



UAS and SmallSat Weekly News

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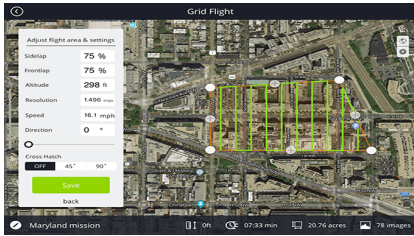
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12Jan19

Measure Ground Control is now available on Android and CrystalSky January 11, 2019 Mapping and Surveying



Ground Control is an **all-in-one drone software solution** that enables enterprise users to fly safely, automate critical workflows, and manage thousands of flights, all in real-time.

Ground Control was built on Measure’s experience inspecting 1.5GW of solar, 2.5GW of wind and 5000 utility poles, while managing thousands of flights and a large group of pilots. Some of Ground Control’s key features include:

- Simplified user interface with pre- and post-flight checklists
- GPS-aided manual control or automated grid pattern
- Active track modes including spotlight, POI, trace, orbit, and profile
- Local Data Mode to block data sharing
- Integrated LAANC authorization
- Automatic upload of flight logs, screen captures, and completed checklists

To get started with Ground Control, you can request a free trial at <https://www.measure.com/software>. To download on Android, find Ground Control on Google Play. To download on CrystalSky, find instructions at <https://www.measure.com/crystalsky>. <https://uasweekly.com/2019/01/11/measure-ground-control-is-now-available-on-android-and-crystalsky/>

DJI drones can fly over crowds, if they pack a parachute AJ Dellinger, @ajdell 01.10.19 in Transportation

Most of the time, commercial and personal drones are not allowed to fly over groups of people. Indemnis' drone parachute changes that. The company's product was **just certified** to allow operators to legally fly drones over small groups of people. This is **the first time** such a device received the certification.

The Nexus system straps onto DJI drones and acts as a safety measure in case the drone fails. It is equipped with sensors that determine if any anomalies are occurring during a flight. If something goes wrong, the parachute is deployed by a ballistic launcher. The company claims



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the chute comes out at a speed of 90 miles per hour, taking just 30 milliseconds. It comes out of a tube that inflates to keep the parachute lines away from the drone's body and propellers.

In order to get approved for use over the head of passersby, the Nexus parachute had to pass 45 functionality tests that examine the system's use in five different failure scenarios. Indemnis' system is available starting today for the [DJI Inspire 2](https://www.engadget.com/2019/01/10/dji-drones-indemnis-nexus-parachute-system/). <https://www.engadget.com/2019/01/10/dji-drones-indemnis-nexus-parachute-system/>

13Jan19

Drones for good: UAVs help survey poorly mapped areas of Africa January 13, 2019

Feilidh Dwyer



[The BBC reports](#) that in Tanzania, regular everyday people are volunteering to use drones to survey previously unmapped areas, providing a great service to the community.

Zanzibar is the capital of Tanzania and has an acute need for accurate maps as its population currently grows by around 1,000 a day. Many newcomers arrive in the city and build property. These houses are not captured in official data and often lack access to basic services such as sewerage, water and rubbish collection.

The mapping initiative was founded in 2016 with help from the World Bank and is the **largest such project in the world**. The total area being surveyed is around 900 square miles and the drones (senseFly eBees) take high-resolution images of the land below.



The eBee can complete up to 12 kilometers of automated flying in a single journey, weighs just 1.5 pounds and is launched by the pilot throwing them in the air.

In most of the world, satellites would suffice to map an area. In tropical areas, however, frequent cloud cover and low-resolution images do not make for accurate maps.

Zanzibar's Minister for Lands, Muhammad Juma Muhammad has said of the project:

"We want to get to the stage where we can plot our hospitals on the map, where we can issue building safety certificates, where we can tell people where the local schools are."

<https://www.wetalkuav.com/drones-for-good-uavs-help-survey-poorly-mapped-areas-of-africa/>



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DRONEII: 2019 Global Outlook for the Commercial Drone Industry Miriam

McNabb January 11, 2019



Happy New Year from Dronell! Hitting the ground running in 2019, we would like to start a timely conversation this year about the key trends in the commercial drone industry. As the industry consolidates, the market will become **a harsher environment** as companies race for time and funding to successfully introduce their products. Here are the trends, laws, tech and players to watch this year.

Responsible Consolidation - As the hype around drones dwindles, the 'winners' in the market will continue developing technologies to fully integrate drones and begin to offer end-2-end (E2E) solutions, a combination of hardware and software which can fully meet the need of customers without the need for another vendor.

From Prosumer to Professional - As we near the end of the proof of concept phase in the commercial drone industry and as the technology is proven to be reliable, there will be a growing demand for job-specific drone platforms.

New Regulation - Early on in the year we expect to finally see the new EASA regulations adopted, a long awaited update of the 2015 regulations (see our article on this [here](#)).

Legalization of Drones in India - On December 1, it became legal to fly drones in India as the Ministry of Civil Aviation finalized a national drone policy. Although drones will be used for mapping, inspection and monitoring, especially collecting data in agriculture and supporting insurance companies, e-commerce delivery is not on the table for now.

BVLOS, FAA Waivers - 2019 could also see an increase in Beyond-Visible-Line-of-Sight missions, although not their standardization.

More Integrated Networks - The integration of hardware and software solutions (E2E) is critical for further scale and adoption as a driver for commercial drone usage across individual operators and large organizations alike.

More AI - The integration of artificial intelligence, especially for data analysis, will be a driving theme in the drone industry in 2019 as companies are already working towards AI-driven solutions.



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Counter Drone Solutions - Following DroneGate at Gatwick at Christmas, there is likely to be an increase in demand for counter-drone solutions as both Gatwick and Heathrow airports have already invested millions in anti-drone technology.

Air Taxis - With plenty of debate over whether unmanned air taxis are overhyped, these technologies will be in the spotlight in 2019.

Find Out More - Want a more in-depth insight into market developments, regulation, technology or companies to watch in 2019? Reach out to us to discuss more tailored studies.

<https://www.droneii.com/contact> <https://dronelife.com/2019/01/11/droneii-2019-global-outlook-for-the-commercial-drone-industry/>

14Jan19

Canada implements new drone laws – minimum age to fly UAVs is 14! January 11, 2019 Feilidh Dwyer



From June 1 on, all drone operators, whether private or commercial must register their craft if it weighs between 0.55 pounds and 55 pounds.

- Drone pilots must be at least 14 years old but 16 for what are termed “advanced operations.”
- People will have to pass an online test to receive a drone license.
- Pilots must be sober while operating.
- The maximum allowable flight altitude is 400 feet.

Current Canadian laws forbid drones from flying within 5.5 miles (9km) of an airport. In 2017, Canada’s aviation authority reported 135 incidences in which a UAV posed a risk to aviation safety. Nevertheless, any drone flying in close proximity to a plane is one too many and the Canadian government seems set on changing the public perception of UAVs from a toy to a tool that has certain rules associated. https://www.wetalkuav.com/canada-implements-new-drone-laws-minimum-age-to-fly-uavs-is-14/?utm_source=WeTalkUAV&utm_campaign=1b95ab5634-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_1d410cb84d-1b95ab5634-83642867



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Alphabet Unit Tests New System to Identify Airborne Drones *Andy Pasztor Jan. 13, 2019*



An Alphabet Inc. Wing delivery drone flies during a demonstration last year.

[Alphabet](#)'s Inc. Wing unit and two other companies say they demonstrated a novel system to identify airborne drones, potentially paving the way toward expanded commercial uses of unmanned aircraft.

The concept, tested in December near San Francisco and expected to be announced on Tuesday, is aimed at tracking different types of drones using disparate software applications linked by a common web-based system. By sharing such data, the location of drones and identity of operators can be captured easily on laptops, cellphones or other digital devices simultaneously. Under the concept, operators, government agencies and individual citizens would have access to the data.

The recent moves are among [various pilot projects under way](#)—many under federal auspices—to study the feasibility of widespread drone operations. In the past, FAA officials have worried that lack of industry consensus threatens to further delay formal regulations. Longer term, industry and government officials still haven't worked out technical or funding principles for incorporating relatively small, low-flying drones with traditional ground-based radars that monitor manned aircraft at higher altitudes.

Much of the proposed air-traffic control system expansion probably will have to be automated, experts say, as the FAA already has done to a limited extent by streamlining the process for obtaining low-altitude flight approvals for small drones around airports.

https://www.wsj.com/articles/alphabet-unit-tests-new-system-to-identify-airborne-drones-11547417035?mod=itp_wsj&ru=yahoo

How to Dig a Hole with Two Drones and a Parachute 7 Jan 2019 Evan Ackerman



[The NIMBUS Lab at the University of Nebraska](#) has been developing drones that have the unique ability to dig holes in the ground and then fill those holes with sensors. The drone needs to be able to carry a portable digging system a useful distance, locate a diggable spot, land, verify that the spot it



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thought was diggable is in fact diggable, dig a hole and install the sensor, and then fly off again.

For more details, we spoke with the principal investigator on this project, NIMBUS Lab co-director [Carrick Detweiler](#), via email.

Battery powered drones have very short flight times, especially when flying with a heavy load. So to get to distant locations, we need to hitch a ride on another vehicle.

Our UAS performs the detachment and parachuting autonomously. The system is smart enough to know if it is likely to succeed in emplacing a sensor after just a short amount of digging. If it isn't likely to succeed, then the system can go to other nearby locations to try again.

What are some potential use cases for this system? *Our system can be used to deploy a wide range of sensors in remote or hard to access locations. We have a **USDA-NIFA project** where we are **deploying sensors and UASs in sensitive wetlands** environments, which are often hard to access in other ways without impacting the environment. We need to dig the sensors into the ground both to secure the sensors so they don't get washed away, but also for sensors such as soil moisture sensors that need good contact below the surface.*

<https://spectrum.ieee.org/automaton/robotics/drones/how-to-dig-a-hole-with-two-drones-and-a-parachute>

Investors Chase UAS Market DEE ANN DIVIS JANUARY 10, 2019 AIR, IUS EXCLUSIVE



Venture capitalists are set to break their 2017 record for investment in drone firms this year, attracted by faster than anticipated growth in the civil/commercial market for unmanned aircraft systems, according to a recent forecast by the Teal Group.

Though the global market for UAS includes drones for civil government and pleasure users, it is the **commercial sector** that is expected to take the lead. The total market is expected to **triple** from \$4.4 billion this year to \$13.1 billion in 2027 with the value of commercial drone activity expected to surpass what is currently the largest market for nonmilitary drones—the consumer/hobbyist sector.

The jump in the forecast is **startling**. In the new study, the annual market value for 2026 is \$1 billion higher than what Teal forecast just a year ago. The market value over the total 10-year period in the 2017 study was \$73.5 billion. The 2018 projection for the 10 years from 2018-2027 inclusive is \$88.3 billion.



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And there is room for even more activity should regulatory barriers or other factors turn more favorable. Teal's 2018 forecast does not incorporate what is expected to be a huge market for delivery drones as this application is seen as blossoming outside of the 10-year forecast period. Also worth noting is that the study includes the market for agricultural spraying but not other agricultural drone applications as these too have yet to mature. **Agriculture** will **someday** be the largest market for UAS, according to Teal, though it is not expected to reach that potential during the next 10 years. <http://insideunmannedsystems.com/investors-chase-uas-market/>

UK defenseless against 'disruptive drone attacks' at British airports, minister admits

Latest News Travel Advisory Travel Alerts Tips January 14, 2019



There's no easy way to prevent rogue drone pilots from causing disruptions at UK airports, transport secretary Chris Grayling has said. It means the chaos recently experienced by passengers at Gatwick and Heathrow may be repeated.

Drone disruptions have become a hot topic in the UK recently after two major airport incidents in London. Around 1,000 flights were canceled, affecting the travel plans of 140,000 people, after two unmanned aircraft hampered Gatwick's operations for two days in December. Heathrow had to hold plane departures for an hour last Tuesday after a drone was spotted in the vicinity of the airport.

With no breakthrough in sight on the technological field, the UK authorities earlier this week gave the police more powers to punish drone operators for violations. The measures included increased exclusion zones around airports; a new register and competent tests for owners as well as a fixed set of fines. Failing to comply with an officer's demands to land a drone or operating an unmanned aerial vehicle without a registration from now on carries a penalty of £100). <https://travelwirenews.com/uk-defenseless-against-disruptive-drone-attacks-at-british-airports-minister-admits-1269680/>

Saudi Arabia opens drone market with electronic registration system

January 14, 2019 Philip Butterworth-Hayes UAS traffic management news



Saudi Arabia's General Authority of Civil Aviation (GACA) has launched its electronic service for drones. It's campaign was launched with the aim of enhancing awareness of the



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importance of registering and issuing licenses which is a prerequisite for operating drones in the Kingdom.

A recreational drone permit will cost \$67 and customers will have to log their identity and the make and serial number of the drone within a registration system. Commercial drone permits will cost \$133, and users will have to complete a training course.

The electronic service for registering drones is user-friendly, where all the intended user has to do is visit the website, fill out the needed information and follow up the process electronically. It links the process to a number of government organizations to make registration quite easy. <https://www.unmannedairspace.info/uncategorized/saudi-arabia-opens-drone-market-electronic-registration-system/>

CES 2019: 5G networks, re-charging drones in flight and anti-spoofing kit January 11, 2019 Philip Butterworth-Hayes UAS traffic management news



Drone and UTM industry professionals may remember the 2019 Consumer Electronics Show in Las Vegas mainly for launch of Bell's **Nexus air taxi concept**, but other notable insights emerged from the event.

Verizon Chief Executive Officer Hans Vestberg spoke of the quantum leap which **5G** will bring to autonomous vehicles, advanced robotics, artificial intelligence and more – with major implications to the UAS sector. These include: mobile devices traveling 500 kilometers per hour can potentially stay connected, and one million devices can be supported in a square kilometer. Verizon will be the first company to **connect 1 million drones** to the 5G network.

Global Energy Transmission announced it had developed a remote charging system to allow battery-powered drones to fly **forever**. By hovering for just a few minutes over a pre-installed charging area, drones can hop between power hotspots along extended flight routes.

Regulus announced the launch of its "**first** commercial-grade, multi-constellation navigation solution with robust, built-in global navigation satellite system (GNSS) spoofing and jamming defense." <https://www.unmannedairspace.info/uncategorized/ces-2019-5g-networks-re-charging-drones-flight-anti-spoofing-kit/>



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Drone used to count seal colony pups for first time APPLICATION BUSINESS DJI DRONES
AT WORKH EADLINE NEWS ALEX DOUGLAS JANUARY 14, 2019



The work, carried out in November off the Northumberland Coast, by Ritchie Southerton Photography but only recently published, counted 2,602 seal pups compared to 1,740 in 2014.

According to a report from Heliguy, experts believe the use of a drone in this way can help make the counts more accurate and efficient while causing less stress for the seals.

Ritchie Southerton Photography worked alongside National trust rangers to complete the work. He said: "The drone, which was compact and easy to transport, helped with the accuracy of the count and it allowed me to fly over the seals and get close to them without disturbing them, which was less intrusive for them and safer for us – as the mother seals can get quite protective and are prone to chasing you. The drone also helped to save time. On the first day, the drone counted 200 more seals than what was achieved on foot."

"The Phantom 4 Pro was the perfect choice, due its compact size, which makes it incredibly portable. It also has a very good camera with good battery life with 25-30 minutes of flying time, and it worked faultlessly operating from a small boat and in damp conditions from staying on the islands for five weeks."

In total, Ritchie conducted 71 flights over an 18-hour period, covering 189,742 meters and capturing 4,000 still images, helping to count just over 2,600 seal pups.

https://www.commercialdroneprofessional.com/drone-used-to-count-seal-colony-pups-for-first-time/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288458-Commercial+Drone+Professional+DNA+-+2019-01-14

15Jan19

FAA Proposes More Commercial Drone Operations at Night and Over People

Andy Pasztor Jan. 14, 2019



Federal air-safety regulators for the first time proposed allowing small drones to routinely fly over crowds of people and at night, **long-awaited steps** toward opening up more airspace and commercial opportunities for unmanned aircraft.



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The preliminary rules, released Monday by the Federal Aviation Administration, call for enhanced training of ground operators and installation of anti-collision lights.

The draft document also **breaks new regulatory ground** by creating separate categories of drones based on weight and other criteria, and then seeks to impose different levels of safeguards to prevent injuries in the event of a crash. Among other things, the FAA wants manufacturers to demonstrate that production materials, speed, altitude restrictions and emergency maneuvering capabilities will prevent injuries, particularly from propellers or other rotating parts.

For the fastest and heaviest drones covered by the proposal, the agency envisions allowing flights over some large crowds such as concerts or athletic events in closed stadiums as long as attendees are notified. The proposal in most cases would prohibit unmanned vehicles from hovering over one section of the audience. The proposal applies to drones weighing less than 55 pounds—those already covered by earlier rules—and it doesn't call for flights above the current 400-foot altitude limit.

If it is finalized, drone operators no longer would have to go through the time-consuming process of applying for specific FAA waivers or exemptions covering many operations.

https://www.wsj.com/articles/faa-proposes-more-commercial-drone-operations-at-night-and-over-people-11547495257?mod=djemlogistics_h

InstantEye Robotics Announces New Tactical Multi-Role sUAS 14 Jan 2019 Mike Rees



The InstantEye Mk-3 is an encrypted, digital system with visible and thermal video as well as still imagery to support standoff reconnaissance. It is the largest aircraft in the family with a payload capacity of over **three pounds**. It is designed to provide near real-time ISR, communications relay, chemical/radiological detection and payload delivery to defeat IEDs.

It uses a tablet computer as a viewing device, with a two-hand controller. The tablet allows the operator to capture and review still imagery in flight and program waypoints.

https://www.unmannedsystemstechnology.com/2019/01/instanteye-robotics-announces-new-tactical-multi-role-suas/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=87e261ecb0-eBrief_2019_Jan_15&utm_medium=email&utm_term=0_6fc3c01e8d-87e261ecb0-119747501



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State of Nevada UAS Test Site Selected for Milestone DOT / FAA UAS Traffic Management Pilot Program January 14, 2019



On 14 January 2019, Department of Transportation Secretary Elaine L. Chao addressed attendees to the Transportation Research Board 98th Annual Meeting on the Future of Transportation. She highlighted the DOT / FAA Unmanned Aircraft System Traffic Management Pilot Program (UPP) awardees, which included the FAA-designated State of Nevada UAS Test Site.

“The State of Nevada is quickly becoming a focal point for the UAS industry” said Reno Mayor Hillary Schieve. “Last year the City of Reno was selected to participate in the FAA’s UAS Integration Pilot Program, and now we are honored to have the opportunity to partner with the Nevada Institute for Autonomous Systems as they conduct testing that will help develop processes for safe integration of drones into the National Airspace.” This past year, Business Facilities magazine ranked Nevada **second among states** for its drone industry, with New York coming in first.

The Nevada Unmanned Aircraft System Traffic Management Pilot Program (UPP) will focus on advanced airspace, drone, and sensor technology for safe drone airspace operations in an urban environment. Nevada UPP partners include Fortune 50 companies and Nevada Teammates/Airspace developers including: AiRXOS a GE venture, ANRA Technologies, WhiteFox Defense, Iris Automation, Drone America, Praxis Aerospace Concepts International, Inc., UltiSat, Inc., AviSight, Deseret-UAS/USU, Telesis, Reno-Tahoe Airport Authority, the Cities of Reno and Henderson, Town of Laughlin, and international partners Unify and the Institute of Aviation, Warsaw (ILOT). <https://uasweekly.com/2019/01/14/state-of-nevada-uas-test-site-selected-for-milestone-dot-faa-uas-traffic-management-pilot-program/>

16Jan19

Approved Drone Pilots commends DJI’s ‘call for caution’ statement COUNTER-DRONE CRIME HEADLINE NEWS REGULATION ALEX DOUGLAS JANUARY 16, 2019



Highlighting the need for care, especially when events are unfolding, ADP stressed that it is important not to jump to conclusions as historically, drone incidents turn out to be disproved on investigation.

When human factors are involved in the identification of



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objects or lights in the sky, there is a significant potential for false positive sightings of drones, saying it would support robust sanity checking of sightings using proven counter drone technology.

The statement, released by ADP late last week, went on to describe how in the recent alleged drone sighting at Heathrow, ADS-B monitoring showed a **police helicopter** in attendance for an extended period very close to the airfield which coincided with sightings cited in the press and videos of lights on social media.

Nicholas Drye, co-founder of ADP thinks it is important that people understand that drones are just a tool to help people in their work. "While people will have seen their use in Hollywood blockbusters, TV programs and adverts, most of the commercial drone work is for more mundane tasks such as surveying high or inaccessible buildings, mapping terrain and assisting the agricultural sector. Drones are also used daily by our Police, Fire, Ambulance and search and rescue services." https://www.commercialdroneprofessional.com/approved-drone-pilots-commends-djis-call-for-caution-statement/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288689-Commercial+Drone+Professional+DNA++2019-01-16

Swiss rail service making plans to integrate air taxi operation APPLICATION BUSINESS EUROPE HEADLINE NEWS TECHNOLOGY ALEX DOUGLAS JANUARY 16, 2019



It is reportedly in talks with Lilium, a Germany-based UAV VTOL firm, to develop air taxis to transport customers from rail stations to destinations.

According to reports from Swiss news outlet, SonntagsZeitung, a prototype flying vehicle that can carry as many as five passengers already exists, and talks have begun. Raffael Hirt, a spokesman for the Swiss rail service, said: "The rail service and the airline taxi company Lilium are currently engaged in talks on cooperation. The parties have signed a letter of intent.

The exact role the SBB could play in the joint venture has not yet been determined, and the rail service could be a marketer of the air taxi service or a co-operator of the flight operations.

https://www.commercialdroneprofessional.com/swiss-rail-service-making-plans-to-integrate-air-taxi-operation/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288689-Commercial+Drone+Professional+DNA++2019-01-16



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Verity Studios to kick off 2019 with drone choreography team expansion

APPLICATION BUSINESS INTERNATIONAL NEWS ALEX DOUGLAS JANUARY 16, 2019



Verity Studios is on the lookout for someone who can be a part of its growing work. The role requires someone to **program drone motion and light choreographies** for the world's best-known artists and the biggest live events, work with clients' creative teams to bring drone show segments to life, design, develop, and test new drone motion elements and lighting effects, and contribute to the development of drone choreography design tools.

Based in Switzerland, Verity Studios' drones have been involved in a number of significant events in recent years and continue to do so as time progresses. In the past, Verity Studios helped put on shows at the Dubai Mall, Madison Square Garden and also worked with Metallica.

In September, Commercial Drone Professional covered Verity Studios work with Drake, you can watch the video here: https://www.commercialdroneprofessional.com/verity-studios-to-kick-off-2019-with-drone-choreography-team-expansion/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288689-Commercial+Drone+Professional+DNA+-+2019-01-16

AUVSI kicks off second annual Xcellence humanitarian awards for unmanned tech

APPLICATION EVENTS NEWS UNITED STATES ALEX DOUGLAS JANUARY 16, 2019



The awards set out to provide an opportunity for the industry to recognize and reward organizations and individuals who have used unmanned technology in innovative ways to serve humanitarian or philanthropic efforts around the world.

Brian Wynne, CEO of AUVSI, commented, "The first-ever Humanitarian Awards in 2018 gave us an opportunity to recognize the accomplishments of truly exceptional leaders with a passion for service and the vision to solve the world's problems in new and innovative ways. The world needs to know about these individuals, and with the help of our partner, **DJI**, we can share their stories to inspire a new generation of humanitarian projects."

The awards will take place at AUVSI Xponential from April 29 to May 2 at McCormick Place in Chicago. The awards will announce recipients across 14 categories highlighting technology,



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solutions and operations that improve economy, lifestyle and society, with Humanitarian Award winners being recognized with a \$25,000 donation.

Last year, the awards went to five organizations that flew drones on critical, life-saving missions around the world, including hurricane recovery, search and rescue, hazard mapping and medical deliveries. Anyone interested in nominating can go to the official AUVSI Xcellence Awards website to register before deadlines close on **February 6**.

https://www.commercialdroneprofessional.com/auvsi-kicks-off-second-annual-xcellence-humanitarian-awards-for-unmanned-tech/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288689-Commercial+Drone+Professional+DNA+-+2019-01-16

JD, China's E-Commerce Giant, Says 50% of Deliveries Will Be Made by Drone

Miriam McNabb January 16, 2019



While the U.S. and Europe inch closer to drone delivery, China is racing ahead. China's leading e-commerce company, **JD**, has launched an aggressive trial that the company says will lead to 50% of its packages being delivered by drone.

Xinhua.net [reports](#) that New Year's gifts are being delivered by drone to rural areas ahead of China's Spring Festival.

Guang'an, an agricultural area in the Sichuan province, was the first city to trial delivery drones in China's rural southwestern region, but JD hopes to expand the program quickly to other cities. Three flight routes connect the city's downtown central delivery station with three major suburban transfer stations. A round trip between the central station to a suburban village usually takes an expressman **an hour** by tricycle, but it only takes a delivery UAV **six minutes** to fly across the mountain road.

Chinese logistics company SF Express is the first company in China approved to operate commercial drones for delivery. The drones have a max payload of 30 kg – about **66 pounds** – more than enough for delivery of everything from fresh food to clothing and electronics.

<https://dronelife.com/2019/01/16/jd-chinas-e-commerce-giant-says-50-of-deliveries-will-be-made-by-drone/>



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Drones to achieve “unlimited flight” using wireless charging January 16, 2019 Feilidh Dwyer



Even the best commercial drones struggle to stay in the air much beyond 30 minutes, and that can interfere with important tasks such as powerline or mine inspections, transporting important goods such as [human organs](#) or [spraying crops on farms](#).

At the Consumer Electronics Show in Las Vegas this year one company, [Global Energy Transmission](#), based in Portland, Oregon, showed off its impressive wireless drone charging solution.

In order for a drone to be capable of receiving a charge, they must first be fitted with a GET recharging pack. Once that is in place, an electric, industrial-class drone may simply hover over one of these spots for **six minutes** and achieve a full charge. The drones they've used for testing this technology weighed 18 lbs without the battery and 30 pounds at takeoff. Without charge, it can stay airborne for 28 minutes.

The company is billing its innovation as “the ultimate solution for unlimited flight.” The company posted a video online of one of their drones flying for 2 hours continuously.

Each charging spot is a hexagonal shape standing 26 feet across which makes it large enough for several drones to simultaneously charge. The beauty of this system is that, if the charging stations are placed at convenient locations along a flight route (say every 5 miles), the potential distance a drone can travel becomes virtually unlimited. <https://www.wetalkuav.com/wireless-charging-for-unlimited-flight/>

17Jan19

Drones Help Power New Retail Inventory Tool Michael Bates January 14, 2019



[Pensa Systems](#) has unveiled its new “retail inventory visibility system”: an approach that uses computer vision to “see,” artificial intelligence to learn, analyze and conclude, and autonomous drones as roving eyes to automate visual tasks. The system is designed to inform

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retailers and brands of what is actually on shelves – across all stores, everywhere, at any point in time.

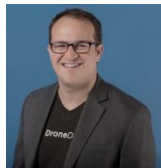
Pensa recently completed a successful pilot of its new inventory visibility system with Anheuser-Busch InBev in the IGA Extra Beck store in Montreal. With less than 90 minutes of setup time, the drone-based system collected hourly and daily data on out-of-stocks and share-of-shelf within the beer section.

Over a period of two weeks, the system scanned dry shelves and coolers with multiple product types capturing 15.9 million images during 200 flights (totaling 2 miles of travel), with its continuous learning accuracy reaching 98% for out-of-stock detection.

Pensa Systems recently raised \$5 million in new funding to accelerate the deployment of its system. The company has now raised a total of **\$7.2 million**. The new round was led by Signia Venture Partners, with participation from new investor Commerce Ventures, as well as existing investors ZX Ventures, ATX Seed Ventures, Capital Factory, Revtech Ventures and others.

https://unmanned-aerial.com/drones-help-power-new-retail-inventory-tool?utm_medium=email&utm_source=LNH+01-17-2019&utm_campaign=UAO+Latest+News+Headlines

DroneDeploy Hits Milestone of 1 Million Flights Betsy Lillian January 16, 2019



Mike Winn, CEO

The company says the milestone was made possible by the 4,000 customers who used aerial data in industries such as construction, agriculture, energy and emergency management. The software has helped customers map more than 40 million acres across **180 countries**. For comparison, the company announced a milestone of [10 million acres in 160 countries](#) in March 2017, [5 million acres in 130 countries](#) in August 2016 and [2 million acres in 100 countries](#) in March 2016.

DroneDeploy says its success in 2018 came from onboarding a number of **construction companies**. The company now serves hundreds of contractors, including Brasfield and Gorrie, Jacobs, Layton Construction, McCarthy Building Cos., Skanska, and Sundt Construction.

https://unmanned-aerial.com/dronedeploy-hits-milestone-of-1-million-flights?utm_medium=email&utm_source=LNH+01-17-2019&utm_campaign=UAO+Latest+News+Headlines



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The Chula Vista Police Department Defines How Drones Can Be Used as First Responders Jeremiah Karpowicz January 15, 2019



As one of the agencies involved with [San Diego's participation](#) in the FAA's Integration Pilot Program, the Chula Vista Police Department (CVPD) is helping to pioneer what it means for police departments to think of and use drones as first responders. CVPD is working with Cape to [integrate Cape-enabled drones](#) into daily emergency

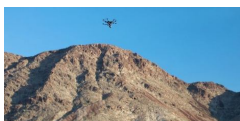
response operations to give CVPD officers and drone operators the ability to share valuable information.



"Let's look at what kind of a difference a drone can make when we're dealing with a situation that's taking place in a crowded park," said Chula Vista Police Chief Roxana Kennedy. "If we get a call that says someone might have a weapon in that park, it can be difficult for officers to find out whether or not that's the case when they have to deal with everything from keeping a crowd of people calm to trees and other objects that block their visibility. A drone can come in from a different vantage point to avoid those obstacles without that crowd ever noticing anything, to identify whether or not that person is actually armed. Knowing that will change the scenario as officers make their entry and guide how they deal with everything and everyone."

It's a difference that some larger departments have enabled thanks to manned aircraft support, but that's not often a realistic option for the CVPD. Their department does not have a manned aircraft program, and while they can receive aid from nearby departments, it's really not something they can rely on given those departments' own needs and priorities. That's part of the reason that being able to use drones as first responders has made such a difference for the CVPD. https://www.expouav.com/news/latest/chula-vista-police-department-drones-first-responders/?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiTWpJeU5qZG1NRFkyTnpNMCIsluQiOiJxR0JhaTArdDVRMzk4c1RNek1Zb1B0WDBkK3pGbUdlld0diT2xjRkF1c2JlbUF0WXhWZThoK0JqSFFBUeHkemU5cm9oclpRXC9NVWFCEk8xMnBnRVBMTWxuXC9seEN5enAwQnl4dFd1TE1JWWZ1b2RZZIVkUjA5TVk0aWhLeEJ1RzBoIn0%3D

FAA Issues an RFI for a Remote ID System for Drones Juan Plaza January 16, 2019



On December 20th the FAA quietly [announced the release of a Request for Information \(RFI\)](#) looking for partners to help develop **a realistic approach**

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to sharing data that would be required to remotely identify small drones in controlled airspace. The data collected would include a unique identifier for the UAV, tracking information as well as drone owner and remote pilot identification.

The selected respondents will be known as “remote ID UAS service suppliers or USS” and will, at **no cost to the government**, participate in workshops, develop position papers, technical requirements, prototype technology demonstrations and conduct demonstrations with the FAA and with other partners. At the end of the process eight respondents are expected to be selected.

The many existing and potential combinations of operators and service providers require a flexible and dynamic approach to information exchange that will fulfill immediate needs for enabling current sUAS operations as well as anticipate future information exchange requirements.

This initiative by the FAA is an important step toward forming the technical foundation that will enable the [full integration of manned and unmanned aircraft](#) in controlled airspace.

https://www.expouav.com/news/latest/faa-rfi-remote-id-drones/?mkt_tok=eyJpIjoiTWpJeU5qZG1NRfkyTnpNMClSnQiOiJxR0JhaTArRDVzRmZk4c1RNek1Zb1B0WDBkK3pGbUdlld0diT2xiRkF1c2JLbUF0WXhWZThoK0JqSFFBUEhKemU5cm9oclpRXC9NVWFCEk8xMnBnRVBMTWxuXC9seEN5enAwQnl4dFd1TE1JWWZ1b2RZZlVkJjA5TVk0aWhLeEJ1RzBoIn0%3D

Danish drone firm QuadSAT secures £700,000 in seed round funding APPLICATION BUSINESS EUROPE FINANCIAL INVESTMENT NEWS ALEX DOUGLAS JANUARY 17, 2019



Led by Vaekstfonden, the Danish Growth Fund, with help from Seraphim Capital and existing investors, the funding will enable the **drone-enabled antenna testing** company to take its UAV platform to the satellite communications industry.

QuadSAT’s platform uses drone technology to test and calibrate satellite and VSAT antennas autonomously, **mimicking** an orbiting satellite that can simulate a ship or aircraft’s motion. The method enables accurate testing while reducing downtime. Having started as a University project, QuadSAT is a startup company and is based at Odense Robotics Start Up Hub, a **Danish accelerator program** for robotics and drone startups.

Joakim Espeland, CEO at QuadSAT, commented on the investment. “Our technology alleviates a massive pain point for our customers and will ensure high quality communications with



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minimum interference at a competitive price." https://www.commercialdroneprofessional.com/danish-drone-firm-quadsat-secures-700000-in-seed-round-funding/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-288848-Commercial+Drone+Professional+DNA+-+2019-01-17

18Jan19

FAA's New Unmanned Traffic Management System in Testing Nick Zazulia January 17, 2019



The xFold Dragon x6 Hybrid drone primarily being used for testing

The FAA is undertaking a research initiative with partners including Harris Corporation, the University of North Dakota and the Northern Plains UAS Test Site to explore the implementation and operation of unmanned traffic management systems in the

National Airspace System.

The FAA has been very focused on UTM over the last year, trying to both contend with [the risks of small UAS](#) mucking up [normal flight operations](#), [potentially grounding flights](#) and introducing unexpected complications, as well as finding a way to integrate the coming wave of commercial [unmanned package-delivery](#), [urban air mobility](#) and [and other](#) largely low-flying [unmanned traffic](#) into an already busy airspace.

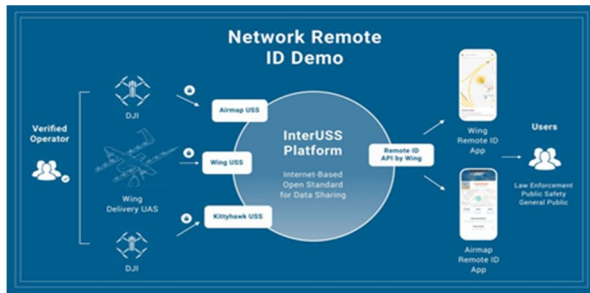
In this latest effort, Northern Plains "will conduct flight tests to **validate the components**" of the FAA's UTM system, primarily using xFold Dragon x6 Hybrid drones. Testing is currently underway and is scheduled to continue through March or April, targeting different components of the architecture. A focus of the testing is understanding the flow of information from user to the UTM system and FAA, and Northern Plains said that both visual and BVLOS operations will be evaluated. <https://www.aviationtoday.com/2019/01/17/faas-new-unmanned-traffic-management-system-testing/>

Wing, AirMap & Kittyhawk demo network drone ID solution Malek Murisonon January 17, 2019

While most agree that Remote ID is needed, there are disagreements over the best path forward. It's important to devise a system that isn't a burden on operators or an unnecessary infringement upon privacy rights.



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This week it emerged that three UAS Service Suppliers helping to run the FAA's [LAANC](#) program – AirMap, Wing and Kittyhawk.io – demonstrated a network-based remote ID application back in December using the open-source [InterUSS platform](#).

InterUSS is a project set up by Wing. The aim is to inform third parties about what drones are operating near their current location and why. That could include the general public, other drone pilots or law enforcement. In the case of Wing's delivery service, the company is keen for the public to know (and ultimately have confidence in) their drones buzzing around overhead.

The demonstration consisted of three operators and three drones. Then, each operator requested airspace access authorizations for their flights through their platform's LAANC approval capabilities. InterUSS was used to discover which service providers were operating drone flights in the area before providing relevant drone data to the separate remote identification applications.

Flight and pilot data was shared only as needed. To protect operator privacy, only safety information was shared to non-participating bystanders who were able to visualize the drone operations in their vicinity in real time on a smartphone application.

"Before such wide-scale drone operations as autonomous deliveries can take place, we need to ensure that regulators – and the public – can easily assess whether or not a particular drone belongs to a good actor or requires intervention," said Ben Marcus, Co-Founder and Chairman of AirMap.

It doesn't require any special hardware, it allows multiple parties to both consume and populate the data, and with the power of technologies like LTE and the forthcoming 5G, it will be **readily accessible** to the largest amount of people **with the smallest amount of overhead**.
<https://dronelife.com/2019/01/17/airmap-kittyhawk-and-wing-demonstrate-interuss-remote-id-solution/>