



UAS and SmallSat Weekly News

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Exploring the Collaboration between NASA, the FAA and Drone Industry to Develop a Cloud-Based UTM System February 19, 2019 Juan Plaza



The National Aeronautics and Space Administration and the Federal Aviation Administration are partnering with private companies to develop a **cloud-based** traffic management system that could handle unmanned aerial vehicles operating in the national airspace, the Department of Homeland Security (DHS) [recently announced](#). The *Unmanned Aircraft Systems Traffic Management* platform enables drone users

coordinate airspace use through a UAS Service Supplier provided they have been registered with the FAA.

The proposed UTM system enables *Low Altitude Authorization Notification Capability* ([LAANC](#)) so that drone operators can receive **real-time** authorization to fly in controlled airspace. Additionally, the system will be able to handle drone coordination via mobile and other electronic devices connected to the Internet so that they can communicate. It will enable capabilities related to dynamic geo-fences, emergency TFRs or virtual barriers as the in-flight UAV will be able to provide real-time information to the operator.

The proposed system will allow data providers to leverage automated UTM communication and to share information such as weather and terrain data, NOTAMS, TFR's, and operational plans addressing potential flight conflicts. DHS' Science and Technology Directorate is speaking with others involved in the development of related systems such as [MIT's Urban Counter-UAS Operational Prototype](#) which will be used to detect unauthorized drones .

Several major technology firms, such as Amazon and Google, have announced plans to launch their own UAS applications, and delivery giants such as DHL, FedEx and UPS followed suit with their own distribution initiatives. However, before they can take to the sky, a safe UTM system must be deployed in full coordination with existing Air Traffic Control to ensure unmanned aircraft don't collide into buildings, airplanes or one another.

https://www.expouav.com/news/latest/exploring-the-collaboration-between-nasa-the-faa-and-drone-industry-to-develop-a-cloud-based-utm-system/?mkt_tok=eyJpIjoiTWprNU5HSmxPV1EyWkdNMSIsInQiOiI6a2Zia0loeitJZDJWbFpXYkI2RVpwexk6QW1kdW90djhvZ2VnMDhCWnlydktXc3dDOHdNYitNV2pDZXY3c3ZxUmRMcWVMd3h0YXQ1MFZsek5UOGNueUdFXC8yM0F3VFwvZGM1NmhodSswXC84VjV6Q3VyUWZkd2kxTikwcW5CV0x0SyJ9



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23Feb19

FAA to Require Drones to Display Unique Identifiers Frank Wolfe February 21, 2019



The FAA has dispensed with the normal notice and comment period of up to 180 days and is proposing a final rule requiring that small unmanned aircraft systems (SUAS) display a "unique identifier."

The interim final rule, which will take effect Feb. 25, "requires small unmanned aircraft owners to display the unique identifier assigned by the FAA upon completion of the registration process (registration number) on an external surface of the aircraft," according to a [Feb. 13 Federal Register notice](#). "Small unmanned aircraft owners are no longer permitted to enclose the FAA-issued registration number in a compartment." Public comments are due by March 19.

In a 2015 rule, the FAA initially permitted SUAS to have their registration numbers concealed inside the aircraft as a concession to the television and motion picture industry, which did not want markings to show in theatrical and television productions, and hobbyists who wanted to preserve the authenticity of their model aircraft. But law enforcement officials highlighted the possible risk to first responders, if SUAS had bombs in their inside compartments, rather than registration numbers. <https://www.aviationtoday.com/2019/02/21/faa-require-drones-display-unique-identifiers/>

Aero India 2019: HAL Unveils Rotary-wing Unmanned Aerial Vehicle February 22, 2019 Military



Indian aerospace and defense company Hindustan Aeronautics Limited unveiled a full-scale prototype of a locally designed rotary-wing unmanned aerial vehicle at the Aero India 2019 defense exhibition being held in Bangalore on 20-24 February.

Specifically designed to perform intelligence, surveillance, and reconnaissance (ISR) operations, the 200 kg UAV, which is equipped with a twin-blade main rotor and a locally- developed petrol engine, is stated to have a range of 200 km, endurance of **six hours**, and a service ceiling of 6,000 m. The platform, the fuselage of which is 4.2 m long and 1.28 m wide, is reportedly capable of flying at a top speed of 200 km/h and can carry a 40 kg payload.



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The UAV, which features a digital engine control and datalink, can fly in autonomous mode, including auto take-off and landing with a return-to-home recovery option. It uses GPS for interactive command and control with programmable mission management computers. Real-time data and video links are available for line-of-sight operations.

<https://uasweekly.com/2019/02/22/aero-india-2019-hal-unveils-rotary-wing-unmanned-aerial-vehicle/>

Mountain rescue team deploys drones to save lives APPLICATION EMERGENCY SERVICES

EUROPE NEWS ALEX DOUGLAS FEBRUARY 22, 2019



The Czech Mountain Rescue Service uses Robodrone Kingfisher drones fitted with cameras and its own avalanche transceiver detection system to locate buried skiers.

MRS drone operator Marek Frys, said: "We use drones fitted with a special system that works on the 457kHz frequency to detect avalanche transceivers." Chief executive of software

developer SCS Smart City Swiss, Jean Yves Barmen, went on to explain what they are doing to help people who aren't wearing a transceiver. He said: "We are working on thermal and multispectral systems that can see gases such as methane and carbon dioxide and could also detect people buried in mud slides, or under rubble."

All the guides in Courchevel have Recco reflectors in their ski gear. However, it takes time to raise an alert and get a helicopter out. Having seen how small and quick to activate drones can be, I would not be surprised if all guides are soon carrying one.

https://www.commercialdroneprofessional.com/mountain-rescue-team-deploys-drones-to-save-lives/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293040-Commercial+Drone+Professional+DNA+-+2019-02-22

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Video: Aerium's Cool Ornithopter Drone PAUL BERTORELLI



Scaring birds away from airports is a huge challenge. A Canadian company is doing it with a robotic Peregrine Falcon called the Robird. They showed the drone at AUVSI Xponential in Dallas. AVweb shot this video on the new product. [view on YouTube](https://www.avweb.com/eletter/archives/101/4265-full.html?ET=avweb:e4265:2565185a:&st=email#228990) <https://www.avweb.com/eletter/archives/101/4265-full.html?ET=avweb:e4265:2565185a:&st=email#228990>



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A new generation of flying cars is taking to the air. But without the cars

SAMANTHA MASUNAGA FEB 22, 2019



Boeing Co.'s flying car prototype completed its first successful test flight in January

No fewer than 70 companies are designing, building and testing this era's version of the flying car. Thanks to advances in electric propulsion, the new designs look more like many-rotored helicopters. And while the early concepts were envisioned as personal transportation, the reality is more likely to be **short-range flying taxi services** in cities.

Uber Technologies Inc. has a division focused on aviation, including a proposed aerial ride-hailing option called Uber Air. The San Francisco firm has teamed up with several flying car manufacturers to build the vehicles for its service, and plans to test them in Los Angeles and Dallas in 2020. Last month, aerospace giant Boeing Co. conducted the first test flight of its autonomous flying car prototype. Laurie Garrow, associate director for the Center for Urban and Regional Air Mobility at Georgia Tech said, "What may take **an hour and a half** to get between two locations today may take **20 minutes** in the future."



The Aerocar I flying auto was designed by Moulton "Molt" Taylor and built in Longview, Wash., in the late 1940s.

There are still many technological and regulatory barriers to clear before these vehicles can take flight.. Some industry officials believe a recent Federal Aviation Administration rewrite of laws governing small aircraft certification standards is a step toward giving companies more leeway in deciding how they'll meet safety guidelines rather than dictating specifically how it should be done.

<https://www.latimes.com/business/la-fi-flying-cars-20190222-story.html>

Airobotics puts US in focus following record year of 'hyper-growth' in 2018

BUSINESS HEADLINE NEWS ALEX DOUGLAS FEBRUARY 25, 2019



Airobotics made record growth in 2018, success which has led to the expansion of its executive team in its new global HQ in Scottsdale, Arizona.

The move follows a successful round of Series D funding and coincided with the introduction of aerial LiDAR capabilities. Raw



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LiDAR data can now be captured and processed quickly in the cloud, allowing Airobotics' customers to make effective decisions based on high-frequency, consistent data capture. Spatial data can also be captured using photogrammetry, video, and infra-red.

Airobotics CEO and co-founder, Ran Krauss, said: "This past year has seen a huge period of growth for us. As we expand our services and shift our base of operations to the US, we continue to push advancements in autonomous drone operations, global regulatory approvals and new technology." https://www.commercialdroneprofessional.com/airobotics-puts-us-in-focus-following-record-year-of-hyper-growth-in-2018/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293213-Commercial+Drone+Professional+DNA+-+2019-02-25

Man arrested for shooting down a missing search drone APPLICATION COUNTER-DRONE CRIME DJI NEWS ALEX DOUGLAS FEBRUARY 25, 2019



Suffolk County Police arrested a man for shooting a drone out of the sky in New York this weekend.

The DJI Mavic 2 Zoom was being used by members of Missing Angels-Long Island to look for a lost dog. The team became aware the drone was unresponsive at approximately 4.45 pm.

The group then used the drone's GPS to determine that the drone was last above Rutherford Street in St. James. Following an investigation by Fourth Squad detectives, it was found a resident of a home on the street fired **three shotgun shots** into the air from his yard, striking the drone.

Multiple shotguns were confiscated from the residence and the man, 26, was charged with criminal mischief 3rd degree and prohibited use of a weapon. He was issued a field appearance ticket and will be arraigned at a later date. https://www.commercialdroneprofessional.com/man-arrested-for-shooting-down-a-missing-search-drone/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293213-Commercial+Drone+Professional+DNA+-+2019-02-25

Pointivo Raises \$7M in Round Led by BIP Capital Madison Hogan February 19, 2019

Atlanta-based [Pointivo](#), a software company that utilizes AI and computer vision to provide automated analytics for drone and other aerial platforms, has raised \$7 million in a Series A round.



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Pointivo's platform automates the heavily manual processes around inspecting and assessing physical assets in the insurance, roofing, solar, telecom and energy industries. Using a patented 3D intelligence platform, Pointivo processes images from drones, manned aerial and mobile cameras and automatically analyzes critical information about structures. The company has partnered with drone platform companies and manned aerial imagery providers.

"Our ability to integrate AI and computer vision to **automatically** extract valuable 3D information about a scene sets us apart," Dan Ciprari, CEO and co-founder of Pointivo, said in a statement."

In addition to the funding raised, Pointivo was awarded more than \$1.5 million through the Small Business Innovation Research program and \$1.4 million in other seed and venture rounds. The startup was awarded "Best in Show" among the Technology Association of Georgia's Top 10 Innovative Technology Companies and a top Startup to Watch by Venture Atlanta.

"Pointivo's significant investment in hard-to-replicate, patented technology enables its partners to deploy highly compelling use cases," Dan Drechsel, senior vice president at BIP Capital, said in a statement. "The company's partners have already deployed the solution to improve the servicing of assets in insurance, roofing, solar, energy and telecom."

<https://www.americaninno.com/atlanta/fundings/pointivo-raises-7m-in-round-led-by-bip-capital/>

Boeing flies in with drone expectations for the region February 21, 2019 Sarah Diaa



A model of Boeing's Horizon X drone

Dubai: Boeing sees "enormous potential" to supply drones and other unmanned aircraft to governments in the Middle East for defense purposes.

Mark Ballew, director of sales and marketing for international government services at Boeing Global Services, said the company is in talks with countries in the region about modernizing their defense platforms.

"There's also going to be an increased need for unmanned aerial vehicles and protection from unmanned aerial vehicles," Ballew said. Ballew was talking to Gulf News on the sidelines of IDEX in Abu Dhabi, where Boeing released its forecast for the defense services sector, projecting growth in the market to a value of **\$96.3 billion** over the next 10 years from this region. Ballew



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said governments are looking at both how to defend against drones and how to utilize them in areas that may be unsafe for humans. <https://gulfnews.com/business/aviation/boeing-flies-in-with-drone-expectations-for-the-region-1.62205625>

FAA, AUVSI will co-host 4th annual UAS symposium on June 3-5 February 21, 2019 Philip Butterworth-Hayes UAS traffic management news



The Federal Aviation Administration and the Association for Unmanned Vehicle Systems International will co-host the 4th Annual FAA Unmanned Aircraft Systems Symposium on June 3-5, 2019 at the Baltimore Convention Center, Baltimore, MD.

In both plenary and breakout sessions, the Symposium will bring together representatives from the FAA, other government agencies, industry and academia to discuss the latest issues related to the increasingly diversified uses of unmanned aircraft and their integration into the National Airspace System.

Like last year, the FAA will operate an on-site resource center to help owners and operators with questions about airspace authorizations, waivers, the Part 107 small UAS rule, changes in hobbyists' drone operations and other policies and regulations. **For more information** <http://faauas.auvsi.net/home> <https://www.unmannedairspace.info/latest-news-and-information/faa-auvsi-will-co-host-4th-annual-uas-symposium-on-june-3-5/>

City of San Diego and US Marine Corps to collaborate on urban air mobility programs February 24, 2019 Philip Butterworth-Hayes Urban air mobility



The city of San Diego and the US Marine Corps have signed a Memorandum of Understanding to work together on "Smart City" technologies such as unmanned aircraft systems traffic management.

San Diego was selected by the Federal Aviation Administration in 2018 as one ten locations for a pilot program to advance the testing of UAS in urban environments.

"Four times a year, the program participants submit reports to the Federal Aviation Administration," according to the *San Diego Union-Tribune*. "The three year testing program is focused on five areas: international commerce and border security, medical delivery, smart city and autonomous vehicle inter-operability, package delivery and public safety."



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Tiffany Vinson, San Diego's homeland security coordinator, said companies like Uber, through its Uber Eats program, could use drones on certain fixed routes to deliver food as early as **this summer**. Plans are also in the works to use San Diego as a test site for Uber Elevate, the company's futuristic-sounding plan to use autonomous drones as flying taxis.

<https://www.unmannedairspace.info/latest-news-and-information/city-of-san-diego-and-us-marine-corps-to-collaborate-on-urban-air-mobility-programmes/>

French military using winged warriors to hunt down rogue drones

A golden eagle grabs a flying drone during a military training exercise at Mont-de-Marsan



French Air Force base, Southwestern France.

Following incidents of drones flying over the presidential palace and restricted military sites – along with the deadly 2015 Paris terror attacks – the French Air Force has trained four golden eagles to intercept and destroy the rogue aircraft.

Aptly named d'Artagnan, Athos, Porthos and Aramis – an homage to Alexandre Dumas' "The Three Musketeers" – the four birds of prey have been honing their attack skills at the Mont-de-Marsan in southwestern France since mid-2016.



Weighing in around 11 pounds, the birds are in a similar weight class as the drones they're sent to destroy, and clocking in at a top air speed of 50 miles per hour, with the capability of spotting its target from over a mile away, the eagles are deft hunters. "A drone means food for these birds," Gerald Machoukow, the military base's falconer, told

FRANCE 24 . "Now they automatically go after them."

"23,000 urban passenger-carrying drones by 2035" – new forecast by Porsche Consulting

February 22, 2019 Philip Butterworth-Hayes Urban air mobility



► The Future of Vertical Mobility
Sizing the market for passenger, inspection, and goods services until 2035
A Porsche Consulting study

By 2035, drones could be servicing their own passenger network with about 23,000 aircraft plying major routes and creating a market worth \$32 billion. The forecast study reaches the following conclusions.

Value – inspection and delivery drones. "Passenger drones will for some time remain a hub-to-hub travel option that depends on other modes of



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transportation, rather than an end-to-end solution. Looking at unmanned eVTOL aircraft, the market for inspection drones will grow to \$34 billion and 21.5 million active units by 2035, complemented by the market for goods-and-delivery drones at \$4 billion and 125,000 units. Inspection drones are in use today, and goods drones are being tested around the world. The market for supporting services will reach another \$4 billion by 2035."

Regulations - "We expect commercial passenger transport to remain a highly regulated market that will remain under the guidance of the FAA in the US and EASA in Europe....Incremental certification will address distributed electric propulsion and, later, "sense-and-avoid" technologies and device autonomy. Legal issues revolve around airspace and traffic management. How will eVTOL aircraft deal with various weather conditions, and how will they sense and avoid other aircraft? Will they use centralized or decentralized communication channels? How will the airspace of tomorrow be structured to accommodate regular aviation and drones? One of the drivers will be the safety of traditional aircraft as the number of inspection and goods drones will rise into the **millions**."

Accidents - "The generally accepted risk models for **hobby drones** imply that 23,000 passenger drones clocking close to 50 million flight hours per year would translate into one critical (not necessarily fatal) incident every second day, which is clearly **not acceptable**. Deploying them for search and rescue operations and government security can have a positive impact on demonstrating the mass suitability of eVTOL aircraft. Over time, these systems should prove that their **benefits outweigh the costs**, ushering in broader passenger mobility services. The public should also rightfully expect laws to define appropriate clearance above private property to prevent privacy violations. Additionally, there is a clear need to develop suitable safeguards for network security that allow remote pilots to override the on-board pilot in an emergency and prevent remote misuse, such as a terrorist taking over an eVTOL aircraft."

For more information https://www.porsche-consulting.com/fileadmin/docs/Startseite/News/tt1371/The_Future_of_Vertical_Mobility_A_Porsche_Consulting_study_C_2018.pdf

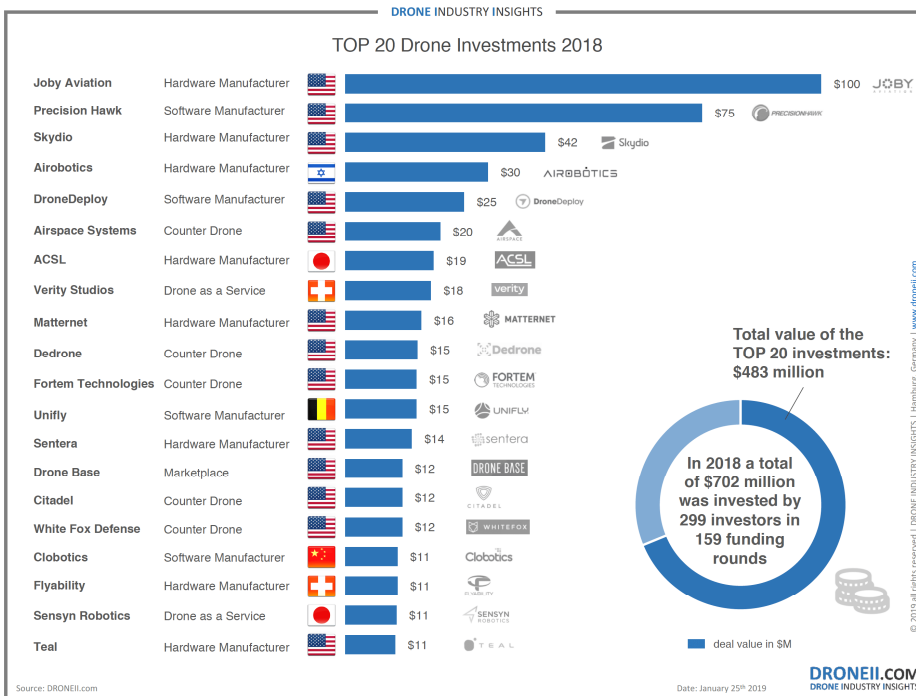
<https://www.unmannedairspace.info/latest-news-and-information/23000-urban-passenger-carrying-drones-by-2035-new-forecast-by-porsche-consulting/>



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Money Talks: Drone Investment Trends Update 2019-02-25 Hendrik Boedecker

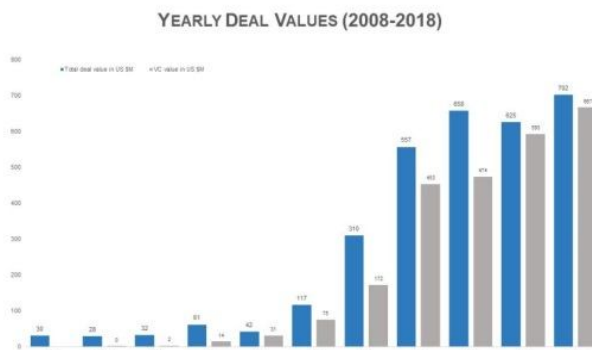


Earlier this month the thermal imagery manufacturer [FLIR](#) bought the UAV developer [Aeryon Labs](#) for \$200 million, beating their previous record in publicly disclosed drone investments of \$134M. This has been yet another signal that even though the drone industry suffered some hard hits in 2018, the period of consolidation, larger investments and serious R&D advances is

ahead. In fact, if one were to look at merely the investment figures for 2018, it wouldn't even be that easy to tell that the drone industry struggled.

Records were set, partnerships formed, and accelerators continued to support exceptional start-ups. A total of **\$702 million** was invested into the drone industry in 2018 (up from **\$625M in 2017**), **\$483 million** of

which was funneled into the top 20 drone deals. <https://www.droneii.com/drone-investment-trends->





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[update](#)

WATCH: K Line launches drone project for ship hull inspection BUSINESS

INTERNATIONAL NEWS SURVEILLANCE VIDEO ALEX DOUGLAS FEBRUARY 26, 2019



Kawasaki Kisen Kaisha, a Japanese shipping firm known as K Line, has introduced a development project to use drones in ship hull inspections to see what maintenance is required. As a result of multiple on-site trials with aerial and underwater drones, it has seen notable improvement in the accuracy, efficiency and safety of such inspections.

Watch the drone in action at the website below.

K Line and Technos Mihara went on to confirm that they are now proceeding to the next step and have reached an agreement to develop a new system for ship hull inspection and maintenance through integration between drone and digital image analysis technology.

https://www.commercialdroneprofessional.com/watch-k-line-launches-drone-project-for-ship-hull-inspection/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293322-Commercial+Drone+Professional+DNA++2019-02-26

Corteva Agriscience joins forces with DroneDeploy to bring real-time drone mapping to its fleet AGRICULTURE BUSINESS NEWS ALEX DOUGLAS FEBRUARY 26, 2019



The partnership will see the agriculture division of DowDuPont use DroneDeploy in its fleet of more than **400 DJI drones**. It will be incorporated with the company's seed production and supply chain as well as its pioneer strategic account management and agronomy team in the US, Canada, Brazil and Europe.

The firms says the advanced mapping software from DroneDeploy combined with its field teams' expertise offers immediate insights to diagnose and correct agronomic, disease or pest concerns, as well as to optimally place products. Every operator will be trained on the aerial technology and will be certified according to local aviation regulations.

Matt Kurtz, global seed technology lead at Corteva commented: "We are also deploying the advanced UAV technology in our seed production network."

<https://www.commercialdroneprofessional.com/corteva-agriscience-joins-forces-with-dronedeploy-to-bring-real->



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[time-drone-mapping-to-its-fleet/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293322-Commercial+Drone+Professional+DNA+-+2019-02-26](https://www.commercialdroneprofessional.com/ddc-recognized-as-a-2019-tsx-top-venture-50-company/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293322-Commercial+Drone+Professional+DNA+-+2019-02-26)

Drone Delivery Canada recognized as a 2019 TSX Top Venture 50 company

BUSINESS FINANCIAL INTERNATIONAL NEWS ALEX DOUGLAS FEBRUARY 26, 2019



Ranking third in the technology sector, winners were selected based on market capitalization growth, share price appreciation and trading volume for 2018.

DDC was well positioned on the criteria, showing a trading volume in excess of 90 million shares, an **increase in market capitalization of 73%** and common share appreciation of

56%.

Richard Buzbuzian, president of Drone Delivery Canada said: "2018 was a very busy year for us, and to be recognized for our hard work as a top performer on the TSX Venture Exchange in the technology sector is a privilege for all of us." https://www.commercialdroneprofessional.com/ddc-recognised-as-a-2019-tsx-top-venture-50-company/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293322-Commercial+Drone+Professional+DNA+-+2019-02-26

Resolute Eagle VTOL UAS to Participate in NASA Unmanned Aircraft Demo 25 Feb 2019 Mike Rees



[PAE ISR](#) has announced that it has begun working in collaboration with NASA and the FAA for the Unmanned Aircraft Systems Integration in the National Airspace System Project. The demonstration is a partnership between NASA and industry with significant coordination through the FAA.

PAE ISR presented its capabilities for the 2020 program and conducted a flight demonstration. The company is pursuing an FAA Type and Production Certification for the Resolute Eagle.

NASA and PAE ISR will work together to tackle key challenges including development, integration, and certification of unmanned aircraft and avionics. The project will culminate in flight demonstrations in 2020 that focus on missions at altitudes greater than 500 feet. The demonstrations will include detect and avoid and command and control technologies. The



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outputs will help the industry partners compile the data to support regulatory compliance of their vehicles and systems.

The Resolute Eagle is a single, reconfigurable aircraft that comes in two configurations — standard and vertical takeoff and landing — with a flight endurance of **12 to 18+ hours**. The aircraft also features a payload capacity of **75+ lbs.**, low acoustic signature at mission altitudes, small logistical footprint and multi-intelligence payloads.

www.unmannedsystemstechnology.com/2019/02/resolute-eagle-vtol-uas-to-participate-in-nasa-unmanned-aircraft-demo/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=098e8619ee-eBrief_2019_Feb_26&utm_medium=email&utm_term=0_6fc3c01e8d-098e8619ee-119747501

27Feb19

Kalashnikov reveals their new “kamikaze” drone February 25, 2019 Feilidh Dwyer



Kalashnikov attended a major defense expo in Abu Dhabi last week and was showing off a miniature version of their exploding suicide drone. The KUB-UAV, is designed to be simple to operate, cheap and an effective method for killing your enemies.

Sergey Chemezov, chairman of Russia’s state-owned Rostec arms manufacturer which owns the controlling share on Kalashnikov, claimed in an official launch statement that the KUB-UAV marks “a step towards a completely new form of combat.”



The KUB-UAV on display at a defence expo in Abu Dhabi

It is four-feet wide and can fly 80 miles per hour for 30 minutes. It carries a six-pound explosive charge and can be hit a target 40 miles away. It can be manually controlled from the ground with what the manufacturer describes as

“utmost precision”.

Smart weapons such as laser-guided cruise missiles have traditionally been so expensive, that only the richest nations could afford them. With newer, cheaper smart weapons becoming available, such as the KUB-UAV, we can expect more nations to start to incorporate them into their arsenals. <https://www.wetalkuav.com/kamikaze/>



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Boeing unveils unmanned combat jet developed in Australia BUSINESS NEWS

FEBRUARY 26, 2019 Jamie Freed



AVALON, Australia (Reuters) - Boeing Co on Wednesday unveiled an unmanned, fighter-like jet developed in Australia and designed to fly alongside crewed aircraft in combat for a fraction of the cost.

The U.S. manufacturer hopes to sell the multi-role aircraft, which is 38 feet long and has a 2,000 nautical mile range, to customers around the world, modifying it as requested.

The prototype is Australia's first domestically developed combat aircraft since World War II and Boeing's biggest investment in unmanned systems outside the United States, although the company declined to specify the dollar amount.

The Australian government is investing \$28.75 million in the prototype program due to its "enormous capability for exports," Minister for Defense Christopher Pyne told reporters at the Australian International Airshow. <https://www.reuters.com/article/us-australia-airshow-boeing-unmanned/boeing-unveils-unmanned-combat-jet-developed-in-australia-idUSKCN1QF2XT>

More than 1 Billion Watch Chinese New Year Drone Show Jason Reagan February 27, 2019



More than 1 billion people have watched an indoor drone show created by Swiss-based [Verity Studios](#) during [China Central Television's Chinese New Year's Gala](#) broadcast on Feb. 5.

Billed as the "world's most-watched TV program," the broadcast featured 88 microdrones flying over major Chinese music

stars Sun Nan and Jason Zhang.

During a song, the drones flew from the back of the stage festooned in red "drone costumes" shaped like lanterns and hovered like butterflies over 50 performers dressed as blossoming cherry trees. "This stunning performance proves how compelling drones can be. More than just flying lights, we've shown that costumes can transform this technology into moving sculptures.



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This is **the first large-scale performance ever done with drone costumes**," said Raffaello D'Andrea, founder of Verity and co-founder of Amazon Robotics."

Founded in 2014, Verity has produced several drone programs for major artists, including Cirque du Soleil, rapper [Drake](#) and [Metallica](#). With more than 100,000 flights across 20 companies, the firm has raised **\$18 million** in a Series A funding round, "making Verity the **world's most well-funded company** in the rapidly emerging **commercial indoor drone market**."

To view the performance, [click here](#). For a behind-the-scenes look, [click here](#).
<https://dronelife.com/2019/02/27/more-than-1-billion-watch-chinese-new-year-drone-show/>

DroneUp and Vintun Partner to Pursue Federal Drone Work



Virginia Beach, VA (February 27, 2019) – DroneUp LLC, an on-demand drone pilot service provider has partnered with Vintun LLC to provide drone services for the United States Government.

Vintun provides a variety of services for various military and government organizations and has developed VDaaS, Vintun Drone-as-a-Service. Through their extensive global pilot network, DroneUp will act as the drone service provider to Vintun. DroneUp's patent-pending platform, Mission Match TM, enables VDaaS's participants to locate, qualify and deploy the right drone pilot for the right mission. DroneUp and Vintun will acquire, process, and deliver actionable aerial data for various agencies and organizations within the US Government at the highest levels.

Tom Walker, CEO of DroneUp, states, "DroneUp is excited to partner with Vintun to assist in expanding the federal use of drones. We look forward to providing these valuable services and continuing to expand the drone industry." <https://www.droneup.com/news/>

Impossible Aerospace's US-1 makes debut in police standoff APPLICATION BUSINESS EMERGENCY SERVICES MANUFACTURER NEWS UNITED STATES ALEX DOUGLAS FEBRUARY 27, 2019



Equipped with thermal and optical sensors along with **90 minutes** of battery life, the drone was used to provide a persistent aerial view of the perimeter, roof and exits of the building, helping the team achieve a successful and peaceful arrest of a suspect.



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According to the Campbell, California police and SWAT authorities, the US-1 provided a regular perimeter scan and more consistent video footage than the county's helicopter. The US-1 confirmed the SWAT teams' strategies, which included using tear gas to force the suspect out of hiding and later using a police dog so the authorities could react and plan proactively.

Gary Berg, police captain in Campbell said: "During critical incidents, real-time intelligence is extremely important. At this recent event involving a barricaded subject with a gun, Impossible Aerospace provided intelligence that our agency previously has never had access to."

He added: "Fortunately, after almost 12 hours, the suspect was taken into custody safely. We are very appreciative of the assistance that Impossible Aerospace provided during this incident." https://www.commercialdroneprofessional.com/impossible-aerospaces-us-1-makes-debut-in-police-standoff/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293454-Commercial+Drone+Professional+DNA+-+2019-02-27

28Feb19

OneWeb's first six satellites in orbit following Soyuz launch Caleb Henry February 27, 2019



KOUROU, French Guiana — The first **six** satellites in a constellation that could one day number close to **2,000** were successfully launched Feb. 27 aboard a Soyuz rocket.

The Russian rocket, adapted for European launch provider Arianespace to operate in the tropical weather that defines the company's spaceport in French Guiana, deployed the first two satellites 63 minutes after a 4:37 p.m. Eastern liftoff.

The launch marked the end of the beginning for OneWeb, a British company founded by American entrepreneur Greg Wyler in 2012 that seeks to make low-cost internet a global phenomenon via a constellation of **mini-fridge-sized satellites** each weighing roughly 150 kilograms. The satellites launched to a 1,000-kilometer orbit, where they will begin a 60- to 90-day test regime that includes orbit raising for another 200 kilometers. <https://spacenews.com/first-six-oneweb-satellites-launch-on-soyuz-rocket/>

Chula Vista Seeks New UAS Partnerships Betsy Lillian February 27, 2019



The City of Chula Vista, Calif., has issued a "request for expressions of interest" highlighting city-owned facilities available to businesses and

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organizations working on autonomous vehicles and unmanned aircraft systems projects.

"Chula Vista is the **only city in the nation** with federal recognition for both AV and UAS testing and validation in a real-world environment," says the city's economic development director, Eric Crockett. "We have built a 'collaboratory' in which businesses can test, deploy and refine their technologies, and we are excited to keep growing via public/private partnerships and innovative ventures."

Available facilities include an undeveloped 375-acre university site where drone start-ups have conducted testing for more than a year. For AV firms, the city is offering 17,000 square feet of industrial space for vehicle maintenance, including cranes and lifts.

The new solicitation complements the city's existing participation in the [federal UAS Integration Pilot Program](https://unmanned-aerial.com/chula-vista-seeks-new-uas-partnerships?utm_medium=email&utm_source=LNH+02-28-2019&utm_campaign=UAO+Latest+News+Headlines). More information can be found [here](https://unmanned-aerial.com/chula-vista-seeks-new-uas-partnerships?utm_medium=email&utm_source=LNH+02-28-2019&utm_campaign=UAO+Latest+News+Headlines). https://unmanned-aerial.com/chula-vista-seeks-new-uas-partnerships?utm_medium=email&utm_source=LNH+02-28-2019&utm_campaign=UAO+Latest+News+Headlines

EDA'S INVESTMENT IN CHOCTAW NATION SUPPORTS DEVELOPMENT OF DRONE TESTING PROGRAM, ATTRACTING NEW BUSINESS AND PRIVATE INVESTMENT TO THE AREA *February 2019 Newsletter*

The Choctaw Nation is a Native American territory and Indian Tribe represented in 11 counties in Oklahoma. Between 2014 and 2016, the Choctaw Nation and surrounding region was affected by three federally-declared natural disasters.



In response, EDA invested \$750,000 in Choctaw in 2016 to support the development and implementation of the Choctaw Nation Economic Development Initiative in Southeast Oklahoma. One of the biggest **successes** of the grant's initiative to date is a portion of Choctaw Nation being designated in May by Transportation Secretary Elaine Chao as an area for the Unmanned Aircraft System Integration Pilot Program.

Through this three-year program, Choctaw Nation can assist multiple federal agencies in solving problems and developing solutions to an array of issues with drones such as safety and security, agricultural innovation, and further business development. These tests will continue to break new ground in unmanned aircraft technology to better understand the necessary infrastructure needed for more advanced operations.

https://www.eda.gov/news/blogs/2019/02/01/success.htm?utm_campaign=2019-February-Newsletter&utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=newsletter



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Schiebel's CAMCOPTER® S-100 Impresses With Successful Flight Trials In Nigeria

February 28, 2019 News



Schiebel's CAMCOPTER® S-100 Unmanned Air System (UAS) demonstrated its capabilities to a large European oil and gas corporation during trials in Rivers State, Nigeria, from 27 to 30 January 2019.

The oil and gas industry has shown increasing interest in employing UAS to monitor and control infrastructure, both onshore and offshore. The flight trials with the aircraft around the coast of Rivers State were designed to further investigate UAS technology. Representatives of the Nigerian Civil Aviation Authority, the Nigerian Air Force, the Nigerian Navy, the Nigerian Army, Kongsberg Geospatial and local UAS service provider Aerial Robotix attended the event.

The aircraft completed day and night flights monitoring pipeline Rights-of-Way, inspecting oil and gas facilities and performing maintenance checks including detection of leaks and fluid levels of storage tanks. The aircraft was also able to detect various third party illegal activities on the client's pipeline ROW. Kongsberg Geospatial's situational awareness application supported Beyond-Visual-Line-Of-Sight operations. <https://uasweekly.com/2019/02/28/schiebels-camcopter-s-100-impresses-with-successful-flight-trials-in-nigeria/>

1Mar19

UAV headlines from around the globe: Drone helps man to cheat at horse racing, Long Island man shoots down drone and more!

February 27, 2019 Feilidh Dwyer



Here are some of the latest drone stories from around the globe:

United Kingdom: UK police were called to a horse-racing track in Leicester after a drone was spotted hovering over the course as the horses were running. It is suspected that the images broadcast from the drone were a

few seconds ahead of footage broadcast on TV. This gave those who made in-race spot bets from the drone feed an unfair advantage compared to those who watched the race on TV. The drone owner has been warned by police and racecourse owners to stay away.



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United States: A man in Long Island, New York, shot down a drone that was in the midst of searching for a missing dog. Missing-Angels used GPS to identify the point at which their drone became unresponsive. Police arrested and charged 26-year-old Gerard Chasteen with criminal nuisance and prohibited use of a firearm. Chasteen used his shotgun to fire three shots at the Mavic from his yard which brought the \$1250 drone crashing to the ground.

Nevada: NASA is testing a drone traffic management system in Nevada. With the possibility of many drones flying simultaneously in urban areas, being able to manage their is very important.



A NASA cartoon of how cities of the future may see many drones flying at any one time.

The tests will simulate a populated urban environment and be conducted between March and June in downtown Reno, Nevada.

https://www.wetalkuav.com/uav-news-from-around-the-globe/?utm_source=WeTalkUAV&utm_campaign=681cefe24a-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_1d410cb84d-681cefe24a-83642867

Dronestream partners with SkyLark Labs for world's first Drone Surveillance System

EMERGENCY SERVICES HEADLINE NEWS NEW PRODUCTS ALEX DOUGLAS MARCH 1, 2019



The DSS has been designed to automatically identify violent individuals to aid law enforcement agencies in the monitoring of large public areas.

As part of the release, those involved highlighted the rate of criminal activities by individuals and threats by terrorist groups

has been on the rise.

The companies went on to describe how they wanted to help in making crowded public places safer with the new system.

https://www.commercialdroneprofessional.com/dronestream-partners-with-sky-lark-labs-for-worlds-first-drone-surveillance-system/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-293768-Commercial+Drone+Professional+DNA+-+2019-03-01