace, unsafe proximity to people or property and critical system failure.

NASA aims to demonstrate technology can assure safe operations of autonomous vehicles and promote public confidence in autonomy and Beyond Line of Visual Sight operations. The project makes use of NASA's patented Safeguard technology which will fly on board competitors' vehicles while navigating the course, set in the context of a post-natural disaster scenario. Small business competitors will provide their own drones, to navigate a simulated post-natural disaster event.

The SANS Challenge aims to help prepare small businesses for the competitive future of UAV flight and showcase a practical and attainable use case for UAVs.

Registration deadline: 15 April 2020 **Application information:** sand2020.nianet.org **For more information visit:** <https://www.nasa.gov/sand> <https://www.unmannedairspace.info/latest-news-and-information/nasa-invites-small-business-applicants-to-demonstrate-technology-to-safeguard-autonomous-flight/>

Indian researchers develop AI-powered counter drone solution

March 9, 2020 Jenny Beechener Counter-UAS systems and policies



Researchers at the Indian Institute of Technology Madras report development of counter drone technology capable of detecting "Rogue drones visually using algorithms powered by Artificial Intelligence and hacking them to change their flight path or land safely". The research was carried out by a team from IIT's Department of Aerospace Engineering by Vasu Gupta mentored by Dr Ranjith Mohan, Assistant Professor. The



UAS and SmallSat Weekly News

development is targeted for use by law enforcement agencies, security services and armed forces to help secure airspace over critical civilian and military installations.

"A major advantage of this system is that it can be controlled over the **internet** and can navigate **autonomously** by hacking their GPS, follow the target drone and change its flight path or land safely. The programmable nature of the aerial vehicles also opens up the possibility of **swarming** of drones and can intelligently detect and track people, drones, vehicles and other objects."

The next step will be to conduct exhaustive tests on the system and ensure its reliability for catering to a wide range of demanding missions. For more information visit: www.iitm.ac.in <https://www.unmannedairspace.info/counter-uas-systems-and-policies/information-researchers-develop-ai-powered-counter-drone-solution/>

This Drone Can Map Pipes and Underground Tunnels from Above

Miriam McNabb March 09, 2020



Drones excel at taking over jobs that are dark, dirty and dangerous – and mapping the sewerage underground electricity tunnels that lie under a city certainly meet that description. Now, a team from Indonesia has demonstrated that a drone equipped with Ground Penetrating Radar can be used to map assets underground. The uses for this technology are many: construction companies who need to identify underground utilities; oil and gas providers who must identify pipeline leaks; or the mapping of open pit mining sites.

This new technology, successfully demonstrated by Terra Drone Indonesia, expands the ways in which drones can help keep workers safe, often while performing a job with improved speed and accuracy. See the Terra Drone press release. <https://dronelife.com/2020/03/09/dark-dirty-and-dangerous-this-drone-can-map-pipes-and-underground-tunnels-from-above/>

10Mar20

Navy Develops Autonomous System for UAS Tracking

Nichols Martin March 9, 2020 News

Scientific and technical personnel from Naval Surface Warfare Center Panama City Division have created technology designed to identify and track unmanned aerial systems autonomously.

UAS and SmallSat Weekly News

The system, known as the Threat Tracker, uses sensors, 3D radars, machine learning algorithms and unique features to function, Naval Sea Systems Command [said Sunday](#).



Threat Tracker works to spot and classify enemy UAS operating on both land and sea domains. The user may choose the command and control system that receives the tracker's information.

"What makes the Threat Tracker **unique** is that it incorporates **machine learning algorithms** to autonomously process radar detections, analyze thermal images to assist in video-based tracking, and classify tracked targets to determine if the object is a UAS," said Marvin Peardon, Threat Tracker program manager at NSWC PCD. "The Gyro-stabilized Marine Platform will prevent the imagery from being distorted and possibly misclassified," said Jeremy Johnson, systems manager for the effort. Both Johnson and Peardon want to pursue operational testing within the year. <https://www.executivegov.com/2020/03/navy-develops-autonomous-system-for-uas-tracking/>

China uses drones to enforce the world's largest quarantine to contain coronavirus

Haye Kesteloo Mar. 9th 2020



Industrial drones have been modified by government agencies and drone manufacturers to try to keep an estimated 50 million residents indoors across a dozen Chinese cities.

Drone software has been rewritten to adapt applications for crowd management and disease detection. The drones are outfitted with thermal sensors, high-definition zoom lenses, loudspeakers, and chemical spray jets for disinfecting large areas, reports the [South China Morning Post](#).

Chinese drone capital Shenzhen has about **360 different drone manufacturers**, including the world's largest drone maker, [DJI](#). Collectively, these companies supply 70% of the world civilian drones and about 60% of Chinese industrial unmanned aerial vehicles, according to official data.

'The coronavirus outbreak has led to a deeper understanding of the application of drones by society and government,' said Lu Zhihui, chairman of Shenzhen MicroMultiCopter Aero Technology, whose surveying and mapping drones can be geared with loudspeakers, thermal sensors, 40-times zoom lenses and flood lights to help enforce quarantines.



UAS and SmallSat Weekly News

Since the coronavirus outbreak led to citywide quarantines, MicroMultiCopter has supplied more than 100 drones to local government authorities in 11 Chinese cities. The company works directly with government agencies including police, transport department, and local propaganda units. Every drone can cover about 10-square-kilometers of urban areas in an hour, saving the work of more than 100 police officers in dozens of vehicles, Lu said.

MicroMultiCopter is planning to more than double its production to 5,000 drones this year, from 2,000 aircraft last year. <https://dronedj.com/2020/03/09/china-uses-drones-to-enforce-the-worlds-largest-quarantine-to-contain-coronavirus/>

Mothers search for missing children in Mexico's 'killing fields' with DJI

Phantoms Haye Kesteloo Mar. 9th 2020



Leticia Hidalgo has been looking for her missing son Roy for almost a decade. She and other activists have now started to use [DJI Phantom drones](#) to look for the missing loved ones in what are called the 'killing fields' of Mexico.

A short video that you can watch [here](#) on Yahoo! News informs us of the following: "Missing since 2011. Leticia's son Roy was kidnapped by armed men. Frustrated with a lack of response from authorities, she has taken the search into her own hands. She now uses a drone to look for traces of his body in an area known as one of Mexico's 'killing fields'. The drones have a much brighter and sharper vision. And it is not necessary to spend hours walking in the sun until we find an area of interest. The drone photos helped identify variations in the surface of the ground, which could indicate the presence of bodies. Mexico's Narco violence has left more than 60,000 people missing since 2006. No one has ever looked for human remains as we are doing now."

With drone technology becoming more capable and more affordable, we keep seeing new ways in which people are using [drones for good](#). <https://dronedj.com/2020/03/09/mothers-search-for-missing-children-in-mexicos-killing-fields-with-dji-phantoms/>

Altitude Angel strengthens offering with 'space-based UTM' APPLICATION HEADLINE

NEWS UK ALEX DOUGLAS MARCH 9, 2020

The company said the move brings critical airspace situation awareness and conflict resolution to remote areas and those affected by natural disasters **anywhere on the planet, at any time**.



UAS and SmallSat Weekly News

It explained that UTM services are typically dependent on the appropriate ground-based communications network infrastructure, such as cell towers, to send and receive instructions and tracking information from drones.



In the event of a natural disaster, such as a flooding, wildfire, tsunami, earthquake or volcanic eruption, safe operation of multiple drone flights is compromised as this ground infrastructure isn't resilient, or in the case of remote areas, not available.

However, Altitude Angel says that the combination of its UTM technology platform, which now includes the world's first tactical Conflict Resolution Service available via a UTM platform at scale, when used in conjunction with partner satellite networks, will allow any lead organization or agency to deploy **an instant UTM platform** for the safe operation of drones in even the most challenging environments. It will also provide the essential coordination of aerial unmanned and, if necessary, manned aviation assets. https://www.commercialdroneprofessional.com/altitude-angel-strengthens-offering-with-space-based-utm/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-325475-Commercial+Drone+Professional+DNA+-+2020-03-09

Skyports sees capital raise hit £6m with Irelandia Aviation investment HEADLINE NEWS ALEX DOUGLAS MARCH 9, 2020



The latest investment came from Irelandia Aviation, joining existing Series A investors Deutsche Bahn Digital Ventures, Groupe ADP and Levitate Capital in the investment round.

Skyports intends to use the funds to continue its ambitious program of **site acquisition** for passenger and cargo vertiports in cities around the world, including **Singapore and Los Angeles**.

The company will also expand its team to enable the full commercialization of its urban and rural drone delivery services.

Founder and managing partner of Irelandia Aviation, Declan Ryan, will also take a seat on the Skyports board. https://www.commercialdroneprofessional.com/skyports-sees-capital-raise-hit-6m-with-irelandia-aviation-investment/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-325475-Commercial+Drone+Professional+DNA+-+2020-03-09

UAS and SmallSat Weekly News

Countries use drones and other tech to fight Coronavirus [Haye Kesteloo](#) Mar. 10th 2020



Today the WSJ published an article in which they talk about how various technologies are being used by countries to fight the [Coronavirus](#). Readers of *DroneDJ* will already know that drones have been used in a number of ways, varying from [drones outfitted with loudspeakers to communicate to people](#) to [modified DJI Agras T16 aircraft to help spray disinfectants](#).

This article briefly covers how drones are used to spot people who might have the Coronavirus and that a drone carrying 2.5 gallons of disinfectant can spray up to 105,000 square feet, which is about the size of a typical Walmart store.

Timothy W. Martin and Liza Lin write for the WSJ that: "Unmanned aerial vehicles, typically used to spot forest fires or for police surveillance, can now scan crowds in China and spot someone hundreds of feet away running a fever, said Kellen Tse, deputy general manager for Shenzhen Smart Drone UAV Co., a drone company working with two Chinese provinces. The drone, which uses thermal imaging, sends alerts about those unwell to on-the-ground officials."

In South Korea's hard-hit city of Daegu, private drone companies have been deployed to help disinfect public places at the local government's request. A single drone can load around 2.5 gallons of disinfectant and spray an area of up to 105,000 square feet—or about the size of a typical Walmart store. "It takes about 10 to 12 minutes to use it all up," a Daegu city official said. You can read the entire article [here](#) [paywall]. <https://dronedj.com/2020/03/10/countries-use-drones-and-other-tech-to-fight-coronavirus/>

Spanish Quaternium sets drone flight time record of eight hours and ten minutes [Haye Kesteloo](#) Mar. 9th 2020



Spanish [Quaternium](#) sets a drone flight time record of eight hours and ten minutes, almost [one hour longer](#) than the previous record. Watch the short video below in which the police from Benidorm, Spain explains the value of such long flight times.

Quaternium started developing unmanned aircraft or drones six years ago. Since the start, the company has been heavily involved in trying to set new flight time records.



UAS and SmallSat Weekly News

The drone developed by Quaternium combines electrical systems and batteries with the use of a 2-stroke gas engine powered by 95 octane fuel with a four percent oil mixture ratio. The unmanned aerial system weighs around 55 pounds and features a payload of 22 pounds. When carrying a full payload the drone can stay airborne for approximately 2 hours. The quadcopter has a cruising range of about 30 to 50 miles per hour. <https://dronedj.com/2020/03/09/spanish-quaternium-sets-drone-flight-time-record-eight-hours-ten-minutes/>

Rwanda Launches Anti-Malaria Pesticide Spray Using Drones

Daniel Sabiiti March 10, 2020



Rwanda has launched a major fight against malaria that will use drones to totally wipe out mosquito lava.

The new spray program launched on Tuesday, March 10, 2020 by the ministry of health is set to be piloted by Charis UAS- a local Drone Company in six high-risk malaria zones across the country at a cost of over Rwf60million.

The government has been using the IRS residual spraying system which requires at least 500 men and women to spray a hectare of land, an activity which costs government between Rwf1 to 2billion per district.

“With technology we cut costs in logistics, and human error in spraying will be minimized. We are taking the war to the mosquito breeding areas instead of waiting for them to grow and infect more people,” Dr. Daniel Ngamije, the new Minister of Health said.

According to Ngamije, this program will cut down on malaria infections by 90% in the next nine years using drone sprays, and will further improve capacity building of health worker and prevention through mass mobilization. <https://www.ktpress.rw/2020/03/rwanda-launches-anti-malaria-pesticide-spray-using-drones/>

11Mar20

VoltAero begins flight testing of Cassio e-aircraft

11 MARCH 2020 NEWS



VoltAero has commenced flight tests for the Cassio e-aircraft from its headquarters facility at the Royan-Médis Aérodrome in France. The all-new family of Cassio e-aircraft is equipped with Safran Electrical & Power's ENGINeUS smart electric motors. “The



UAS and SmallSat Weekly News

current test phase is with the powertrain for our six-seat Cassio version, to be followed by validation of the final aerodynamic and powertrain configurations on both the four-seat and nine-seat Cassio versions."

The aircraft can be customised for use in different applications, including operations by private owners, air taxi/charter companies and commercial flights. VoltAero technical director Didier Esteyne said: "Flying on the power of Safran's ENGINeUS motors is truly remarkable, with no vibration and extremely low noise levels. It confirms that our Cassio aircraft will bring an entirely new experience to aviation." According to VoltAero, the power module combines an internal combustion engine and three electric motors. <https://www.aerospace-technology.com/news/contract-news/voltaero-begins-flight-testing-of-cassio-e-aircraft/>

Here's Matternet's Idea For The Kind Of Docking Station That Could End Up On Your Block

Jeremy Bogaisky Forbes Staff Aerospace & Defense; Mar 10, 2020



Matternet on Tuesday unveiled a 10-foot tall kiosk three years in the making that's designed to safely integrate its medical delivery drones into urban environments.

Plenty of companies have developed docking stations for recharging drones and to shelter them when they're idle. Matternet could be **the first** to field a system that automatically handles cargo.

After its M2 drone enters through the top and docks, the station loads and unloads payload boxes, swaps batteries and assesses the condition of the drone. Medical workers will be able to retrieve and drop off boxes through a hatch after scanning their IDs.

Matternet, which is based in Mountain View, California, aims to deploy the docking station in the second quarter in **Switzerland**, where it began ferrying medical specimens between hospitals and laboratories in 2017 in collaboration with Swiss Post. In Lugano, Matternet claims to have improved delivery times by 45 minutes over ground-based courier services. It relaunched service in late January after an eight-month halt following two crashes.

<https://www.forbes.com/sites/jeremybogaisky/2020/03/10/a-delivery-drones-home-heres-matternets-idea-for-the-kind-of-docking-station-that-could-end-up-on-your-block/#224bfbd4565b>



UAS and SmallSat Weekly News

XAG resumes drone production as China “steadily recovers” from coronavirus outbreak

APPLICATION HEADLINE NEWS INTERNATIONAL ALEX DOUGLAS MARCH 11, 2020



The Chinese agriculture technology company XAG is one of the first companies obtaining work resumption approval from government. It restarted business in its Guangzhou headquarters on February 10, with an overall 90% work resumption rate of its R&D staff on the first day.

To fulfil the large purchase orders of agricultural drones for the farming season, XAG has also set up a 20-million-yuan relief fund for its supply chain partners who struggle to reopen their factories.

Commenting on the move, Tang Xiaomin, vice president of XAG, said: “XAG’s suppliers are mostly small-to-medium sized manufacturing enterprises. Many of their machine and equipment are financed through bank loans, and obviously it is much more difficult to apply for another loan at this stage. Without enough cash flow, they would not be able to restart operations, let alone returning to full output capacity.”

https://www.commercialdroneprofessional.com/xag-resumes-drone-production-as-china-steadily-recovers-from-coronavirus-outbreak/?utm_source>Email+Campaign&utm_medium=email&utm_campaign=45819-325648-Commercial+Drone+Professional+DNA+-+2020-03-11

Impossible Aerospace unveils 911 responder drone

APPLICATION INTERNATIONAL NEW PRODUCTS NEWS ALEX DOUGLAS MARCH 11, 2020



Impossible Air Support is a turn-key program that lets cities dispatch drones directly to the scene of their 911 calls to improve emergency response times. **Mounted on top of tall city buildings**, the drones are controlled by police officers and firefighters from secure command stations within their departments.

Once deployed, they can provide a live video feed of an evolving situation to responders on the ground, intervene in a situation with sirens or lights or even deliver crucial supplies like life jackets or AEDs.



UAS and SmallSat Weekly News

The company says it is now in 'Phase One' of its Air Support deployment, with several police and fire departments across the state of California now flying its US-1 aircraft. Phase two will involve a series of hardware and software updates that enable cities to perform more advanced missions.

Air Support drones will be equipped with sirens, spotlights and loudspeakers so first responders may use them to provide instructions from the air to emergency victims or suspects.

https://www.commercialdroneprofessional.com/impossible-aerospace-unveils-911-responder-drone/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-325648-Commercial+Drone+Professional+DNA++2020-03-11

12Mar20

US is preparing to ban foreign-made drones from government use Zack

Whittaker@zackwhittaker March 11, 2020



The Trump administration is preparing an executive order to ban federal departments and agencies from buying or using foreign-made drones, citing a risk to national security, TechCrunch has learned.

The draft order, which was drafted in the past few weeks would effectively ban both foreign-made drones or drones made with foreign components out of fear that sensitive data collected during their use could be transferred to adversarial nation-states. The order calls out threats posed by China, a major hub for drone manufacturers that supply both government and consumers, with the prospect that other countries could be added later.

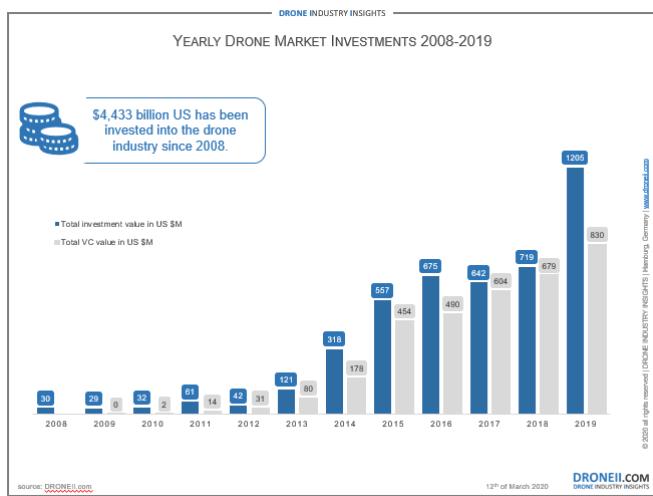
The order says it's government policy to "encourage" the use of domestically built drones instead. If passed, federal agencies would have a month to comply with the order. But the military and the intelligence community would be granted broad exemptions. A spokesperson for the White House did not comment. <https://techcrunch.com/2020/03/11/us-order-foreign-drones/>

Money Talks: 2019 Drone Investments Break New Records 2020-03-11 Hendrik

Boedecker

Rounding off another fiscal year, we bring you the key trends and developments in drone investments in 2019.

UAS and SmallSat Weekly News



2019 was a record-breaking year in many ways. The total yearly investment value not only broke last year's record but also surpassed the billion mark, as **\$1.2 billion** was invested in the drone industry. As our graphic shows, venture capital investments once again made up a large portion of this sum. VC deals also broke the record in 2019 with \$830 million invested, up from \$679 million in 2018. Eleven years since our first recorded drone industry investment, we can now

say that a whopping \$4.443 billion has been invested into the drone market.

2020 Outlook: As the market continues to grow, we expect 2020 to be yet another record-breaking year, with both overall and VC deals reaching new highs. We also expect to see the continued trend not the number of investment deals growing drastically but the value of each investment instead. <https://www.droneii.com/money-talks-2019-drone-investments-break-new-records>

France Chooses 8 UTM Providers for a “Best of Breed” Solution: “U-Space Together” Miriam McNabb March 12, 2020

Each participant will implement their product in a specific designated area, and DSNA will evaluate the systems during the trial period. *The following is an Altitude Angel press release.*



London, UK: [Altitude Angel](#), the world's leading UTM (Unmanned Traffic Management) technology provider, has been selected by France ANSP DNSA to take part in a nationwide, U-space pre-operational program.

The U-space Together program aims to build best-in-class solutions through a collaborative approach. Eight partners have been designated a unique area of restricted airspace to deploy a UTM platform, the success of which will be appraised by DSNA during the trial period.

Altitude Angel will be introducing a platform to the restricted airspace around the international airport of Lyon Saint-Exupéry, the second busiest non-Parisian airport in France after the Nice Airport. It serves the city of Lyon, the third biggest city in France.



UAS and SmallSat Weekly News

<https://dronelife.com/2020/03/12/france-chooses-8-utm-providers-to-create-a-best-of-breed-integrated-solution-u-space-together/>

13Mar20

U.S. Military Exploring eVTOL Solution to Resupplying Troops Nick Zazulia March 12, 2020



Service Engineering's TRV-150 system

The U.S. military is stepping up its efforts to enlist autonomous eVTOL aircraft for a variety of missions, especially those that would reduce risk to troops, such as moving cargo in combat zones. In early January, the U.S. Air Force issued a request for information to civil eVTOL developers in a bid to evaluate options for investing in the technology. For 2020 alone, the Pentagon has allocated almost **\$170 million** to investigate options for what it calls unmanned logistic system-air capability.

The Marines are partnering with both the Army and the Air Force on different projects to realize that goal through what it calls small, medium, and large unmanned logistics systems. The Office of the Secretary of Defense is allocating approximately **\$120 million** to the efforts of the Naval Air Systems Command with small and medium ULS-A vehicles.

Another \$30 million for medium-size ULS-A in combined stakeholder investment and funding from the Office of the Secretary of Defense is being put toward joint capabilities technical demonstrations that need to be completed before the POM funding can be put to use. And the fiscal year 2020 budget from Congress includes **\$18.5 million** to advance autonomous technology, particularly in large aircraft. <https://www.ainonline.com/aviation-news/defense/2020-03-12/us-military-exploring-evtol-solution-resupplying-troops>

Businesses Are Rethinking How They Use Drones in the Face of Novel Coronavirus, COVID-19 Danielle Gagne MARCH 12, 2020



The **global pandemic COVID-19** has been a major disruptor globally, from **travel restrictions** and **event cancellations** to impacts to supply chain and is going to be a major differentiator for companies looking to weather the crisis. Because of their ability to respond quickly and operate autonomously, one major mitigating factor receiving a lot of



UAS and SmallSat Weekly News

media attention has been the use of drones.

Although this is a novel situation for drones to be used, it is highlighting the value that drones inherently held all along—the ability to deliver goods and aid, to provide important high-quality data in hazardous conditions that would otherwise put humans at risk and the ability to monitor our important resources from afar. By doing what drones do best, they are helping to mitigate exposure to the disease and address worker shortages, which only goes to highlight why regulations like BVLOS and flights over people are set to be game changers in the industry.

In the article below, Ariel Avitan, Co-Founder and CCO at Percepto, breaks down some of the keyways drones can help keep businesses operating and what this crisis reveals about our operating processes in general. https://www.commercialuavnews.com/public-safety/businesses-are-rethinking-how-they-use-drones-in-the-face-of-novel-coronavirus-covid-19?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiTnpNelpXTTVOV1ZtWkRZeCIsInQiOilraFUxN0lzNzVPUjRocTVjRXJ2eURvYURJdkJzS292T0RWZ285bzVWUmhGTzlVcUxtczROb2RYajE2UmptXC90K3hoZ29iaFBqYVgrT0d1VnJIRGRtaEJmQStRUHpRN0tiNWlYaGVuMzRIZDVtNhTZmEyaXFDWUV3RWFQV2dVUVUiFQ%3D%3D