



## UAS and SmallSat Weekly News

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### Wingtra Drones Help Norway Build Safer Roads Jason Reagan December 31, 2019



Swiss drone manufacturer [Wingtra](#) provides Norway's Public Roads Administration with vertical-take-off-and-landing drones to survey roads for data analysis and construction projections.

Norway's road system has been consistently ranked as the **safest in Europe**. Oslo wants to reach **zero traffic fatalities** by 2024 – a goal that requires precision road inspection and construction.

Last year, the agency started using the WingtraOne for road-construction surveys, and officials immediately realized time and cost savings. "We looked at fixed-wing drones, but they need a passage to land, and we often have small places for landing. We can take off and land everywhere with WingtraOne," NPRA chief engineer Gry C.S. Kjellsmoen said. He explained that a road survey covering around 3 square miles requires three flight plans, lasting between 18 and 22 minutes each. This adds up to approximately **one hour of flight time**.

"Traditionally, it would take me about **five days** in the field with a scanner to get the data we get in an hour with WingtraOne, and then I'd have to edit it inside afterward," she said.

<https://dronelife.com/2019/12/31/wingtra-drones-help-norway-build-safer-roads/>

### Happy New Year! Here's to lots of exciting drone news in 2020! Haye Kesteloo Dec. 31st 2019



Happy New Year to all of our readers and friends in the drone industry! Here's to lots of exciting drone news in 2020! And it seems that we will be getting off to a good start.

After a somewhat lackluster 2019 where expectations ran high, it seems that 2020 will start off with a bang! First we expect Autel Robotics to make a big start this year with the

launch of the [Autel EVO 2](#). If you're wondering what all the hype is about with this drone, then go check the specs here. I'll wait. Furthermore, we have an iconic drone making a return and are waiting for the launch of the [DJI Mavic 3 Pro](#). Possibly as early as January, although it wouldn't surprise me if DJI is re-evaluating what specs they need on the Mavic 3 Pro now with the EVO 2 coming out.



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And, I'm sure there will be lots more to talk about in 2020. For instance, the FAA proposed rules for [Remote Identification for UAS](#) or drones. This one is on top of everybody's mind right now as it might have a massive impact on your hobby and drone business. So stay tuned for that one.

**And with that, I wish all of you a Happy New Year with lots of safe, responsible but above all exciting drone flying!** <https://dronedj.com/2019/12/31/happy-new-year-drone-news-2020/>

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### FAA to investigate suspicious drone swarms over rural Nebraska and Colorado

CRIME FAA NEWS REGULATION UNITED STATES SAM LEWIS JANUARY 2, 2020



seriously.

Numerous residents have reported seeing "unexplained" swarms numbering up to 30 drones, always at night, over the past two weeks, according to a report in the New York Times. The drones are not linked to any private enterprise, nor are they US government drones, which is why police and the FAA are taking the matter so

Reports differ, but suggest that the drones fly in the same formation every night, between the hours of 17:00 and 22:00. Some reports describe them as having wingspans of more than six feet.

If recent FAA proposals are successful, drones such as these would be easily identifiable to the FAA as well as police, solving the problem with relative ease. Yuma County Sheriff Todd Combs has confirmed that the drones are operating within current US law, so residents should not fear their presence. <https://www.commercialdroneprofessional.com/faa-to-investigate-suspicious-drone-swarms-over-rural-nebraska-and-colorado/>

### CAA addresses 'nervous' first-time drone users

HEADLINE NEWS ANDREW SEYMOUR JANUARY 2, 2020



With new registration laws and ever-increasing attention being paid to drones, the CAA said it expected many new drone users to be "apprehensive" about flying their new machine. It said that new users could enjoy flying drones safely and legally by following some "simple" actions.



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Its advice includes how to register with the CAA for owners of drones over 250 grams and details of its online education package, which requires users to pass a short multiple-choice test to get their flyer ID.

The CAA added that news users can access safety information in the [Dronecode](#), as this provides all the basic safety rules and advice that drone owners need to comply with. Key to this is remaining below 400ft, keeping clear of aircraft and airfields, and not flying too close to people and property. The CAA pointed out that there is a fine of up to £1,000 for anyone found guilty of not complying with the drone registration requirements.

UK airspace is some of the busiest in the world and even while keeping below the 400ft maximum flying height, users may well be sharing the skies with other aircraft, such as emergency helicopters. <https://www.commercialdroneprofessional.com/caa-addresses-nervous-first-time-drone-users/>

### **Record-breaking drone display rings in the New Year** INTERNATIONAL NEWS

TECHNOLOGY SAM LEWIS JANUARY 2, 2020



Performance drone company SKYMAGIC has collaborated with Fireworks by Grucci on the partnership's second Ras Al Khaimah New Year's Eve show, breaking **two Guinness world records** in the process.

The show broke the record for the longest firework waterfall, at 3,788m, as well as the record for 'most unmanned

aerial vehicles for launching fireworks simultaneously' at 196.

This is a different record entirely to that held by Intel, which flew 2,018 drones in a California show in July 2018. Intel's record is for the most unmanned aerial vehicles flown at once.

Ras Al Khaimah is one of the seven emirates making up the **United Arab Emirates**. The display was visible from over a kilometre away, so SKYMAGIC says the entire island was able to view it.

This news comes after charity Nesta predicted that 2020 could be the year that we see drone performances replace fireworks displays for environmental reasons, rather than merge with

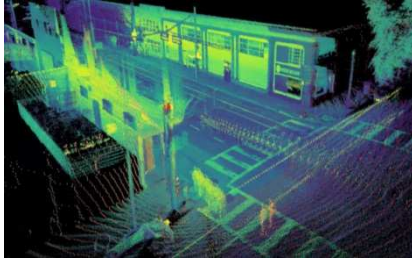


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them. <https://www.commercialdroneprofessional.com/record-breaking-uae-drone-display-rings-in-the-new-year/>

### **Drones lead the charge in predicted 29% boom for global 3D sensor market**

BUSINESS FINANCIAL INNOVATION INTERNATIONAL NEWS SAM LEWIS JANUARY 2, 2020



This is according to a report titled '3D Sensors Market by Application and Geography – Forecast and Analysis 2020-2024' by market intelligence provider Infiniti Research.

The report lists a number of reasons for the growth, including use of sensors in smartphones, driverless vehicles, AI, virtual assistant technology, fingerprint sensor and facial recognition software, security and surveillance systems.

High on the list of factors promoting this growth, though, include the aerospace and defense industries, as well as security of public sector assets like railroads, airports and power stations, as well as borders. A large part of this includes the use of 3D sensors in the drone. The report notes that 3D sensors are crucial to LiDAR (light detection and ranging) and LADAR (laser detection and ranging) systems. This hardware allows the detection of approaching drones from a long distance. <https://www.commercialdroneprofessional.com/drones-lead-the-charge-in-predicted-29-boom-for-global-3d-sensor-market/>

### **NYPD flies in surveillance drones for Times Square bash** APPLICATION DJI NEWS

SURVEILLANCE UNITED STATES SAM LEWIS JANUARY 2, 2020



New York City police commissioner Demot Shea said that his team began plans for the celebration on Jan. 1, 2019.

Approximately 1 million attendees were under the watchful eye of the drones. The FBI was also present, along with police helicopters and bomb-detection units. The police were also using drone mitigation technology that could detect and disable other drones in the area.

NYPD currently utilizes 14 DJI drones of three different kinds, all catered to a variety of tasks. Former NYPD detective Joe Giacalone explained: "When policing large crowds, [drones] can spot areas where trouble might be brewing."

<https://www.commercialdroneprofessional.com/nypd-flies-in-surveillance-drones-for-times-square-bash/>



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### No more mystery drones? FAA proposes rule for drones to identify themselves

SHELLY BRADBURY sbradbury@denverpost.com The Denver Post December 30, 2019



*In this 2017 file photo, old farm equipment is lined up in a field in Sedgwick County, Colorado.*

As a band of unknown drones flies across northeast Colorado and western Nebraska, the Federal Aviation Administration is proposing a new rule that would require most drones to be identifiable remotely.

The proposed rule change, announced Thursday, has been in the works for more than a year, FAA spokesman Ian Gregor said in an email Monday. The proposal would allow law enforcement, federal security agencies and the FAA to remotely identify drones that fly through their jurisdictions.

Such technology would prevent a repeat of the ongoing mystery in Northeast Colorado, where residents in [five counties have spotted large drones](#) flying in grid-like patterns in the evenings and nights for about two weeks.

Residents have called local authorities to report seeing groups of six to 10 drones hovering or cruising through the region between 7 and 10 p.m., usually flying a couple hundred feet in the air. The drones have also been spotted in Deuel County, Nebraska, authorities said.

No one has come forward as the operator of the drones, [prompting widespread speculation about their purpose](#). Several companies and government agencies have said the drones don't belong to them, including the U.S. Air Force, U.S. Army Forces Command, Fort Carson, the Drug Enforcement Administration, Paragon Geophysical Services, the U.S. Geological Survey, Amazon and the Colorado Department of Transportation. The FAA is working with local law enforcement on the case, but also hasn't identified the drone operator.

Local sheriffs told The Denver Post that the drones don't appear to be "malicious" and that they're likely not breaking any laws. <https://www.denverpost.com/2019/12/30/mystery-drones-faa-proposes-rule/>



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### All's Whale That Measures Well: Drones Help Researcher Measure Marine

**Mammals** Jason Reagan January 01, 2020



Drones have improved the study and sustainability of whales by leaps and bounds over the past few years. From efforts to [curb whale hunting](#), to researching the sea mammals' [snot](#) (there's a good reason for that), to helping preserve threatened species like the [sperm whale](#).

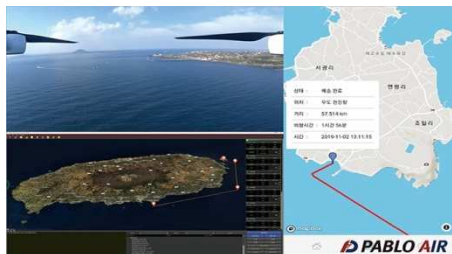
A new research study headed by [Fredrik Christiansen](#), a fellow with the [Danish](#) Aarhus Institute of Advanced Studies, is enhancing the drone's reputation as a whale lover even more.

Using drone imagery, Christiansen's team can accurately estimate the weight of whales without invasive techniques. Why is this important? In the past, only stranded or dead whales could be weighed or measured. In an [article](#) in the British Ecological Journal Methods in Ecology and Evolution, the team discovered gathering more accurate body-size data from whales will allow researchers to learn more about the physiology and ecology of whales in their natural habitat.

Christiansen explains: <https://dronelife.com/2020/01/01/all-whale-that-measures-well-drones-help-researcher-measure-marine-mammals/>

### PABLO AIR Becomes The First Korean Company To Have Succeeded In A 57.5 km Package deliver Using A Drone

January 2, 2020 News



PABLO AIR successfully conducted a long-distance drone delivery from Seogwipo Port on Jeju Island to Cheonjin Port on Wudo Island on November 2, 2019, ushering in an era wherein delivery services can be received via drone anywhere.

PABLO AIR is an unmanned aerial hardware and software development company based in Korea. Due to the company's swarm flight technology, they have the largest drone performance art show in Korea.

In a demonstration of a long-distance drone delivery conducted on November 2, 2019, PABLO AIR set the record for the longest time and distance drone delivery in Korea by flying a drone **57.514 km for 1 hour and 56 minutes**. <https://uasweekly.com/2020/01/02/pablo-air-becomes-the-first-korean-company-to-have-succeeded-in-a-57-5-km-package-deliver-using-a->



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[drone/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=uasweekly\\_daily\\_newsletter\\_01\\_02\\_2020&utm\\_term=2020-01-02](https://www.axcelinnovation.com/newsletter/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_01_02_2020&utm_term=2020-01-02)

### Connecticut Signs Participating Addendum with Avion Unmanned To Provide Drone Services to Public Agencies January 2, 2020 News



Avion Unmanned, the Unmanned Aircraft Systems division of Avion Solutions, Inc., signed a Participating Addendum with the State of Connecticut and all its State Agencies, Political Subdivisions and Institutions. This contract opens the door for the company to provide UAS services to state and local government agencies in Connecticut.

“Providing a simplified direct path for government agencies at all levels to request unmanned aircraft operations is finally a reality,” said Taylor Abington, Senior Program Manager of Avion Unmanned.

Among the UAS services are: Emergency Services, Law Enforcement Support, Aerial Inspection and Mapping Data Services, support to Agricultural and Gaming, as well as Agency Media Relations and Marketing. [https://uasweekly.com/2020/01/02/connecticut-signs-participating-addendum-with-avion-unmanned-to-provide-drone-services-to-public-agencies/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=uasweekly\\_daily\\_newsletter\\_01\\_02\\_2020&utm\\_term=2020-01-02](https://uasweekly.com/2020/01/02/connecticut-signs-participating-addendum-with-avion-unmanned-to-provide-drone-services-to-public-agencies/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_01_02_2020&utm_term=2020-01-02)

### Drone used to drop contraband in a prison on Christmas day Josh Spires Jan. 2nd 2020



[Drones](#) have a history of entering and dropping off goods into prisons with various drops being [captured on camera](#). Christmas Day for prisoners in Queensland’s Capricornia Correctional Centre was an extra special due to a [rogue drone](#) dropping off two packages, sending the prison into lockdown for the majority of the day.

A drone was spotted dropping a package to a prisoner by an officer at 1:45 pm on Christmas Day at an [Australian](#) prison. Once spotted, the prison was put on lockdown, allowing the prison officers to investigate and search the prison for the package.

The day after Boxing Day, once the prison was back to running normally, the prisoner who received the package was behaving in an “elevated manner” and told staff he had swallowed an





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unidentified substance dropped by the drone. <https://dronedj.com/2020/01/02/drone-drop-contraband-aussie-prison-christmas/#more-22582>

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### **German drone startup sees funding soar to new heights** APPLICATION EMERGENCY SERVICES HEALTH INTERNATIONAL NEWS SAM LEWIS DECEMBER 16, 2019



Wingcopter, a German drone startup, has received a seven-figure funding boost from direct investments specialist Corecam Capital Partners. Wingcopter produces autonomously flying delivery drones for social and civilian purposes.

The startup already has 35 members and has clients in 10 countries, but the new financing will help grow these numbers further.

“Their unique tilt-rotor mechanism as well as the strong global patent protection and the interest of blue-chip customers were decisive for us”. Thanks to tilt-rotor technology, Wingcopter’s drone can fly at Guinness world record speeds of up to 150mph and is resistant to strong winds up to 55mph. The drone can complete delivery of many products with a range of **75 miles**. The company also completed a six-month delivery contract with DHL.

Wingcopter also promises the safe delivery of important medical supplies such as medicines, vaccines, blood or lab samples. [https://www.commercialdroneprofessional.com/german-drone-startup-sees-funding-soar-to-new-heights/?utm\\_source=Email+Campaign&utm\\_medium=email&utm\\_campaign=45819-320498-Commercial+Drone+Professional+DNA+-+2020-01-03](https://www.commercialdroneprofessional.com/german-drone-startup-sees-funding-soar-to-new-heights/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-320498-Commercial+Drone+Professional+DNA+-+2020-01-03)

### **Unexplained Drone Swarms Alarm Residents in Colorado** Paul Bertorelli January 2, 2020



Authorities in Colorado and Nebraska continue to investigate reports of unexplained nighttime swarms of drones over eastern Colorado and western Nebraska. Dozens of residents have reported seeing drones at various altitudes with sizes estimated to be as large as six feet.

Jennifer Rollins told the Denver Post this week that she saw what appeared to be a swarm of drones near her parents’ house in Yuma County, Colorado. “It was too low to the ground to be



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a plane, and it seemed way too close to the house to be out in space, like a satellite,” Rollins told the Post on Tuesday. “It was definitely within driving range, for sure.”

Sighting reports have increased through December, and local law enforcement agencies are at a loss to explain them. FAA spokesman Ian Gregor told CNN that multiple government agencies are investigating the sightings. In a Facebook post this week, Yuma County Sheriff Todd Combs said it appears that the drones are flying at least 150 to 200 feet from buildings and people. He said residents have been disturbed by the swarms and the regularity of the sightings. “People do not like the unknown as it upsets the balance of our lives,” Combs wrote.

[https://www.avweb.com/aviation-news/unexplained-drone-swarms-alarm-residents-in-colorado/?MailingID=258&utm\\_source=ActiveCampaign&utm\\_medium=email&utm\\_content=Fewer+Fatal+Passenger+Aircraft+Accidents+In+2019%2C+Unexplained+Drone+Swarms+Alarm+Residents&utm\\_campaign=Fewer+Fatal+Passenger+Aircraft+Accidents+In+2019%2C+Unexplained+Drone+Swarms+Alarm+Residents+-+Friday+January+3%2C+2020](https://www.avweb.com/aviation-news/unexplained-drone-swarms-alarm-residents-in-colorado/?MailingID=258&utm_source=ActiveCampaign&utm_medium=email&utm_content=Fewer+Fatal+Passenger+Aircraft+Accidents+In+2019%2C+Unexplained+Drone+Swarms+Alarm+Residents&utm_campaign=Fewer+Fatal+Passenger+Aircraft+Accidents+In+2019%2C+Unexplained+Drone+Swarms+Alarm+Residents+-+Friday+January+3%2C+2020)

### **'People Do Not Like the Unknown.' Here's What to Know About The Mystery Drones Hovering Over Rural Colorado and Nebraska** JASMINE AGUILERA JANUARY 2, 2020



Multiple sightings of mysterious [drones](#) have been reported over night skies in rural Colorado and Nebraska — and they’ve left local residents, sheriffs in multiple counties and the Federal Aviation Administration searching for answers.

The sightings began mid-December, according to [public statements](#) by sheriff’s offices in rural Colorado. As of yet, officials do not know who is operating the drones or why they are flying over certain counties. Now, federal agencies, police departments and sheriff’s offices are scheduled to meet on Jan. 6 to

In one county, there are at least 17 drones that have flown each night between 7 to 10 p.m., according to [The Denver Post](#), who spoke to Phillips County Sheriff Thomas Elliot. A spokesperson for the FAA tells TIME that multiple divisions of the agency are investigating the reports, but cannot comment on the details of open investigations.

The drones are flying approximately 150 to 200 feet or more away from buildings or people. Elliot told The Denver Post that the machines span about six feet and fly in squares of about 25 miles. They’re also flying at night.



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On Dec. 21, the Phillips County and Yuma County Sheriff's offices tracked more than 16 drones between the two regions, according to a Facebook post by Phillips County. "We believe that the drones, though startling, are not malicious in nature."

**Where have they been sighted?** In north eastern Colorado, Yuma, [Lincoln](#), [Morgan](#), [Washington](#) and Sedgwick counties have reported sightings, and according to the [New York Times](#), Perkins, Hayes and Hitchcock counties in Nebraska have also seen the drones, though there may be others. <https://time.com/5757819/drones-colorado-nebraska/>