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EHang unveils drone taxi in Vienna APPLICATION EUROPE HEADLINE NEWS MANUFACTURER NEW PRODUCTS ALEX DOUGLAS APRIL 5, 2019



It was introduced in the Austrian capital's Generali Arena football stadium and made 'hops' around the ground to show what it could do. As it is not yet authorized for use in Austrian airspace, it had to stay inside the stadium but did make vertical moves of up to 30 feet.

EHang says it has received thousands of pre-orders and is

working with Austrian aeronautics company FACC to start mass production next year.

The EHang 216 is equipped with eight sets of rotors which emit a noise level of 90 decibels, below a normal helicopter but still easily loud enough to be uncomfortable. The firm says it hopes to get the noise level down to 75 decibels.

EHang's goal is to use to the drone to carry passengers at low altitude over distances of up to 22 miles but still needs to be cleared for use by aviation authorities. Earlier this week, CDP reported on the news that EHang had withdrew its plans for an IPO in the US.

https://www.commercialdroneprofessional.com/ehang-unveils-drone-taxi-in-vienna-%EF%BB%BF/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-297795-Commercial+Drone+Professional+DNA+-+2019-04-06

Russian shotgun-wielding drone shoots other drones out of the sky Haye Kesteloo Apr. 5th 2019



Check out this Russian shotgun-wielding drone that can shoot other drones, balloons or model airplanes out of the sky.

Terrifying? Yes. Impressive? Yes, as well. This is a 50-pound weighing drone that can take-off and land vertically and can shoot other flying objects out of the sky with the help of the Vepr-12 shotgun that is operated by a second visor-wearing

person who aims the gun through a live video link and sighting system. This heavyweight drone has a flight time of 40 minutes.

One of Russia's largest defense contractors, JSC Almaz Antey, has received a patent for this terrifying shotgun-wielding drone. Work on this unmanned aircraft started in 2016 on behalf of



Almaz Antey by the Student Design Bureau of Aviation Modeling at the Moscow Aviation Institute.

In the video below you can see how this heavyweight drone flies very well and is able to shoot down a balloon and a model aircraft before landing successfully. You would think that such a heavy drone would be hard to operate and even harder to aim, but this video shows that it apparently works really well. https://dronedj.com/2019/04/05/russian-shotgun-wielding-drone/

UK drone incidents rise sharply according to safety experts



According to safety experts, <u>UK drone incidents</u> rose more than a third in 2018. The UK Airprox board recorded 125 dangerously close encounters or drone incidents in 2018. This number is more a third higher than in 2017 when only 93 drone incidents were recorded. 71 incidents were recorded in 2016. It should come as

no surprise that 39 of the 125 drone incidents occurred at the UK's busiest airport Heathrow.

In an article from the <u>Financial Times</u>, the head of flight safety at Balpa, the British Pilots Union, Rob Hunter said that the sharp increase was "incredibly concerning." He continued to say that "a drone coming into contact with an airliner or helicopter could prove disastrous."

interestingly enough the <u>Gatwick drone fiasco</u> that shut down the airport for three consecutive days, is not included in the 125 dangerously close encounters or UK drone incidents of last year. The reason for the exclusion is that the pilots and air traffic controllers did not feel that the safety of aircraft was endangered. https://dronedj.com/2019/04/05/uk-drone-incidents-2018-safety-experts/

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DOT Secretary Elaine Chao Flies a Drone – and Points Out the Benefits of the Drone Industry Miriam McNabb April 05, 2019

With the UAS Integration Pilot Program (IPP) well underway and reporting successful tests of a wide variety of beneficial drone applications, Department of Transportation Secretary Elaine Chao is giving drones some attention. While her speech did mention "irresponsible drone flights," the focus was on search and rescue and first responder applications.



"New uses are constantly being found for drones, including surveying crops, inspecting damaged homes and infrastructure, and delivering packages and medical supplies. But one field where drones have already proved, and continue to prove their worth, is in search and rescue."

On Saturday, at Search and Rescue Drones Conference in Hazard, Kentucky, she highlighted several examples of how drones are helping first responders and the communities they serve.

"Last year, Georgetown police, following FAA guidelines, purchased a drone with night vision and thermal imaging to deal with a rash of car break-ins. It helped police nab a burglar hiding up on a building roof."



U.S. Transportation Secretary Elaine L. Chao speaks to 300 first responders, law enforcement officials and their families at "Search and Rescue Drones Conference" in Hazard, Kentucky 3/30/2019.

Secretary Chao drew attention to how when a grandmother, her grandson and their dog got lost in a field, a drone found them

within just 15 minutes. "And when a train derailed, that same drone allowed emergency response teams to assess the wreckage and determine, before personnel entered the site, whether any of the tank cars were leaking bio-hazardous material," she said. https://dronelife.com/2019/04/05/dot-secretary-elaine-chao-flies-a-drone-and-points-out-the-benefits-of-the-drone-industry/

Interview: Intelligent Energy & Productiv on Hydrogen-Powered Drones Malek Murison April 04, 2019

One of the projects mentioned in our exploration of hydrogen was RACHEL, in which a UK-based group flew a 20kg multi-rotor drone powered by a hydrogen fuel cell <u>for over one hour</u>. The project was a collaboration funded by Innovate UK that was led by engineering firm Productiv with help from UAS videography company <u>BATCAM</u> and fuel cell provider Intelligent Energy.

We got in touch with <u>Productiv</u> and <u>Intelligent Energy</u> to find out more about the complexity and potential of hydrogen-powered drones. The comments below were provided by Intelligent Energy's head of communications and PR, Debbie Hughes, and Productiv's product strategy manager, Tom Donnelly.



Hydrogen has a reputation as a futuristic power source, but Intelligent Energy, based in Loughborough, England, is one of several companies with solutions that are ready to go today. Hydrogen fuel cells allow for a power to weight ratio that can achieve longer flight times. And, if you can offer minimum downtime and quick refueling, they are a compelling alternative to conventional sources of power.

In the past 18 months, Intelligent Energy has launched three products designed to get hydrogen drone operations off the ground: a 650W Fuel Cell Power Module, an 800W Fuel Cell Power Module and a Power Path Module, which is used to connect multiple modules and facilitate higher power outputs. According to Debbie Hughes, Intelligent Energy "now has the lightest and most power dense fuel cells available on the

market." https://dronelife.com/2019/04/04/intelligent-energy-productiv-hydrogen-powered-drones/

International breakwater survey deploys drones for industrial surveying and assessment DRONES AT WORK HEADLINE NEWS SURVEILLANCE UK ALEX DOUGLAS APRIL 5, 2019



Terra Drone Europe has partnered with Dutch firm as part of industrial surveying and assessment work carried out by drone.

Taking place in Guatemala, the companies put a DJI Phantom 4 RTK to work. By combing hydrographic survey data with aerial survey data, it was possible to create a 3D model showing features

above and below the water level. The uninterrupted view provides significant insights into complicated spaces and the data produced supports key decision making. Survey data was collected along a series of breakwaters and intertidal beach fronts.

Last year, Skeye was acquired by Terra Drone, from Japan. Following this acquisition, Terra Drone has become one of the largest drone service companies with more than 250 employees and presence in six continents. https://www.commercialdroneprofessional.com/international-breakwater-survey-deploys-drones-for-industrial-surveying-and-

<u>assessment/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-297750-Commercial+Drone+Professional+DNA+-+2019-04-05</u>



Chinese police turn to drones in bid to tackle illegal gambling APPLICATION BUSINESS CRIME INTERNATIONAL NEWS ALEX DOUGLAS APRIL 5, 2019

According to Chinese media outlet People's Daily Online, the drones are used as a means of surveillance.

They act as eyes in the sky for the authorities and inspect the landscape in the hunt for gamblers. The technology can be used to identify well-hidden gambling houses allowing the police to carry out a raid.

The report went on to confirm that since last year, law enforcement has led raids on a number of mobile casinos with the assistance of UAVs in an effort to keep gambling from "corrupting the spiritual civilization of society." https://www.commercialdroneprofessional.com/%EF%BB%BFchinese-police-turn-to-drones-in-bid-to-tackle-illegal-

gambling/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-297750-Commercial+Drone+Professional+DNA+-+2019-04-05

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Drones could be the future of weather forecasting Tamara Dietrich Staff writer Apr 6, 2019



Meteorology professor and drone researcher Phillip Chilson has a vision, and it goes something like this: A network of 30-foot mesonet towers is stationed throughout the country to sample air pressure, temperature, humidity, wind speed and direction. There's also a complementary network of ground stations, both

autonomous and manned. Every hour or two, stations launch drones that fly up a mile or so to take measurements inside the Earth's energetic and extremely complex boundary layer — a region not easily studied using current technologies. This helps build a vertical profile of the lower atmosphere. That data is fed back to the ground stations, then ingested into forecast computer models.

When a drone sniffs out an approaching storm or some threatening disturbance, more vehicles will launch — an intelligent swarm of drones that coordinate with each other on how best to interrogate that region of the atmosphere, gathering more data, still feeding the models. Smaller, expendable winged drones are dropped into the gathering storm, flying around in a controlled manner to collect even more samples before they're ultimately destroyed.



And all those measurements, combined with others taken by research aircraft, weather balloons or Earth-observing satellites, give meteorologists a fuller and more accurate picture of a weather threat, and people in its path the information they need to best respond to it. https://pilotonline.com/news/local/science/article-6d9a7b22-5713-11e9-b618-0759326ac5d9.html

Drone Ban Grounded after Outcry Vince Conti Apr 7, 2019



STONE HARBOR - Following challenges to its first version of an ordinance which prohibited the flying of drones in the borough except under narrow business-related conditions, Stone Harbor Borough Council reintroduced a significantly changed ordinance April 2.

Borough Solicitor Marcus Karavan told council that the new version had been worked out in conjunction with the Federal Aviation Administration to ensure that the ordinance was consistent with areas in which federal and state laws preempt municipal regulation.

In the new version, the borough's attempt to regulate drone use is accomplished with a series of seven operational requirements which limit what a drone user can do without otherwise interfering with the ability of an individual to fly unmanned aircraft.

Individuals will not be allowed "to operate any model aircraft or unmanned aircraft systems" in ways that are careless or reckless. They cannot operate such aircraft to capture images, video or audio in situations where the subject "has a reasonable expectation of privacy." Drones cannot be used to harass, stalk or otherwise victimize individuals. This prohibition includes using the aircraft to follow, film or photograph a person who has not consented to such activity. Drones cannot be operated in ways that interfere with a parade or motorcade, users must not use them in ways that interfere with the operation of any emergency responder, and they cannot be operated in ways that molest wildlife. Finally, drone operators cannot fly aircraft that have weapons of any kind attached.

Unmanned aircraft flown on behalf of the borough are exempt from these requirements provided that they comply with all federal laws and regulations. The ordinance establishes penalties for violation of the requirement with a first offense being punishable by a fine of not more than \$500. Subsequent violations can carry penalties of up to \$1,000 and incarceration for not more than 30 days. https://www.capemaycountyherald.com/news/government/article-56de69ee-57e4-11e9-8174-e353d65d5e91.html



IAI expands Heron UAV unified control station availability worldwide Pat Host, Rio de Janiero - Jane's Defence Weekly 04 April 2019

Israel Aerospace Industries (IAI) is expanding worldwide the availability of the unified control system (UCS) for its family of Heron medium-altitude long-endurance unmanned aerial vehicles. Machtinger said the UCS was designed with touch-screen simplification. He said the goal was to provide efficient user interfaces.



The user can use touch control to perform automatic take-off and landing and change mission course and altitude, among other functions. The UCS, based on commercial off-the-shelf equipment, has three screens - two for the basic payload and a third tablet-sized screen for a mapping application. It also includes a keyboard, mouse, DVD drive, USB ports, optional joystick, left-hand module, voice-over internet protocol headset, and a PC. It allows one user to have complete control of the aircraft while also reducing the training time required to qualify a pilot.

https://www.janes.com/article/87681/update-laad-2019-iai-expands-heron-uav-unified-control-station-availability-worldwide

DJI and Los Angeles Fire Department team up to accelerate public safety drone tech HEADLINE NEWS UNITED STATES ALEX DOUGLAS APRIL 8, 2019



The partnership is expected to create, test and deploy DJI drones tech as an emergency response and preparedness tool.

The agreement marks one of DJI's largest partnerships with a fire-fighting agency in the US and will provide the LAFD with access to new technologies, training and support to incorporate innovative drone technology into its operations.

Enterprise Partnerships Manager at DJI, Bill Chen, said: "Through our two-way collaboration, DJI will receive valuable insight into the complexities of deploying drones for emergency situations in one of the most complex urban environments in the nation. This insight will allow us to continue to refine and develop new technologies that will allow the LAFD and public safety agencies around the world to gain more value from life-saving drone technology." The agency has flown over 175 missions using DJI's industrial aerial platforms.

https://www.commercialdroneprofessional.com/dji-and-los-angeles-fire-department-team-up-to-accelerate-



<u>public-safety-drone-tech/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-297929-Commercial+Drone+Professional+DNA+++2019-04-08</u>

Government in Gibraltar invests in drone to further environmental research BUSINESS DRONES AT WORK EUROPE HEADLINE NEWS POLITICS UK ALEX DOUGLAS APRIL 8, 2019



The Department of the Environment, Heritage & Climate Change in Gibraltar has acquired a UAV. It believes drones represent an opportunity for the Department to support and collaborate with a wider cross section of Government departments, augmenting data capture, data availability and data interpretation.

The initial applications of this technology will center on terrestrial and marine mammal monitoring, renewing and updating the aerial imagery of Gibraltar with new Orthophoto, generating 3D Building Models, Contour Maps and Solar panel inspections. The technology will also be a tool for enhanced environmental law enforcement.

Minister for the environment and climate change, Dr John Cortes commented: "It is a huge step forward in how we look after our natural environment, both on the land and in the protected seas which make up British Gibraltar Territorial Waters."

https://www.commercialdroneprofessional.com/government-in-gibraltar-invests-in-drone-to-further-environmental-research/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-297929-Commercial+Drone+Professional+DNA+-+2019-04-08

Drone delivery operations underway in 27 countries April 7, 2019 Philip Butterworth-Hayes UAS traffic management news



Drone postal and goods delivery programs are underway in 17 countries around the world while 13 countries are pioneering medical/pharmaceutical drone transport services. Altogether, 26 nations of the world are trialing, planning to test or have established drone delivery operations underway.

These are the first results of a survey into the drone delivery market carried out by www.urbanairmobilitynews.com at the start of April 2019.

While the countries of sub-Saharan Africa have become pioneering nations in the development of beyond visual-line-of sight medical deliveries by drone, Switzerland, Finland, Iceland, China,



Australia, Singapore and the USA are leading the way in developing more commercial drone delivery operations.

These pioneers will soon be caught and overtaken by a second wave of adopters which include Germany, Dubai and Canada — especially Canada, where Drone Delivery Canada has developed a C\$2.5 million-a-year business supplying one rural community with goods by drone and is now planning to expand this business to 200 more remote communities over the next few years. https://www.unmannedairspace.info/latest-news-and-information/drone-delivery-operations-underway-in-26-countries/

'SmartSat' Tech Could Help Satellites Adapt to Mission Requirement April 07, 2019 News, Technology



Maria Demaree, vice president and general manager of mission solutions at Lockheed Martin's space segment, said a new software-based technology can support reconfiguration of satellites according to mission requirements, C4ISRNET reported Friday. SmartSat can help reprogram other satellites in the

Lockheed introduced SmartSat <u>in March</u> and noted it would integrate the technology into *Linus* and *Pony Express* nanosatellites slated to launch later this year. The company's new satellite architecture has the potential to retain updates from ground controllers and facilitate big data processing.

event of a weather satellite malfunction and deliver coverage between continental regions.

"We can integrate onboard artificial intelligence and machine learning, making our satellites smarter than ever." https://blog.executivebiz.com/2019/04/lockheeds-maria-demaree-smartsat-tech-could-help-satellites-adapt-to-mission-requirement/

Pilotless Octocopter Flies with Passengers RUSS NILES

Ehang flew its autonomous octocopter with two passengers for the first time in public in Austria on Saturday and the company said the aircraft is now ready for mass production. The Ehang 216 hovered briefly in a soccer stadium Apr. 4 in Vienna with a small contingent of press in attendance. "This is not a drone," a company spokesman said in a video release. "It's an AAV, an autonomous aero vehicle." Nomenclature notwithstanding, the aircraft was pilotless, but it's not clear if it flew on internal guidance or whether it was remotely controlled.

In practice, passengers would climb aboard, punch a destination into the panel, and their work would be over. Using 5G wireless technology, the aircraft would fly itself to the destination and



take care of separation from other aircraft and objects. There will be two navigation systems on each aircraft, each capable of taking over from the other in case of a failure. The 216 will sell for about \$350,000 and the company is claiming "thousands" of orders, most of them in China.



http://flash.avweb.com/eletter/4311full.html?ET=avweb:e4311:2565185a:&st=email#232589

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UK urged to unify airspace for planes and drones April 8, 2019 - by Admin



The UK needs to overhaul airspace regulation to allow passenger jets and drones to fly safely alongside each other, the head of the country's largest air traffic control service has said.

Martin Rolfe, chief executive of Nats, which controls the airspace around Heathrow, the UK's busiest airport, said in an interview with the Financial Times that without a change, "you [will] have smaller pockets of airspace" for each type of aircraft, and "before you know it, you've divided the sky into too many pieces".

Mr Rolfe said he expected the government to reform Britain's airspace in the next five to seven years, depending on how quickly different types of aircraft — such as delivery drones and helitaxis — came into regular use.

UK airspace is currently split into five classes. Four are controlled and are used by airliners, some private planes and military aircraft; the fifth, Class G, is used by aircraft such as drones and small aeroplanes. They can fly whenever and wherever they like, subject to simple rules.

In its consultation on the future of UK aviation, published in December 2018, the government said it wanted to modernize airspace so that it was "shared and integrated." The government also confirmed in February that it was drawing up legislation that would provide the police with powers to enforce the legislation. These included so-called stop and search powers to seize drones or access relevant data in relation to crime scenes and large events at risk of a terrorist attack. http://dronesfanatics-blog.com/uk-ur ed-to-unify-airspace-for-planes-and-drones/



Google just beat Amazon to launching one of the first drone delivery services Jake Kanter



A Wing delivery drone

Wing, which became its own company under the Alphabet brand last year, plans to launch its first commercial delivery service in Canberra, Australia. The company confirmed the move in a blog post on Tuesday after it secured approval from Australia's Civil Aviation Safety Authority following a successful trial. A CASA

spokesman confirmed to Business Insider that the agency had approved the delivery service and said it was "very likely" to be a world first.

Other firms have claimed to have launched the world's first commercial drone delivery service. This includes Flytrex, which <u>launched a service in Iceland in 2017</u> in partnership with AHA, the country's biggest online retailer.

Wing has been piloting the Canberra project for about 18 months, completing 3,000 deliveries. On its official launch, the service is expected to be available to a confined number of homes in the Canberra area before gradually expanding. CASA said 100 homes would be eligible initially.

Wing is designed to allow users to place orders through an app, with deliveries made by drone within minutes, according to the company. Popular delivery items include fresh food, coffee, ice cream, and medicine. https://www.businessinsider.com/google-beats-amazon-to-launching-drone-delivery-service-in-australia-2019-4

AeroVironment Wins \$17.5 million Drone Contract Jason Reagan April 08, 2019



Commercial and defense drone systems provider <u>AeroVironment</u> is flying into a contract with an unnamed nation for more than \$17 million, according to a company announcement during the <u>LAAD 2019</u> defense expo

in Rio de Janeiro this week. The company will provide its <u>Puma AE II</u> small unmanned aircraft systems, training and support.

Puma can stay aloft for two hours and fly as high as 10,500 feet with a range of 12 nautical miles. Some models are equipped with optical and infrared cameras that can to capture still imagery and video.



"AeroVironment's family of small drones comprise the majority of all unmanned aircraft in the U.S. DoD inventory, and its rapidly growing international customer base numbers more than 45 allied governments," Sharpin added.

Last year, AeroVironment garnered a \$5.9 million contract from the Portuguese army, encompassing the procurement of Raven unmanned aircraft systems equipped with Mantis i23 sensors and pocket Remote Video Terminals. https://dronelife.com/2019/04/08/aerovironment-wins-17-5-million-drone-contract/

Commercial UAV Expo Europe: PwC Names 7 Trends in the Drone Industry Harry McNabb April 09, 2019



Michael Mazur, Consulting Partner and head of Pwc Drone
Powered Solutions delivered one of the Keynote addresses at the Commercial UAV Expo Europe today in Amsterdam, naming 7 trends that the investment firm sees shaping the industry.

- **1) Telecom will be a major beneficiary of the drone industry.** The massive amounts of data generated by commercial drone missions needs to be communicated somehow and telecom companies will reap the benefits.
- **2)** Energy Grid Operators are Scaling Up Autonomous Detection of Failure Modes. Using LiDAR and photogrammetry, operators can create digital models of the grid; using Al-powered tools, they can monitor vegetation growth, identify failure modes and create maintenance plans.
- **3) Drones and photogrammetry are becoming standard tools in the mining industry.** The time to do an open mine survey has moved from two weeks to two days using drones.
- **4) UAV urban mobility pilots are spreading across Europe.** Using drones as part of an integrated and multimodal transportation system is the only option to improving the situation.
- **5) UTM models are being refined and rolled out across Europe.** The models are currently being implemented across Europe, influencing the global drone community.
- **6) There is rapid growth in counter drone technology.** Regulators are anxious to support its development and implementation.



7) BVLOS will become standard in Europe. BVLOS flight opens commercial drone operations like large scale infrastructure inspections, remote operations, and drone delivery. https://dronelife.com/2019/04/09/commercial-uav-expo-europe-pwc-7-trends-in-the-drone-industry/

Injured hiker rescued from Clear Creek Canyon with help of drone Haye Kesteloo - Apr. 8th 2019



In a story about <u>drones for good</u>, an injured hiker was rescued with the help of a drone. The woman had fallen 30-feet down a rocky slope in Clear Creek Canyon in Denver, Colorado. A drone was used to locate the woman, but it took three dozen rescue workers nearly six hours, an

inflatable raft and two rope systems to bring the hiker back to safety from the inaccessible backcountry.

First, the hiker was lowered to the creek side with the use of a rope system. She was then carried down the creek bed for roughly 600 feet to a location where a second rope system was setup to pull her up to the road where an ambulance was waiting to take her to the hospital.

West Metro and the Golden Fire Department worked together on the rescue. Additional assistance was provided by the Jefferson County Sheriff's Office, Jefferson County Open Space, the State Patrol, the state Department of Transportation and American Medical Response ambulance. https://dronedj.com/2019/04/08/injured-hiker-clear-creek-canyon-drone/

The Drone Market Report 2019



HIGHLIGHTS

- The global drone market will grow from \$14 billion in 2018 to over \$43 billion in 2024 at a CAGR of 20.5%.
- **Service** is and will continue to be the largest segment of the drone industry, but **software** is the fastest growing.
- Energy is and will continue to be the largest industry on the drone market, but Transportation & Warehousing is going to close the gap and overtake all others as the fastest growing industry.
- **Inspection** continues to be the leading application method of drones, but the greatest growth is expected in **drone deliveries**.



- The North American market is currently the largest regional drone market, but the Asian one is growing at a much higher rate and expected to take over by the end of this year.
- Having legalized drones in December 2018, India will be by far the fastest growing commercial drone market in the world, by 2024 becoming the 3rd largest commercial drone market.
- Our new Drone Readiness Index (DRI) provides a comparative overview of drone regulations across the globe, followed by a deep dive into 20 national legislations. https://www.droneii.com/project/drone-market-report

10Apr19

DJI urges drone pilots to comment on proposed FAA rules – April 15 deadline Haye Kesteloo Apr. 9th 2019

<u>DJI</u> urges drone pilots, operators, and drone fleet managers in the United States to comment on the proposed <u>Federal Aviation Administration (FAA)</u> rules.

Before the proposed FAA rules come into effect there is a timeframe in which you can submit your comments. As of now, fewer than 100 comments have been received about flight at night and over people. The FAA actually pays attention to your input and takes it into consideration when making the final rules.

You can submit your comments on:

- 1. proposed new rules to allow professionals to routinely fly drones at night and over people
- 2. how to safely prepare for Unmanned Traffic Management (UTM), implement payload restrictions and enable flight beyond visual line of sight.

So, please take a minute or two and check out these links below and submit your comments for the FAA to consider. The deadline is Monday, April 15th. You can read DJI's official statement here. https://dronedj.com/2019/04/09/dji-urges-drone-pilots-comment-proposed-faa-rules/



FAA to award first drone airline license in the next month – official APRIL 10, 2019 Jamie Freed

SINGAPORE, April 10 (Reuters) - The agency decided last year that large-scale commercial package delivery operations by drones would need to meet the same safety and economic certification standards as other licensed U.S. airlines.



"In the next month we expect to announce we will have our first ... air carrier certificate for operating a drone airline," FAA Office of Unmanned Aircraft System Integration Executive Director Jay Merkle said at a conference in Singapore.

"That is a major accomplishment for us and our partner." He declined to name the partner, but to date, the only air carrier certificate application for a drone carrier listed on a U.S. government website has come from Wing Aviation LLC, a subsidiary of Google's parent, Alphabet Inc.

FAA documents associated with the application said Wing Aviation was proposing to conduct package deliveries using small fixed-wing drones in a rural area of the United States.

"Operations enabled by this exemption will be the first of their kind — a convergence of prior experience the FAA has with both small UAS operations and air carrier operations," the FAA said, in reference to unmanned aircraft systems. The regulator said granting approvals would be in the public interest, in a document dated April 2. https://www.reuters.com/article/aviation-drones/faa-to-award-first-drone-airline-licence-in-the-next-month-official-idUSL3N21S1GY

11Apr19

NASA Conducts CubeSat Optical Comms Link Experiment Matthew Nelson April 10, 2019 News, Technology



NASA carried out a laser communications pointing test through two deployed CubeSats from space. The satellites recorded a flash of light from a laser communications platform aboard the *Optical Communications and Sensor Demonstration* spacecraft with a short-wavelength infrared

camera within the *CubeSat Multispectral Observation System* payload, the agency <u>said</u> <u>Wednesday</u>.



NASA noted the experiment hopes to prove the feasibility of an optical communications link between two CubeSat units. The functionality may allow small satellite constellations to transmit large volumes of data in low-Earth orbit.

"The future of space communications is optical, and this result can be the first step on a road to making optical communications ubiquitous in Earth orbit, even on the smallest satellites," said Rich Welle, a co-principal investigator for NASA's OCSD mission at Aerospace Corporation.

CUMULOS is an Aerospace-built three-camera remote sensing payload developed to work with the *Integrated Solar Array and Reflectarray Antenna* small spacecraft. https://www.executivegov.com/2019/04/nasa-conducts-cubesat-optical-comms-link-experiment/

Italian company wins NY commercial drone competition April 10, 2019

ALBANY, N.Y. (AP) — An aerospace engineering startup founded in Italy will receive \$1 million after winning a New York state competition that aims to boost the state's aerial drone industry. Founded in 2017 in Parma, Italy, Sentient Blue designs small, gas engines for unmanned aerial vehicles. On Wednesday the company was named the latest winner of the GENIUS NY prize, which includes state economic development funding and a year-long residency at a business incubator in Syracuse.

Four other businesses were named as finalists and will each get \$500,000. The winning businesses have all agreed to operate in central New York for at least a year.

This is the third round of the competition, which is part of the state's broader effort to make central New York a national center for drone research and development.

https://www.chron.com/news/article/Italian-company-wins-NY-commercial-drone-13757280.php

The Case for Air Traffic Control for Drones Mariah Scott April 10, 2019



In February 2018, Corey Hitchcock traveled to Puerto Rico to assist crews from Georgia Power, Alabama Power and Mississippi Power with restoration efforts following the island's devastation from Hurricane Maria.



This time, Hitchcock and unmanned aircraft system (UAS) pilots from Alabama Power and Georgia Power used drones to pull 72,000 feet of rope for conductor wire, saving weeks of time and an estimated \$5.3 million. Hitchcock is the chief UAS pilot at Southern Co., one of the largest public utilities in the U.S., with over 9 million customers across 19 states. He is also one of more than 100,000 drone pilots who have obtained federal drone certification since the U.S. legalized drones for commercial use in 2016.

"Drones have changed the energy landscape in a way that I didn't foresee when we first started using the aircraft around the company," said Hitchcock, who runs drone standardization and operations for the company. "Initially, I thought that we were just going to do utility inspections on vertical infrastructure, and that was it. I quickly found out that construction, mapping and coal pile analysis were other practical uses." https://unmanned-aerial.com/the-case-for-air-traffic-control-for-drones?utm_medium=email&utm_source=LNH+04-11-2019&utm_campaign=UAO+Latest+News+Headlines

Mexico City Police Launch New Drone Program Betsy Lillian April 10, 2019



The Mexico City Police Department has launched a new drone program in partnership with Cape, a cloud platform for drone telepresence and data management.

The drones will be integrated into the department's daily operations to improve aerial intelligence, including supporting security efforts at large public events. Additionally, drones

equipped with Cape Aerial Telepresence will provide emergency response support for local SWAT operations.

The yearlong program will focus on increasing operational efficiency and the safety of both officers and the greater community. It is designed to enable officers to launch drones throughout the city and tele-operate each drone directly from the command center to the location of emergency calls. With access to the drone's live feed, responding officers will be able to get a live view of the scene before arrival to better determine needed resources and improve situational awareness.

"The safety of our residents, visitors and first responders is always our top priority," states
Edgar Isaac Martinez, director of cyber security and intelligence for the Department of
Intelligence and Information. "With Cape technology, our team is able to gain a level of visibility
that was never before possible, helping to not only drive operational efficiencies, but enabling



us to better protect and serve our community." https://unmanned-aerial.com/mexico-city-police-launch-new-drone-program?utm_medium=email&utm_source=LNH+04-11-2019&utm_campaign=UAO+Latest+News+Headlines

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National Agricultural Aviation Association cautions UAS operators of low-flying spring ag aircraft AGRICULTURE APPLICATION BUSINESS FAA NEWS REGULATION UNITED STATES ALEX DOUGLAS APRIL 10, 2019

The organization has said that UAS operators should know that agricultural aviators fly as low as 10 feet off the ground when making an application, meaning they share this low-altitude airspace with UAS.

Andrew Moore, executive director of the NAAA, said: "With the proliferation of Unmanned Aircraft Systems over the last few years, it is critical for UAS operators to be aware of agricultural aircraft. It is extremely difficult, if not impossible, for manned aircraft to see UAS while conducting labor-intensive aerial applications 10 feet off the ground at speeds as fast as 140 mph."

The NAAA has recommended UAS operators equip drones with tracking technology, get certified and well-trained in operating a UAV, contact local agricultural aviation operations before flying.

Equipping UAVs with visible strobe lights, giving right-of-way to manned aircraft, landing a UAV immediately when a low-altitude manned aircraft is nearby and carrying liability insurance is also important. <a href="https://www.commercialdroneprofessional.com/%EF%BB%BFnational-agricultural-aviation-association-cautions-uas-operators-of-low-flying-spring-ag-aircraft/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-298156-Commercial+Drone+Professional+DNA+-+2019-04-10

SkyX Systems chosen by ATTSAR for long-range search missions APPLICATION BUSINESS INTERNATIONAL NEWS ALEX DOUGLAS APRIL 10, 2019



ATTSAR described how SkyX's systems of surpassing the usual given distance was a reason for the decision.

A range of at least 65 miles, endurance up to an hour and a half, minimum speed of 40mph and maximum speed of 75mph and



autonomous VTOL in SkyX's offering were key features which ATTSAR outlined as important.

William Bolton, senior trainer at ATTSAR, commented: "Search and rescue missions are high-pressure, time-sensitive moments where every second counts in increasing the chances that we'll find individuals safe and unharmed."

"It's paramount that we use the latest technology to aid our efforts, which is why we've chosen to work with SkyX. The longer flight duration enables us to conduct missions in Southern Ontario over difficult terrain, along riverbeds, or long beachfronts. Additionally, BVLOS capabilities and ability to operate in various weather conditions provides us comfort."

https://www.commercialdroneprofessional.com/skyx-systems-chosen-by-attsar-for-long-range-search-

https://www.commercialdroneprofessional.com/skyx-systems-chosen-by-attsar-for-long-range-search-missions%EF%BB%BF/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-298156-Commercial+Drone+Professional+DNA+-+2019-04-10