



## UAS and SmallSat Weekly News

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### **New European drone regulation comes into force** HEADLINE NEWS JOE

PESKETT DECEMBER 31, 2020



New European Drone Regulation as laid out by the European Union Aviation Safety Agency comes into effect today in the UK, all EU member states, Norway, Iceland, and Liechtenstein.

These new rules are designed to offer a harmonized framework across most European countries and will help drone pilots to operate their drones in different territories on the same conditions as in their home country regardless of recreational or commercial purposes.

This is designed to effectively improve flight safety, simplify user approval procedures, facilitate users' personal and business applications, enhance user experience, and support rapid business development.

The world's largest drone manufacturer, DJI, has urged operators to embrace the new framework. "We welcome the new EU Drone Regulation as it streamlines different processes and allows DJI customers to travel from country to country without having to worry about different rules in different locations," said Christian Struwe, Director of Public Policy at DJI EMEA. "Striking a balance between the need to harmonize regulation of the safe use of drone technology and allowing our customers to benefit freely from its growing potential has always been of paramount importance for DJI in Europe."

The new regulation distinguishes between low-, medium- and high-risk categories with different requirements for products and operators.

<https://www.commercialdroneprofessional.com/new-european-drone-regulation-comes-into-force/>

### **Three amazing FPV videos showcase drone piloting skills** Scott Simmie Dec. 31, 2020



Pretty much all of these videos involve the agility that can only come from an FPV drone – and the ability that only comes with top-flight pilots.

[2 Comments](#). We happened across 22 seconds of epic footage, where FPV Filmz had followed B.A.S.E. jumpers



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with their FPV drones. The effect was amazing, as the pilots let gravity do the work.

**Air-to-air videos** always pose a challenge: You need to get close enough to the object in flight for it to dominate the shot – but not so close that your drone could pose any threat to the safe flight of the other vehicle.

Soaring with a paramotor. This piloting is, in our view, even trickier. As a drone pilot, you'd want to always stay well clear of those lines – and obviously not do anything else that could potentially interfere with the safety of the pilot. Here, the FPV Filmz duo manage to strike that balance: Close enough, yet far enough. Just watch.

Remember the top of the story? How it was those 22 seconds of footage that made us aware of FPV Filmz in the first place? Well, that video was just a teaser. Here's the real thing, just posted: <https://dronedj.com/2020/12/31/three-amazing-fpv-videos-showcase-drone-piloting-skills/#more-44968>

**Here are the top 5 drones of 2020: consumer, commercial, and research** Josh Spires Dec. 31, 2020

It's the last day of 2020, so we thought we'd [share the drones](#) we think stood out from the rest, putting them at the top of the list.



everyone.

**DJI Mini 2.** The new Mini 2 has also gained new and improved motors that allow it to fly in stronger winds and fly faster. It can now fly up to 10 kilometers away, thanks to the inclusion of DJI's OcuSync 2.0 transmission technology. That makes it the perfect budget drone for



and 15 meters per second wind.

**Parrot Anafi USA.** It has a heavy focus on security. While the drone has features that might appeal to the military, it's been designed for the first responder and enterprise market. It can detect people 1.2 miles away, can be fully operational in just 55 seconds and can fly in the rain



human could land.

**NASA Ingenuity.** The [NASA Ingenuity helicopter drone](#) was launched earlier in the year with the Perseverance Mars rover. It will allow NASA to get a look at the planet from above. It will allow scientists to capture high-definition images to prepare for future missions where a rover or



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**DJI Mavic Air 2.** It has launched with some impressive specs that include 48MP photos, 4k 60 fps video, HDR, 34-minute flight time, 10km transmission range, and ActiveTrack 3.0. To me, it's the perfect combination between size and specs for the flying I do.



**Skydio X2.** It is built for short-range reconnaissance missions for the US Army and will be used in search and rescue and security patrol. The **Skydio X2E** is built for the enterprise world to obtain situational awareness, inspect infrastructure and run search & rescue operations.

<https://dronedj.com/2020/12/31/here-are-the-top-5-drones-of-2020-consumer-commercial-and-research/#more-45256>

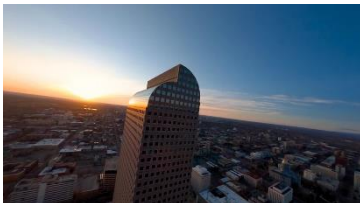
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### Denver daredevil dazzles with drones David MacQuarrie Jan. 1, 2021



Will Strathmann is a freelance cinematographer who only recently began flying and building FPV drones. He takes them along with him during Rocky Mountain hikes and captures **really frightening video** as his drone nearly scrapes the mountain tops at 80 mph.

Strathmann's dazzling drone videos [have gone viral before](#), like when he released his dawn flyover of Denver's Wells Fargo Center.



"The shot I had in mind was as the sun was rising and reflecting off those windows at the top of the building. Then as (the drone) goes over the side, to be able to do a dive down, was something much more dynamic and interesting and different than (what) people are used to seeing," Strathmann told FOX31.

"At the crossroads of FPV and professional filmmaking, it's really just the beginning, and that's really cool to be a part of," Strathmann says.



On top of The Rocky Mountains via FPV drone

Here's the full FOX 31 feature. It's worth watching.

<https://dronedj.com/2021/01/01/denver-daredevil-dazzles-with-drones/#more-45349>



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### Drone show lights up Scottish sky for Hogmanay Scott Simmie Jan. 1, 2021



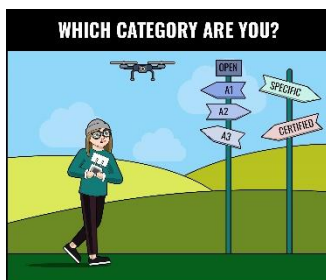
Scotland marked the end of 2020 with a special drone show in three parts. Really, it’s more like an art installation in some ways. And it’s definitely worth taking in.

Hogmanay refers to celebrations marking the end of the year. In fact, the final day of the year is a special day, and this year it was marked with a three-part installment of drone lights. The first part of that installment reflects on the year Scotland (and the rest of us) have just been through:

There couldn’t be large gatherings [in Edinburgh](#), so Underbelly Ltd. put together the drone show. It seems, at least in China, that these shows are all about setting records: The most drone, the longest shows, etc. The Scottish drone light show won’t set any records. But there is something very poetic about what they’ve done. There’s something kind of magical about this drone show...

Curious about who’s behind this show, and why they did it? Glad you asked. Here’s the answer, with a backgrounder video showing “behind the scenes.” <https://dronedj.com/2021/01/01/drone-light-show-new-year-scotland-hogmanay/#more-45340>

### SkyBound Rescuer Launches a FREE ‘Drone License Finder’ for the New EU Drone Laws Gemma Alcock DECEMBER 30, 2020



Many EU countries will be experiencing a step change in drone regulations from 1<sup>st</sup> January 2021 as they adopt the ‘EU UAS Regulation Package’ and with this development brings a steep learning curve of finding which category applies to any given drone operation. Open? Specific? Certified? If the drone pilot falls into the Open Category, are they Subcategory A1, A2, or A3?

SkyBound Rescuer has launched a FREE intelligent survey, dubbed the ‘Drone License Finder’, which simplifies this process and is sponsored by [Flock](#), [HALO Drones](#), and [Allan Panthera](#). Drone pilots simply complete a series of 3 to 14 ‘yes/no’ questions about their drone and how they intend on flying it, to then receive their category/subcategory results and personalized guidance based on the answers they gave. SkyBound Rescuer has made the EU drone laws simple for everyone; reducing reading times from weeks to minutes. Try it out: [www.skyboundrescuerproject.com/drone-license-finder](http://www.skyboundrescuerproject.com/drone-license-finder)



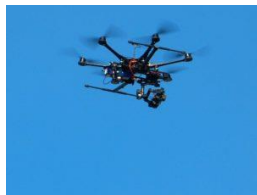
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[https://www.commercialuavnews.com/public-safety/skybound-rescuer-launches-a-free-drone-license-finder-that-simplifies-the-new-eu-drone-laws?utm\\_source=marketo&utm\\_medium=email&utm\\_campaign=newsletter&utm\\_content=newsletter&mkt\\_tok=eyJpIjoiTURKa1pUSXdaVFEwTIRSaSIsInQiOiJvcUdQXC92UHowZmMyZiRjV1M4U3E0UTdsaTNzVGZYQUlnYTFYWjBRRTdRbVwva2hUNIFuZWVh3a2M0QTJHK3NzUzNldWV4Mk9TQUtqYVUxUXIITkVtc3hyd0RUzBKc09sbHk1NHFaemhrcFh1bFwvTmNXRUlnNG9aTzhMZmhNeU4bSJ9](https://www.commercialuavnews.com/public-safety/skybound-rescuer-launches-a-free-drone-license-finder-that-simplifies-the-new-eu-drone-laws?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiTURKa1pUSXdaVFEwTIRSaSIsInQiOiJvcUdQXC92UHowZmMyZiRjV1M4U3E0UTdsaTNzVGZYQUlnYTFYWjBRRTdRbVwva2hUNIFuZWVh3a2M0QTJHK3NzUzNldWV4Mk9TQUtqYVUxUXIITkVtc3hyd0RUzBKc09sbHk1NHFaemhrcFh1bFwvTmNXRUlnNG9aTzhMZmhNeU4bSJ9)

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### Industry Weighs in on New Drone Rules for Remote ID, Flight Over People Miriam

McNabb December 28, 2020



The FAA has published [new drone rules for Remote ID and Operations Over People](#). While it will take some time to fully unpack the final rule on Remote ID, the drone industry is weighing in on the new regulations and the impact that they will have.

Calling the new rules “critical steps” towards Unmanned Traffic Management, flight Beyond Visual Line of Sight, public safety operations and infrastructure inspection AUVSI said the publication represented **progress**. President and CEO Brian Wynne said, “Remote ID will enable more complex operations. Operations over people and at night are important steps towards enabling integration of drones into our national airspace.”

“While the implementation of remote identification technology may appear somewhat daunting for UAS program managers and operators who have already invested substantial budget towards building out their drone fleets, the finalization of the Remote ID and Operations Over People rules truly represent a significant milestone that ought to be celebrated by UAS professionals,” said Christopher Todd, Executive Director, [Airborne International Response Team](#), the leading 501(c)3 non-profit organization supporting Drones For Good. <https://dronelife.com/2020/12/28/industry-weighs-in-on-new-drone-rules-for-remote-id-flight-over-people/>

### Remote ID Q & A: DRONERESPONDERS Answers Questions Miriam McNabb December

28, 2020

Remote ID Q & A: Who will enforce Remote ID? When does it become effective? Where is it required? For all of these questions and more, [DRONERESPONDERS](#), a non-profit organization dedicated to helping public safety agencies use drones, has your answers.



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Chief Charles Werner Director of DRONERESPONDERS, the world's leading 501(c)3 non-profit program supporting the use of drones by first responders, said "Upon final implementation, Remote ID technology will provide law enforcement agencies and security stakeholders with an increased ability to evaluate low altitude UAS traffic within their respective jurisdictions."

While Remote ID will help move the safe integration of unmanned systems into the airspace forward, stakeholders will have many questions about the details. While addressed to the public safety community, the following answers questions many stakeholders need answered: from how to equip or retrofit existing equipment to what information is made available to the public. The following Remote ID Q & A is republished with permission from [DRONERESPONDERS](#) and [AIRT](#). <https://dronelife.com/2020/12/28/remote-id-q-a-droneresponders-answers-questions/>

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**Alphabet unit Wing blasts new U.S. drone ID rule, citing privacy** David Shepardson  
DECEMBER 31, 2020



WASHINGTON (Reuters) - Alphabet Inc's drone delivery unit Wing criticized Trump administration rules issued this week mandating broadcast-based remote identification of drones, saying they should be revised to **allow for internet-based tracking**.

The rules eliminate requirements that drones be connected to the internet to transmit location data but requires them to broadcast remote ID messages via radio frequency broadcast.

"This approach creates barriers to compliance and will have unintended negative privacy impacts for businesses and consumers," Wing said Thursday in a blog post, adding "an observer tracking a drone can infer sensitive information about specific users, including where they visit, spend time, and live and where customers receive packages from and when."

Wing added that "American communities would not accept this type of surveillance of their deliveries or taxi trips on the road. They should not accept it in the sky." Wing called on the FAA to expand ways operators can comply with ID requirements.

The FAA said Thursday it received and addressed "more than 50,000 public comments on the proposed remote-identification rule, which will further the safe integration of drones into the



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national airspace system.” <https://www.reuters.com/article/usa-drones-faa-alphabet/alphabet-unit-wing-blasts-new-us-drone-id-rule-citing-privacy-idUSL1N2JB1QP>

### Japan to launch first WOODEN satellite by 2023 that will burn up completely on re-entry IAN RANDALL FOR MAILONLINE 29 December 2020



The major component in today's satellites is aluminum — which, when broken down by the force of re-entry, releases long-lived aerosols that damage the ozone layer.

Researchers from Kyoto University have joined forces with Sumitomo Forestry to explore the potential for wood to be used in the extreme environment of space. Not only would wooden satellites be better for the environment, but they could also allow for new and simpler designs if used to make a craft's outer shell. This is because electromagnetic signals pass more easily through wood — meaning that antennas could be placed within, rather than outside, the satellite body.

The Japanese team of experts have said that they hope to have their first wooden satellite ready to launch by the year 2023. <https://www.dailymail.co.uk/sciencetech/article-9095635/Space-Japan-launch-WOODEN-satellite-2023-burn-completely-entry.html>

### Drone Industry News: What's Next for 2021 Miriam McNabb December 31, 2020



There have been major regulatory changes, big progress in new technologies like Unmanned Traffic Management, and important new applications for drone technology introduced. Based on the stories DRONELIFE covered this year, here are a few predictions for big stories in 2021.

**Number 1:** Passenger Drones will continue to be a big story. Investment in the space will continue and interest will ramp up as the technology and regulations develop.

**Number 2:** Flight Beyond Visual Line of Sight. With Remote ID, Operations Over People, and Operations at Night out of the way, U.S. regulators can focus on BVLOS operations – and maybe a Notice of Proposed Rulemaking? Who knows what a year will bring!

**Number 3:** Drones as First Responder. The public safety sector is growing fast in the drone industry. [DRONERESPONDERS](#) has provided a lot of news this year with surveys and working





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groups: their latest efforts will help public safety agencies around the country learn about the [drone as first responder](#) program in Chula Vista, CA.

2020 wasn't all bad for the drone industry – and we're expecting 2021 to be a banner year!  
<https://dronelife.com/2020/12/31/drone-industry-news-the-top-stories-of-2020-and-whats-next-for-2021/>

**US defense department to fund military UTM research at NUAIR** December 31, 2020 Philip Butterworth-Hayes UAS traffic management news



The *Times Telegram* news service reports that among the \$278 million funding for the US [Air Force Research Lab in Rome](#), New York is **\$10 million** “to further develop a Department of Defense/Federal Unmanned Aircraft System Traffic Management testbed and prototype in collaboration with the NY UAS Test Site.”

The Test Site at Griffiss International Airport in Rome recently completed phase two of the Federal Aviation Administration’s unmanned aircraft traffic management pilot program.

“UPP Phase Two showcased capabilities and services that will support safe, high-density unmanned aircraft systems operations. The capabilities demonstrated included: remote identification services that will allow observers to identify nearby UAS, detect and avoid technology to prevent collisions and public safety operations. Virtual collaboration for the effort began in mid-April of this year, with three weeks of live flights and component testing throughout November, pushing the boundaries of unmanned aircraft systems and enhancing Central New York’s leadership in the booming UAS industry.”

<https://www.unmannedairspace.info/uncategorized/us-defence-department-to-fund-military-utm-research-at-nuair-news-report/>

**Altitude Angel secures \$5m million from Octopus Venture for UTM** December 29, 2020 Jenny Beechener UAS traffic management news



Altitude Angel reports GBP4 million (USD5.3 million) investment by Octopus Ventures, bringing the total invested in the UK company by Octopus and Seraphim Capital in 2020 to GBP7.05 million (USD9.4 million).

The investment will allow Altitude Angel to expand development and deployment of local and national UTM platforms, allowing it to further expand its



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international presence and in doing so, accelerate the safe and secure use of drones in skies across the globe. Following the opening of its Dutch HQ in September, the company will be opening offices local to its international partners in addition to increasing its presence in markets promoting UTM growth. <https://www.unmannedairspace.info/latest-news-and-information/altitude-angel-secures-gbp4-million-funding-from-octopus-venture-for-utm-development-and-deployment/>

### **Dubai-made magnetic counter-drone system to launch soon** Josh Spires Jan. 4, 2021



Dubai-based Cusp Technologies has developed a [new counter-drone system](#) that uses powerful magnets, forcing drones to leave an area. The system essentially creates a magnetic field around an area or object to protect it from rogue drones.

Mohamed Saleh, founder and chairman of Cusp Technologies, told [Gulf News](#) magnetic technology has been researched and developed over the last five years. In that time, he and his team found that it can be used in the security and military fields. The system has been built from the ground up to detect and block out drones much more accurately.

In testing, the company has found that it works great against rogue drones, with the possibility for use in the space industry. Cusp Technologies is also working with an unknown American company to improve the system and range up to 100 km (62 miles).

<https://dronedj.com/2021/01/04/dubai-made-magnetic-counter-drone-system-to-launch-soon/#more-45417>

### **London adds a drone show to its New Year's fireworks display** Josh Spires Jan. 4, 2021



The drones started by displaying 2021 as the clock ticked over into the new year. After a cool transition, they formed into a bird flapping alongside the fireworks for about a minute. The drones displayed the National Health Services logo with a heart surrounding it with a girl's voice thanking the frontline workers.

The show continued with the drones mimicking the fireworks before displaying the mute symbol, linking it back to the increased amount of video calls we all had to make this year due to working remotely. A strong fist was then displayed, sharing the importance of the Black Lives Matter movement with Stormzy's Blinded By Your Grace, Pt. 2 playings in the background.



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The fireworks took back over for a few seconds before the drones returning to spell out “All Together,” “Join Together,” “Hope Together,” “Love Together.” The drones then formed a heart to match the music. The celebrations ended with David Attenborough talking about our planet, with the drones displaying a turtle with Earth as its shell. See the video:

<https://dronedj.com/2021/01/04/london-adds-a-drone-show-to-its-new-years-fireworks-display/#more-45420>

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**FUTURE FLIGHT: PYKA PELICAN** January 1, 2021 Thomas A. Horne



The New Zealand Pelican is operated by West Farms, a company based in the Canterbury region of the South Island. More Pelicans are being built in Oakland at a rate of one per month. The Pelican uses three wing- and tail-mounted 20-kW motors, can take off and land in just 150 feet, and is fully autonomous. It weighs 1,125 pounds, has a 38-foot wingspan, can carry a **625-pound payload**, and cruises at 78 knots; airspeed for crop dusting is 70 knots. It achieves this efficiency in large part because of its high aspect ratio wings, which are equipped with full-span flaps. The Pelican can cover **85 acres in an hour**, including the time to fill its load and swap out batteries. At two gallons an acre, it can cover 135 acres an hour. Battery endurance is 30 minutes.

Wings provide most of the lift, which saves precious battery power. Wings also permit glides after a loss of power. By using electrical power in an eSTOL application, bigger loads and longer endurances may be possible using extremely short runways or other launch areas, or even threatened or closed airports.

A natural progression suggests a passenger-carrying version of the Pelican. And there is such a design in the works. <https://www.aopa.org/news-and-media/all-news/2021/january/pilot/future-flight-pyka-pelican>

**Walmart Drone Delivery Hub: Never Heard of Pea Ridge, AR? You Have**

**Now** Miriam McNabb January 04, 2021

Pea Ridge, AR, is a beautiful little town renowned for lovely scenery and Civil War history. If local Planning Commissioners approve tomorrow, Pea Ridge will also be the site of a Walmart drone delivery hub.



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The Walmart drone delivery hub will be the site of the [drone delivery trials](#) executed by [Zipline](#) International in partnership with Walmart. In an announcement about the project last September, Walmart SVP of Consumer Product, Tom Ward, described the project:

*Zipline will operate from a Walmart store and can service a 50-mile radius, which is about the size of the state of Connecticut. And, not only does their launch and release system allow for quick on-demand delivery in under an hour, but it also eliminates carbon emissions, which lines up perfectly with our sustainability goals. The operation will likely begin early next year, and, if successful, we'll look to expand.*

Now, the Arkansas Democrat Gazette [reports](#), a drone delivery launch hub in Pea Ridge has been identified. In a letter from Benoit Miquel, new deployments manager of Zipline International Inc., Zipline explains the project to the Pea Ridge Planning Commission.

“Earlier this year, Zipline and Walmart partnered to create a **first-in-the nation** drone delivery network that will enable Walmart to provide an increasing number of customers with fast, convenient access to health and wellness products. We would like to first launch this service at the Walmart Neighborhood Market located in Pea Ridge. We at Zipline are thrilled at the opportunity to partner with Walmart and the City of Pea Ridge to bring safe, contactless, on-demand delivery options to local residents.” <https://dronelife.com/2021/01/04/walmart-drone-delivery-hub-never-heard-of-pea-ridge-ar-you-have-now/>

## China Introduces National Standard for UAS Delivery Services 05 Jan 2021 Mike Ball



China’s State Post Bureau has issued a Specification for Express Delivery Service by Unmanned Aircraft which is the country’s **first industry standard** for express drone-based deliveries. The Standard was jointly formulated by major industry players including EHang, JD.com and ZTO Express, and is designed to improve last-mile delivery services, ensure the safety of drone operations and

promote the development of the urban air mobility industry.

The standard is applicable to delivery drones with a maximum empty aircraft weight of 116kg, a maximum takeoff weight of 150kg and an airspeed of no greater than 100km/h. It also specifies



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the service entities, conditions, procedures, assessments and safety issues, providing a standard reference for postal express companies and drone operators wishing to develop drone delivery services in the future.

Ehang has developed a complete suite of intelligent unmanned aerial logistics solutions and used its industry expertise and insights to contribute to the development of the new standard.

[https://www.unmannedsystemstechnology.com/2021/01/china-introduces-national-standard-for-uas-delivery-services/?utm\\_source=UST+eBrief&utm\\_campaign=027fc64010-eBrief\\_2021\\_5Jan&utm\\_medium=email&utm\\_term=0\\_6fc3c01e8d-027fc64010-119747501](https://www.unmannedsystemstechnology.com/2021/01/china-introduces-national-standard-for-uas-delivery-services/?utm_source=UST+eBrief&utm_campaign=027fc64010-eBrief_2021_5Jan&utm_medium=email&utm_term=0_6fc3c01e8d-027fc64010-119747501)

### **Malaysian team turns pineapple waste into disposable drone parts** January 5, 2021 News Ebrahim Harris

BANGI, Malaysia (Reuters) – Malaysian researchers have developed a method to transform the



fiber found in normally discarded pineapple leaves to make a strong material that can be used to build the frames for drones. The project, headed by Professor Mohamed Thariq Hameed Sultan at Malaysia's Putra University, has been trying to find sustainable uses for pineapple waste generated by farmers.

He said drones made out of the bio-composite material had a higher strength-to-weight ratio than those made from synthetic fibers and were also cheaper, lighter and easier to dispose of. If the drone was damaged, the frame could be buried in the ground and would degrade within two weeks, he said. The prototype drones have been able to fly to a height of about 1,000 metres (3,280 ft) and stay in the air for about 20 minutes.

Ultimately, the research team hopes to create a larger drone to accommodate bigger payloads, including imagery sensors, for agricultural purposes and aerial inspections.

[https://uasweekly.com/2021/01/05/malaysian-team-turns-pineapple-waste-into-disposable-drone-parts/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=malaysian-team-turns-pineapple-waste-into-disposable-drone-parts&utm\\_term=2021-01-05](https://uasweekly.com/2021/01/05/malaysian-team-turns-pineapple-waste-into-disposable-drone-parts/?utm_source=rss&utm_medium=rss&utm_campaign=malaysian-team-turns-pineapple-waste-into-disposable-drone-parts&utm_term=2021-01-05)



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### Visionary UAS remote identification patent awarded to long time industry

**veteran** January 5, 2021 News



Ariascend, an Oregon unmanned aircraft systems research and development company, announced that their CEO, Kenji Sugahara, was recently awarded a patent for broadcast remote identification of drones.

The recent FAA announcement of the final rule on Remote Identification of Unmanned Aircraft and the upcoming ASTM standards cement the patent's applicability and relevance in the industry.

The United States Patent Office issued [U.S. Patent 10,825,345](#), titled "Devices, methods and systems for close proximity identification of unmanned aerial systems" on November 3, 2020 with priority to March 9, 2017. The "digital license plate" system described in our [proposal](#) and in the patent was the genesis of the framework for Remote ID as described in the FAA final rule.

"I am honored that the [whitepaper](#) that I had brought to the FAA Remote ID ARC planted the seed for what we see today in the FAA's final rule," said Kenji Sugahara, CEO of Ariascend. While Remote ID will evolve over time, broadcast will remain the cornerstone of remote identification for the near future." [https://uasweekly.com/2021/01/05/visionary-uas-remote-identification-patent-awarded-to-long-time-industry-veteran/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=visionary-uas-remote-identification-patent-awarded-to-long-time-industry-veteran&utm\\_term=2021-01-05](https://uasweekly.com/2021/01/05/visionary-uas-remote-identification-patent-awarded-to-long-time-industry-veteran/?utm_source=rss&utm_medium=rss&utm_campaign=visionary-uas-remote-identification-patent-awarded-to-long-time-industry-veteran&utm_term=2021-01-05)

**Share your best drone videos with DroneDJ – and our audience!** Scott Simmie Jan. 5, 2021



This video showed up in a DJI Facebook group dedicated to the Mini 2. It was of Snowdonia National Park in Wales. The combination of mist and snow, coupled with the gentle pace of the drone flight, gave the video an ethereal quality that we just loved.

Gidon Prager lives with his wife in the village of Betws-y-Coed, which itself lies within the UK's second-largest national park. The couple moved there a couple of years ago, purchasing a bed and breakfast in the hopes of simply enjoying a more peaceful quality of life than they had in London.



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Gidon knew he wanted to capture the park with some snow on the ground, preferably with fog. The conditions aligned perfectly last week. He took out his [Mini 2](#) and started flying. The finished product provides an evocative look at a beautiful spot.

<https://dronedj.com/2021/01/05/share-your-best-drone-videos-with-dronedj-and-our-audience/#more-45476>

**6Jan21**

**Amazon, American Airlines execs to advise FAA on drone regulation** Eric Kulisch, Air Cargo Editor January 5, 2021



The private-sector Drone Advisory Committee meets regularly to advise the Federal Aviation Administration on how to safely integrate unmanned aircraft systems into national airspace alongside traditional aircraft. Executive-level representatives are selected from a wide range of stakeholders including the aviation industry, research and academia, retail, technology and state and local government.

The new members include Molly Wilkinson, vice president of regulatory affairs at American Airlines, and David Carbon, vice president and general manager of Amazon Prime Air, which is working to commercialize home package delivery by drones. Amazon is operating under a special license that allows it to operate drones beyond the sight of the flight controller.

“As the UAS industry continues to evolve, it is important to have DAC members who mirror the many facets of this fast-growing industry. We know the members will help the FAA ensure the highest level of safety while keeping pace with the new and innovative technology for UAS,” said FAA Administrator Steve Dickson in a statement.

<https://www.freightwaves.com/news/amazon-american-airlines-execs-to-advise-faa-on-drone-regulation>

**The GENIUS NY program is back for another year!** Josh Spires Jan. 6, 2021



[The GENIUS NY business accelerator](#) competition is back for another year, with entries now open for teams to have their shot at winning up to **\$1 million**. The accelerator is funded by Empire State Development and is run out of CenterState CEO’s Tech Garden incubator in Syracuse, New York.



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GENIUS NY is a business accelerator competition focused on unmanned systems, IoT, and big data startups. It has just announced that the application period has now begun until March 31.

The panel of judges will go through all of the applications and pick out 15 to 20 semifinalists. At this stage, the companies will provide demos and pitches to the judges in the spring of this year. Out of these 15 to 20 companies, five will advance into the actual competition.

Five companies are selected from around the world to take part in the two-phase program, with the first phase providing the teams with \$10,000 per month and housing subsidy to participate in the three-month accelerator.

Phase two will see all five teams come back again for another nine months in the accelerator with three days to make their mark on investors and judges to gain extra funding. At the end of this, the winning company will win \$1 million, with the other four companies taking home a \$2 million share. <https://dronedj.com/2021/01/06/the-genius-ny-program-is-back-for-another-year/>

### **Drone captures hostile but gorgeous location** Scott Simmie Jan. 6, 2021



Daniel Haussmann is a Frankfurt-based landscape photographer and aerial drone photographer/videographer. His work has been licensed by major brands including Heineken, Korean Air, Die Welt, Visit Norway and Deutsche Bank. [His website](#) explains that he's drawn to unique landscapes that really showcase the natural

world. He has been fortunate to have seen three of the volcanos mentioned here in person: Kilauea, Stromboli, and Etna.

Ethiopia's Danakil Depression is one of the most hostile places on the planet. There's nothing around here but geology: No running water, no lodgings, no source of electricity. But plenty of sulfur, other hot gases, unusual geological formations, and lava. It's also considered a somewhat risky place to travel, with bandits regularly looking for opportunities. But that didn't stop Haussmann. Or his incredible drone work: <https://dronedj.com/2021/01/06/drone-captures-hostile-but-gorgeous-location/#more-45724>





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### **uAvionix Announces Transponder and GPS for Airbus Zephyr** January 5, 2021 News



Zephyr is a solar-electric, stratospheric UAS that flies above weather and conventional air traffic, filling a capability gap complementary to satellites. With a wingspan of 25m and relying on solar energy, onboard batteries are charged during daylight and have sufficient capacity to power overnight flight. Zephyr currently holds the world record for the longest flight duration at

25 days, 23 hours, and 57 minutes.

The Zephyr team needed a certifiable transponder, ADS-B, and GPS solution which not only meets global airspace requirements as it ascends and descends through Class A airspace, but does so with minimal size, weight, and power consumption consistent with what a long-endurance solar-powered aircraft can support.

“Every gram and milliwatt has to earn its way onto the platform for customers like Zephyr,” says Paul Beard of uAvionix. “The combined weight of the ping200X transponder and truFYX GPS is only around 70 grams and consumes less than 2 Watts of power while providing high power (54dBm), high integrity transmissions of ADS-B and transponder mode data to Air Traffic Control (ATC) and nearby, suitably equipped aircraft.”

[https://uasweekly.com/2021/01/05/uavionix-announces-launch-customer-airbus-zephyr-for-ping200x-and-trufyx/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=uavionix-announces-launch-customer-airbus-zephyr-for-ping200x-and-trufyx&utm\\_term=2021-01-06](https://uasweekly.com/2021/01/05/uavionix-announces-launch-customer-airbus-zephyr-for-ping200x-and-trufyx/?utm_source=rss&utm_medium=rss&utm_campaign=uavionix-announces-launch-customer-airbus-zephyr-for-ping200x-and-trufyx&utm_term=2021-01-06)

**7Jan21**

### **CONGRESS WANTS TO KNOW THE FAA’S BVLOS PLANS WITHIN 90 DAYS** January 5, 2021 Sally French News



Congress December passed its end of year government Fiscal Year 2021 funding legislation, [H.R. 133, Consolidated Appropriations Act, 2021](#), on Dec. 21, 2020. The document

says the FAA has until early spring to share its plans for allowing Beyond Visual Line-Of-Sight drone operations. Here’s a snippet of the actual text:

The FAA shall report to the House and Senate Committees on Appropriations within 90 days of enactment of this Act on how it plans to address a number of complex safety concerns prior to allowing for BVLOS operations, including safe distance separation, right-of-way, reliability



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standards for sensors, and the associated data sources and data fidelity for flight planning, terrain avoidance, object avoidance, collision avoidance and how current onboard detect-and-avoid technology manufacturers and users are addressing these challenges.

Big players in the drone industry, ranging from detect and avoid module maker Iris Automation to the Aircraft Owners and Pilots Association say the text is a **welcome addition** to furthering the safe use of drones in the U.S., adding that Congress is sending a clear signal about the importance of full BVLOS drone integration. [https://www.thedronegirl.com/2021/01/05/congress-faa-bvlos-plans/?fbclid=IwAR3Ki7UYe773UKHA0VWIFz-5HPKk2OrBVaX6iY2-cE1Qhbdk1ACpN3\\_sqgo?utm\\_source=marketo&utm\\_medium=email&utm\\_campaign=newsletter&utm\\_content=newsletter&mkt\\_tok=eyJpIjoiWXpSbVpXSml1OelpqTmpleClsluQioiIQVnd4OVI0d1FzbzNVTXJmSno4YkxvRWpNR3pkYWwhaHJjdTlwZHVZVEl0ZmNUcjRUSkxKUUtXSHpTV1ZRTlBhVVdrc0tNSXJcL2ZQUHc1c1FmVUZaZDB1eFRFRQ1Y4bG5Pb01LNGtUcmxUQjZlUXhJczBcl3dZTHVLS0Nic0M0QWNlIn0%3D](https://www.thedronegirl.com/2021/01/05/congress-faa-bvlos-plans/?fbclid=IwAR3Ki7UYe773UKHA0VWIFz-5HPKk2OrBVaX6iY2-cE1Qhbdk1ACpN3_sqgo?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiWXpSbVpXSml1OelpqTmpleClsluQioiIQVnd4OVI0d1FzbzNVTXJmSno4YkxvRWpNR3pkYWwhaHJjdTlwZHVZVEl0ZmNUcjRUSkxKUUtXSHpTV1ZRTlBhVVdrc0tNSXJcL2ZQUHc1c1FmVUZaZDB1eFRFRQ1Y4bG5Pb01LNGtUcmxUQjZlUXhJczBcl3dZTHVLS0Nic0M0QWNlIn0%3D)

**China uses Wing Loong II variant for weather modification work** Greg Waldron 7 January 2021

China has deployed a variant of the AVIC Wing Loong II unmanned air vehicle to help **create precipitation** in the country's arid west. The UAV, designated Ganlin-1, is equipped to modify weather through cloud seeding.



During a maiden flight recently, the aircraft flew 40 minutes, performing "atmospheric detection and catalyst spreading to generate precipitation." The UAV was also able to de-ice itself.

The UAV was developed by Gansu Meteorological Bureau, the Chengdu Aircraft Design and Research Institute of AVIC, and AVIC (Chengdu) Unmanned Aircraft System Company. Saudi Arabia, Turkmenistan, and Egypt are known to be customers for the UAV.

The Wing Loong II has a maximum take-off weight of 9,260 lb. An AVIC flyer for the type shows it carrying 10 air-to-ground munitions, with four mounted on dual racks. Sensor payloads include an electro-optical surveillance/targeting system and a synthetic aperture radar.

<https://www.flightglobal.com/civil-uavs/china-uses-wing-loong-ii-variant-for-weather-modification-work/141855.article>



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### ENTRIES OPEN FOR DJI’S SKYPIXEL 6TH ANNIVERSARY PHOTO AND VIDEO

**CONTEST** January 7, 2021 Sally French Photos, Video



Entries are open between now and Feb. 18, 2021, and winners will be announced on March 18, 2021. And unlike many other photo/video contests, this one is free to enter.

New to this year’s SkyPixel contest is the addition of five categories: Vlog, FPV, Showreel, Hometown and Environment. The new ‘hometown’ category proves that you don’t need to venture far to get a great aerial shot.



Often, it’s the mundane parking lot or funky tree in the park that makes the best aerial photo anyway — not the beautiful-but-kind-of-generic-beach scene, or the same aerial shot of the Golden Gate Bridge that we’ve seen a million times before. Though, there is of course still a travel category too (there are no shooting date requirements, so you could submit a travel photo from a trip taken years ago).

So what are you up against? Well, here were the winners from the [SkyPixel 2018 contest](https://www.thedronegirl.com/2021/01/07/dji-skypixel-6th-anniversary-photo-video-contest/), [2017](#) and [2016](#). <https://www.thedronegirl.com/2021/01/07/dji-skypixel-6th-anniversary-photo-video-contest/>

### Aussie drone startup Aerologix receives \$1.5 million Josh Spires Jan. 7, 2021



[Aussie drone startup](#) Aerologix has received \$1.5 million in its pre-seed funding from private equity firm Nightingale. The company has created a platform that allows drone pilots and clients to connect for specific jobs.

The founders Tom Caska and Rakesh Routhu met during MBA studies at a top Australian business school. Both already had drone companies before creating Aerologix but decided to join forces when the pair realized the potential for gig-style drone jobs to be created.

Speaking to [The Australian Financial Review](#), Caska shared that the platform already had **a few hundred pilots signed up** around the 18-month mark. He also shared that he expects this number to increase dramatically due to the pandemic and many pilots losing their jobs. Pilots



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can become a qualified drone pilot by completing a half-day course and can start earning up to \$80 per hour on a job.

The company is currently working on an **autonomous flight system** that will allow the drones to fly themselves through complex jobs and allow less experienced pilots to also have a shot at getting some of the jobs. <https://dronedj.com/2021/01/07/aussie-drone-startup-aerologix-receives-1-5-million-in-funding/>

**8Jan21**

### **General Atomics' Avenger to be used as Skyborg testbed** Garrett Reim 7 January 2021

General Atomics Aeronautical Systems received a contract from the US Air Force to modify two of its company-owned Avenger unmanned air vehicles with Skyborg autonomy technology.



*General Atomics Avenger*

"These Avengers will then be used as part of various experimentation events in 2021 and 2022, which will enable manned aircraft to control Avengers while in flight and relay specific information between the manned and unmanned aircraft," says the company. "Flights will be conducted from General Atomics

flight centers in Southern California."

Skyborg is intended to **autonomously control multiple UAVs at once, in coordination with manned aircraft**. The manned-unmanned teaming concept is seen as an important piece to the USAF's attritable UAV development effort, a program to create and manufacture drone teammates at such a low cost that the vehicles could be affordably lost to combat attrition.

General Atomics' Avenger is a turboprop-powered UAV intended for intelligence, surveillance and reconnaissance that has seen limited production. <https://www.flightglobal.com/military-uavs/general-atomics-avenger-to-be-used-as-skyborg-testbed/141877.article>

### **New strategy wants to counter increasingly complex drone threats** Jen Judson 17 hours ago

WASHINGTON — The Pentagon released a new strategy Jan. 7 to counter increasingly complex small drone threats, one that focuses on establishing a common threat picture, architecture and protocol across the services.



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The new strategy also sets up stronger coordination between other federal agencies in the homeland as well as with allies and partners abroad.



Drones are getting cheaper and easier to use and acquire. Small drones run the gamut from being nuisances in the wrong air space at the wrong time to being deadly, aiding adversaries in serious operations such as lasing targets for fires or collecting intel or becoming a weapon itself. Technology development in autonomy and artificial intelligence is making swarming drones even easier to coordinate and integrate into operations.

Military leaders approved a set of requirements to help counter small, unmanned aircraft systems in late September 2020. That move created a path for the development of materiel and non-materiel solutions to work within a common command-and-control system.

The requirements were developed by the newly established Joint Counter-sUAS office — or the JCO — led by the Army that has been tasked to round up the plethora of C-sUAS systems — over 40 items — used to answer urgent needs in the Middle East and to consolidate the technology into a group of interim systems. Additionally, the JCO was directed to develop a joint strategy that focuses on an evolving and growing threat and to manufacture long-term solutions that are designed to address the threat.

<https://www.airforcetimes.com/pentagon/2021/01/07/joint-strategy-calls-for-common-architecture-to-counter-increasingly-complex-drone-threats/>