



UAS and SmallSat Weekly News

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Pegasus Aerospace Launches Security Drone System That Packs a Wallop Jason

Reagan February 01, 2019



ShockWave Tactical UAS is designed "to enable clients to safely and accurately achieve their missions without risking and endangering first responder lives in case of a life-threatening situation."

The drone system offers several **non-lethal options** for defense and police ops that can nevertheless **incapacitate** a target from a distance and also provide surveillance **and intelligence collection**. The system offers:

- Full manual or autonomous modes;
- Incapacitating Light Emitting Diode Device, a new tech developed by the company, that "emits different colored light, flashes and patterns, which act on the target's brain, inducing disorientation, confusion, nausea and, in some extreme cases, vomiting"
- Custom Digital Taser Module available with cartridges capable of accurately striking a target 20 feet away
- IR targeting laser, visible on its camera system
- NLLS System – a 12GA launcher module designed to fire "12-gauge non-lethal ammunition, such as flash-bang grenades, as well as pepper or rubber rounds"
- 1080p HD camera system that can transmit video or save to DVR – a fixed front camera provides a pilot's eye view, with a superimposed HUD system
- [FLIR](#) Duo Pro R, HD dual-sensor thermal camera available
- Compact design and footprint

ShockWave is IP-64, STANAG 4586, FAA compliant and is ready for use in controlled national airspace across all classifications. <https://dronelife.com/2019/02/01/pegasus-aerospace-launches-security-drone-system-that-packs-a-wallop/>



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With Tiny Water-Powered Engines, Startup Aims to Give Small Satellites a Nudge Andy Pasztor Feb. 3, 2019



Founded by a Russian immigrant and relying on a cadre of U.S. technical experts, the Silicon Valley company called Momentus says it has devised a way to inexpensively propel small satellites into more useful orbits than those they often reach via standard rocket launches. That stands to make them cheaper to deploy and, in many cases, would increase the number of years they spend usefully circling the earth.

After the satellites are blasted out of the atmosphere atop various rockets, the aim is to use a two-foot by two-foot spacecraft, called Vigoride, to nudge them into optimal orbits. The first test flight is slated for the spring, and company officials are set to announce Germany's Exolaunch GmbH as their first paying customer with a contract valued at about **\$6 million** for a series of supplemental rides to low-earth orbit and beyond through 2021.

The Momentus engine uses microwaves to heat water to superhot temperatures, creating a plasma and ejecting a stream of high-velocity water vapor into space, providing thrust. It would cost roughly \$1.2 million to disperse a cluster of as many as two dozen satellites weighing some 20 pounds apiece into different orbits.

If Momentus succeeds in showing the power and dependability of its space tug after release into low-earth orbit from a Russian Soyuz rocket, probably three months from now, it would be **the first commercial demonstration of microwave plasma propulsion** technology in the harsh conditions of space. <https://www.wsj.com/articles/with-tiny-water-powered-rockets-startup-aims-to-give-small-satellites-a-nudge-11549209724>

Six drones confiscated in Atlanta ahead of Super Bowl Brendan O'Brien SPORTS NEWS FEBRUARY 2, 2019



ATLANTA (Reuters) - Authorities in Atlanta have confiscated six drones that violated a temporary order not to fly the devices in the area ahead of the NFL's Super Bowl on Sunday, federal officials said.

Drone flight was prohibited on Saturday and from 10 a.m. until 5:30 p.m. EST on Sunday for one nautical mile around the Mercedes-Benz Stadium and up to an altitude of 1,000 feet. Operators who send drones into restricted areas around the Mercedes-



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Benz Stadium could face more than \$20,000 in civil penalties and criminal prosecution, according to the FAA.

The Federal Bureau of Investigation in Atlanta said on Twitter on Friday that it had **confiscated** the six drones in the run-up to the game but did not provide details.

<https://www.reuters.com/article/us-football-nfl-superbowl-drones/six-drones-confiscated-in-atlanta-ahead-of-super-bowl-idUSKCN1PROPL>

50 molasses-spraying drones help to clear smog in Bangkok February 3, 2019 Feilidh Dwyer



In Thailand's capital, Bangkok, air pollution recently got so bad that a fleet of planes and drones and sprayed water and molasses in an attempt to reduce dust and clear the air.

City authorities contacted a drone club in Bangkok to source the 50 drones which can each carry up to 10 litres of liquid on board. The drones sprayed in a 2.5 miles radius. The molasses helps to capture dust which then falls to the ground as a **black droplet**.

Bangkok is a densely populated, industrialized city with more than 8 million inhabitants. Recently, the air pollution was so severe (approaching 200 parts per cubic meter) that schools were cancelled and residents took to social media to complain of irritated eyes and even coughing up blood.

Bangkok's Governor, Aswin Kwanmuang, has taken a number of recent measures to help clean the city including cloud seeding. He admits that drones are not a long-term solution to the problem but said that every little bit helps. https://www.wetalkuav.com/50-molasses-spraying-drones-help-to-clear-smog-in-bangkok/?utm_source=WeTalkUAV&utm_campaign=77d3048be2-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_1d410cb84d-77d3048be2-83642867

THE US ARMY IS EQUIPPING SOLDIERS WITH POCKET-SIZED RECON DRONES JON

CHRISTIAN 3Feb19



The U.S. Army has placed a **\$39 million** order for tiny reconnaissance drones, small enough to fit in a soldier's pocket or palm. The idea behind the drones, which are made by FLIR Systems and look like tiny menacing helicopters, is that soldiers will be able to send them into the sky of the



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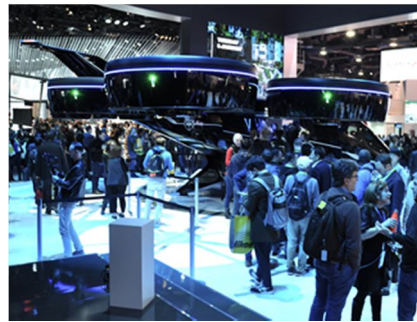
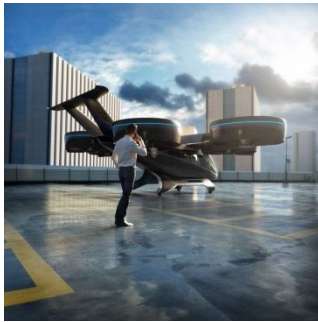
battlefield in order to get a “lethal edge” during combat, [according to Business Insider](#).

FLIR Systems is currently delivering its “nano-unmanned aerial vehicles,” which it calls Black Hornet Personal Reconnaissance Systems, according to a [press release](#) that says the Army is starting an “initial integration” of the drones.

“This contract represents a significant **milestone** with the operational large-scale deployment of nano-UAVs into the world’s most powerful Army,” said Jim Cannon, the CEO of FLIR Systems, in the press release. <https://futurism.com/the-byte/us-army-pocket-sized-recon-drones>

Bell Reveals Its 5-Seat Nexus Air Taxi at CES Las Vegas January 16th, 2019 Nicolas Zart

Bell Helicopter announced the Bell Nexus, a hybrid-electric vertical takeoff and landing aircraft a few years ago at CES. This year, we caught up with the team at CES in Las Vegas to find out what it looks like and what it means for our future mobility needs by 2023.



[Bell](#) showed us the full-size demonstration of its Nexus eVTOL, and it was big. In fact, it was so big we couldn’t shoot full-size pictures of it in the large space of its CES booth. The company also showed two unmanned delivery aircraft systems otherwise also known as **drones**, along with flight control simulator booths. But nothing could overshadow how imposing the Bell Nexus was and is.

With its massive 90-degree 6 tilting rotors, it houses 4 passengers and a pilot cockpit. It is powered by a hybrid-electric propulsion system using a [Safran](#) turbine. One battery pack sits on top of the aircraft in front of the turbine, and another pack below the aircraft frame. The Nexus will use Bell’s lift concept, with the 6 tilting ducted fans designed to be safe, redundant, and fairly quiet for air travel. <https://cleantechnica.com/2019/01/16/bell-reveals-its-5-seat-nexus-air-taxi-at-ces-las-vegas/>



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Emergency Medical Supply Drone Deliveries to be Tested in Alaska 28 Jan 2019 Mike Rees



The [University of Alaska Fairbanks](#) has announced that, in conjunction with K2 Dronotics and Unmanned Systems Alaska LLC, it will deploy unmanned aerial vehicles to test the feasibility of delivering emergency medical supplies across Alaska as part of a national initiative from the U.S. Department of Transportation and the White House.

The Federal Aviation Administration and DOT expanded the scope of the Alaska Unmanned Aircraft Systems Integration Pilot Program's efforts to include medical supply delivery in remote regions with an initial test across Turnagain Arm fjord south of Anchorage.

Unmanned Systems Alaska, in conjunction with Battlespace Inc. and UAF, is working with the FAA to develop a process that may eventually lead to the standards under which Alaska unmanned aircraft operators can obtain the air carrier certificates required to **commercially** carry medical supplies and other cargo across the state. Cathy Cahill, the director of the Alaska Center for Unmanned Aircraft Systems Integration at UAF, said, "This is **exactly** what the IPP is designed to do for Alaska and the nation."

<https://www.unmannedsystemstechnology.com/2019/01/emergency-medical-supply-drone-deliveries-to-be-tested-in-alaska/>

Intel's Drones Light Up The Super Bowl Again Malek Murison February 04, 2019



If you were one of the millions of people around the world to catch the Super Bowl yesterday, you will have seen Intel's drones play a part in lighting up the Halftime Show.

A first ever moment. 150 Intel Shooting Star drones enhanced the show in a choreographed performance to create a unifying message of LOVE at the Super Bowl. [#pepsihalftime#SBLIII](#) <https://intel.ly/2GnR3gD>

Intel's shooting star drones had a makeover this time around: Each was disguised as a **floating lantern**. During Maroon 5's "She Will Be Loved," 150 Intel Shooting Star drones floated up and over the field in a choreographed performance to the music, forming the words "ONE" and "LOVE."



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The drones fly a pre-programmed path inside a closed stadium environment without GPS. The 150 drones flown indoors **outripped the world record** that Intel earned flying 110 indoor drones at CES in 2018.



"When we received the opportunity to bring our drone light show back to the Super Bowl, we were excited by the challenge to execute it live within a closed stadium environment. We collaborated with the show producers to bring a special and unique show experience to the viewers. It was an honor to have performed with Maroon 5 to create a memorable experience for those watching live from their

seats in the stadium and for viewers watching at home."

<https://dronelife.com/2019/02/04/intels-drones-light-up-the-super-bowl-again/>

Skeyetech System by Azur Drones is First to Receive Approval for Autonomous UAS Flights in Europe February 4, 2019 News



Azur Drones, European leader in surveillance UAVs, has just received the first and only DGAC approval for a **fully-automated** drone – Skeyetech system – which takes off from a docking station and **requires no remote pilot**. This specific approval is **unprecedented** since any authorized flight scenario in France requires a qualified pilot.

Skeyetech drones can fly over private areas, Beyond Visual Line Of Sight day or night, in urban areas, under simple supervision of a remote operator. With this unique approval, the system will be directly operated by a security guard with no pilot license. The drone will thus be used to patrol the area or provide valuable aerial insights in case of an alarm.

"We are very proud of this approval which rewards an 18-month collaboration with DGAC services. Our system had to comply with the civilian aviation authorities' requirements in terms of safety, reliability and quality," explains Stéphane Morelli, Azur Drones Managing Director.

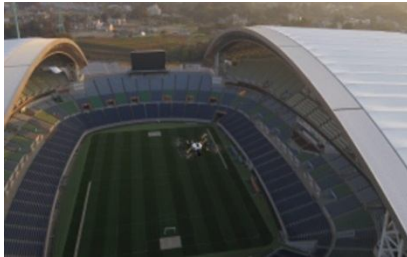
<https://uasweekly.com/2019/02/04/skeyetech-system-by-azur-drones-is-first-to-receive-approval-for-autonomous-uas-flights-in-europe/>



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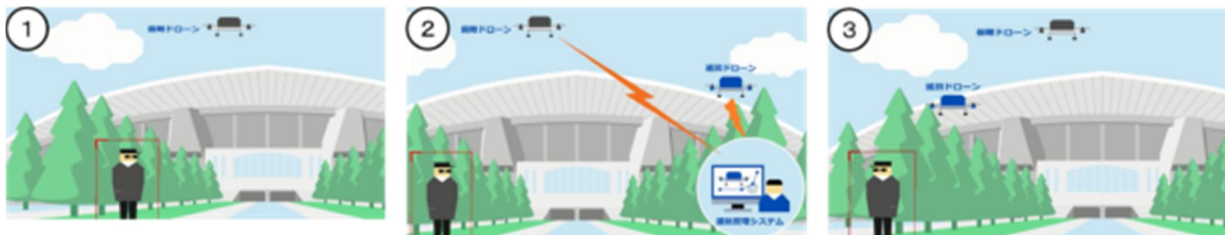
5Feb19

Japanese companies team up in drone security and surveillance first APPLICATION BUSINESS INTERNATIONAL NEWS SURVEILLANCE ALEX DOUGLAS FEBRUARY 5, 2019



KDDI Corporation, Terra Drone and SECOM have collaborated to become **the first** Japanese companies to demo the Smart Drone*1 to monitor a stadium.

In co-operation with Saitama Stadium 2002, the firms showed how the system uses a mobile communications network and a human detection system.



In the demonstration, the drone used to patrol the surrounding area of the stadium automatically identifies a suspicious person and calculates the location by using the **human detection AI system**. Then, a low-altitude drone automatically flies down to the suspicious person and sends the location information to the command center.

KDDI and Terra Drone jointly developed a new operation management system which captures and analyses the 3D relief map, weather and wind conditions and aerial mobile communications condition around the area of interest.

https://www.commercialdroneprofessional.com/japanese-companies-team-up-in-drone-security-and-surveillance-first/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-290974-Commercial+Drone+Professional+DNA++2019-02-05

Tethered Drones Provide Security for NFL Championship 01 Feb 2019 Mike Rees



[Skyfire](#), a public safety UAV consulting company, in coordination with the Georgia World Congress Center Authority and the Georgia Emergency Management Agency, announced that it deployed two tethered drones at the NFL Championship Game in Atlanta.



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Based in Decatur, Georgia, just seven miles from the Mercedes-Benz Stadium, Matt Sloane, CEO of Skyfire, and his team **worked for more than a year** to secure the necessary approvals from the FAA, the FBI and the Department of Homeland Security to operate for the event.

"It was interesting to coordinate and fly drones just a few hundred feet below Black Hawk helicopters," said Sloane, "and we were just a few thousand feet from the biggest sporting event in the world."

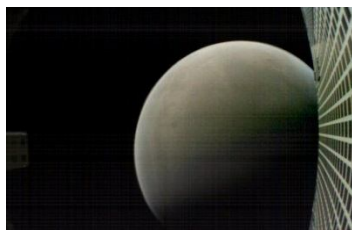
Sloane also had Mike Briant on his team, a veteran law enforcement and counter-terrorism specialist from the Skydas Group, to help determine areas of interest and concern. "Real-time, actionable information for the guys on the ground is essential and allows you to respond much more quickly to a critical incident than you could having to rely on traditional aviation assets," said Briant. The video feeds were streamed through the DroneSense software platform and viewed by law enforcement command centers in over a dozen locations.

https://www.unmannedsystemstechnology.com/2019/02/tethered-drones-provide-security-for-nfl-championship/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=2f18111ef4-eBrief_2019_Feb_05&utm_medium=email&utm_term=0_6fc3c01e8d-2f18111ef4-111778317

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The World's 1st Interplanetary Cubesats Go Silent Beyond Mars Meghan Bartels

Space.com Senior Writer February 6, 2019



MarCO-B captured this image of Mars shortly after NASA's InSight lander successfully touched down on the Red Planet.

The two MarCO spacecraft launched in May with NASA's InSight lander as a demonstration project. The mission was meant to show that the small satellites could survive and conduct useful science **beyond Earth's immediate neighborhood**, and they **achieved every one of their goals**, NASA said.

"This mission was always about pushing the limits of miniaturized technology and seeing just how far it could take us," Andy Klesh, the mission's chief engineer at NASA's Jet Propulsion Laboratory, **said in a statement**. "We've put a stake in the ground. Future CubeSats might go even farther." https://www.space.com/43237-marco-first-interplanetary-cubesats-fall-silent.html?utm_source=notification



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New Zealand police begin using drones to survey crime scenes February 6, 2019 Feilidh Dwyer



We've already brought you stories from [states](#) like New York and [California](#), both of which have incorporated drones into their police forces while drawing the ire of civil libertarian groups. Not surprisingly, locals in New Zealand have reacted in a similar manner to groups overseas – with **concerns** about privacy and state overreach.

According to the [Otago Daily Times](#), police in Southern regions of Dunedin and Southland have thus far only used drones to record and map the boundaries of crime scenes. Kiwi police have not yet acquired their own drones but instead, hired professional UAV operators to assist them in gathering evidence.

The ODT spoke with New Zealand Council for Civil Liberties chairman Thomas Beagle. He said that while he has no issue in principle with police using drones, he would object if they began to be used as proactive surveillance tools. "We have become normalized to fixed cameras ... I don't think we want drone surveillance to be normalized," he said.

<https://www.wetalkuav.com/new-zealand-police-start-deploying-drones/>

US Army invents 40mm grenade that nets bad drones NEWS FEB 5, 2019

U.S. Army researchers have packed a net into a 40mm grenade so they can take down enemy drones. The new invention, which was patented on Tuesday, brings high-tech engineering to the tried-and-true grenade launchers common among U.S. military and law enforcement units.



Enhanced illustration of U.S. Patent 10,197,365, showing the net strings under the proximity detector which detonates a small charge, springing the 40mm grenade apart and spreading the net out six to nine meters from the target.

"As the round nears the target, a signal from a control board activates a servo. The servo pulls on a central lock plunger to release a ball mechanism. This releases the ogive section, which in turn allows the ejection spring means to eject the petals and weights along with the net stowed there within," according to the patent.



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The new warhead was invented by Tomasz Blyskal, Richard Fong, and LaMar Thompson of the Armament Research, Development, and Engineering Center at the Picatinny Arsenal in New Jersey. Initial testing showed that their round **outperforms** other net-centric counter-drone tactics like dragging a net from another larger drone because that requires trained pilots and doesn't work when trying to "ensnare many, or swarms of drones." https://techlinkcenter.org/us-army-invents-40mm-grenade-that-nets-bad-drones/?utm_campaign=subscribers&utm_medium=subscribers_push_notification&utm_source=subscribers

Smallsat industry faces new challenges to growth Jeff Foust February 5, 2019



MOUNTAIN VIEW, Calif. — The small satellite field, which has enjoyed significant growth and investment in the last few years, will face new challenges this year demonstrating their business plans, with some expecting a shakeout in some parts of the sector.

During a panel discussion at the SmallSat Symposium here Feb. 5, industry officials expressed **general optimism** about the field even while **cautioning** that some sectors, like small launch vehicles and some classes of smallsat constellations, could run into **headwinds**.

"This is the year where companies will prove themselves or not," said Carissa Christensen, chief executive of Bryce Space and Technology. Failures should not be surprising. "That is not an indictment of this set of business ventures. That's part of the normal process of this kind of business," she said. However, she warned that such failures could be treated with greater concern by more risk-averse government agencies. "That's important because those government customers are critical anchor customers for some of those businesses." <https://spacenews.com/smallsat-industry-faces-new-challenges-to-growth/>

U.S. Army Eyes Potential Shadow UAV Replacements Feb 5, 2019 Tony

Osborne Aerospace Daily & Defense Report



LONDON—The U.S. Army says it has begun work to replace its fleet of [TextronMQ-7](#) Shadow tactical unmanned air systems.

Troops have been frustrated by the UAV's reliance on a runway and the platform's acoustic signature, which had resulted in the target subject being warned of its presence. Troops increasingly want a system that is not runway dependent and could be carried in the back of a [CH-47](#) Chinook. It currently takes two-and-a-half [C-130](#) flights to transport one system.



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The Army issued a request for proposals last October and completed a fly-off at the Dugway Proving Ground, Utah, that informed source selection. "The next step is to downselect to three vendors this month," Rugen says. Each will build two systems this year, and they will be tested by Army personnel in what Rugen called a "buy, try, decide format" that will go on to inform a future requirement. <http://aviationweek.com/defense/us-army-eyes-potential-shadow-uav-replacements>

Stratodynamics and UAVOS complete next stage of earth observation platform flight tests INNOVATION INTERNATIONAL NEWS TECHNOLOGY ALEX DOUGLAS on FEBRUARY 6, 2019



UAVOS and Stratodynamics have successfully completed the next stage of flights tests of the earth observation platform called the HiDRON to an altitude of 82,000ft.

In a collaboration with researchers from the University of Kentucky, the HiDRON also carried an atmospheric measurement system onboard. The night-time flight lasted four hours, including the one-hour weather balloon launch period with an average climb rate at 22 ft./s. At release altitude, the aircraft was 22m away from the launch site where it headed home and was above launch area at an altitude of **59,000 ft**. It operated in headwinds up to 112mph, -60°C temperatures, experienced wing icing and reliably returned home and landed autonomously. The HiDRON then glided near the home position **with a descent rate much slower than a comparable parachute-borne instrument**, a journey which lasted around three hours.

https://www.commercialdroneprofessional.com/watch-stratodynamics-and-uavos-complete-next-stage-of-earth-observation-platform-flight-tests/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-291166-Commercial+Drone+Professional+DNA+-+2019-02-06

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Air Force wants to become a bigger player in the small launch industry Sandra Erwin February 6, 2019



Will Roper, Assistant Secretary of the Air Force for Acquisition, Technology and Logistics.

WASHINGTON — Space billionaire Sir Richard Branson, founder of the suborbital spaceflight company Virgin Galactic, recently visited the Pentagon and met with Air Force leaders to talk about how the company might in the future do business with the U.S. Air Force.



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"We are tracking what companies are doing," Assistant Secretary of the Air Force for Acquisition, Technology and Logistics Will Roper told reporters on Wednesday at the Pentagon. "I think small launch is going to be **a big deal**."

Virgin Orbit, a spinoff of Virgin Galactic, [developed a satellite launch vehicle called LauncherOne](#) that will be deployed from a Boeing 747 aircraft. The company is preparing to fly a small test satellite for the Defense Department later this year.

Roper said he wants the Air Force to work more closely with the small launch industry as the military embraces the idea of "**responsive space**" — using small satellites for missions that traditionally have been done by large spacecraft. Roper added, "If you lose a satellite, you put another one up at the time you need it. You don't put it up earlier because you're just giving an adversary time to think about how to take it out." <https://spacenews.com/air-force-wants-to-become-a-bigger-player-in-the-small-launch-industry/>

Germany Begins Training on Heron TP Beth Stevenson February 6, 2019

German air force personnel have begun training on their new Heron TP unmanned aerial vehicles at Tel Nof airbase in Israel, ahead of the planned delivery of the first example by the end of 2019. The first crews to train on the type have traveled to Israel for eight weeks of training.



This is being conducted alongside the Israeli air force, which is the most seasoned operator of the TP, and will prepare the Germans for peacekeeping operations in Afghanistan and Mali. "The cooperation is not only very special for us...we—the German air force and the Israeli air force—will learn a lot from each other," a Major in the Luftwaffe was quoted as saying. "The Israeli air force has a lot of experience with the system, and we can only benefit from that." Two training courses are planned for now, the one that has just started and another in 2020, and two more courses are expected to begin in 2021 and 2022. <https://www.ainonline.com/aviation-news/defense/2019-02-06/germany-begins-training-heron-tp>

Germany's DFS, Rheinmetall demonstrate system to prevent drone disruptions

Andrea Shalal

MANCHING, Germany (Reuters) - DFS and Rheinmetall, Germany's largest arms maker, have tested a solution that could be highly automated, connecting existing air traffic data with advanced radar systems, acoustic and infrared sensors and optical equipment to first detect possible intruders, and then neutralize them with other drones.



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In Wednesday's demonstration, which was hosted by the German military's Technical and Airworthiness Centre for Aircraft (WTD61) about 50 km (35 miles) north of Munich, a "good" drone threw a net over a potentially threatening one, taking it to the ground.

Matthias Diem, head of strategy for Rheinmetall's air defense and radar systems business, said it would take time, testing and certification before any such system could be deployed, and it was uncertain what it would cost. But he said the experiment offered promise.

DFS had invested for two years to develop an anti-drone system but the Gatwick incident underscored the **urgency**, Vogt said. Wednesday's demonstration was a milestone because it showed it was possible to use technology to "clearly differentiate good drones from bad drones", he added. <https://www.reuters.com/article/us-germany-drones/germanys-dfs-rheinmetall-demonstrate-system-to-prevent-drone-disruptions-idUSKCN1PV2E7>

DDC launches commercial operations centre in Ontario APPLICATION BUSINESS

INTERNATIONAL NEWS ALEX DOUGLAS FEBRUARY 7, 2019



Spanning 16,000 square feet, the centre will provide capacity for up to **25 drone operators** to oversee commercial flights both in Canada **and abroad**.

The company confirmed it will commence occupying the new facilities in Q2 of 2019 and will make it fully operational by Q3.

Tony Di Benedetto, CEO, said: "We are fully engaged in commencing commercial operations and require a robust operations centre to house 'mission control' to oversee the flight of our **autonomous** drone fleet. He added: "For context, our operations centre will be very similar to that of a commercial airline with our software integrating into active air space."

https://www.commercialdroneprofessional.com/ddc-launches-commercial-operations-centre-in-ontario/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-291365-Commercial+Drone+Professional+DNA+-+2019-02-07

VIDEO: UAVs enter the Guinness World Record books APPLICATION EVENTS HEADLINE

NEWS INTERNATIONAL VIDEO ALEX DOUGLAS FEBRUARY 7, 2019



The show, which took place on January 3, achieved the Guinness world record for the most consecutive formations formed by unmanned aerial vehicles same set, by creating **11 formations using 30 drones**.

Robert Rea | Axcel Innovation | Charlottesville and Portsmouth, VA
robert.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com



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A total of **300 drones** were used in the 10-minute show and were programmed to draw portraits of the UAE's leaders including vice president and prime minister of the UAE and ruler of the emirate of Dubai, Sheikh Mohammed bin Rashid Al Maktoum, and Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum who is crown prince of Dubai. The UAVs wrote a message in Arabic that read 'thank you, Sheikh Mohammed'. Watch the video of the show here:

https://www.commercialdroneprofessional.com/video-uavs-enter-the-guinness-world-record-books/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-291365-Commercial+Drone+Professional+DNA++2019-02-07

Merseyside Police jails man for attempting to fly a drone into Liverpool prison

CRIME HEADLINE NEWS UK ALEX DOUGLAS FEBRUARY 7, 2019



*Merseyside Police has welcomed the **five year sentence** of a man for attempting to fly a drone containing prohibited items in HMP Liverpool.*

Named as 29-year-old Anthony Cheeney and sentenced this week at Liverpool Crown Court, police confirmed that the crime took place at around 9pm in August 31 in 2017.

A statement from police described how officers sighted a drone close to HMP Liverpool on Hornby Road and went on to detail how the drone was observed crashing nearby and was recovered. On recovery, police say they found Class A and B drugs, mobile phones and sim cards attached, all of which were seized.

Speaking after the sentencing, Detective Constable Chris Cook said: "These sentences demonstrate the effective partnership working between Merseyside Police and the prison service.



He continued: "We are vigilant at all times to attempts to bring items into our prisons, and this and previous sentences should send a message to those who involve themselves in this kind of behaviour that they run the risk of being jailed for a significant time for criminal activity, which comes at high risk with low reward."

https://www.commercialdroneprofessional.com/merseyside-police-jails-man-for-attempting-to-fly-a-drone-into-liverpool-prison/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-291365-Commercial+Drone+Professional+DNA++2019-02-07



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Delair Offers New Drone Platform Aimed at Construction, Mining Industries Jason

Reagan February 06, 2019



French drone company [Delair](#) is taking artificial intelligence to a new altitude with the launch of the [Delair Aerial Intelligence](#) platform, a solution the company says will convert UAS-gathered images into “actionable business insights.”

The platform provides custom analytic models for industries such as [mining](#), [construction](#), and [agriculture](#) to “enable more accuracy and precision to deliver bottom-line benefits.”

Productivity-oriented visualization tools. Intuitive commands allow the user to visualize a site in 2D or 3D. Tools include support for orthophotography, slope maps, digital surface models and 3D models. Measurement is made simpler with integrated toolsets for calculating length, determining an area size or calculating stockpile volumes.

Real-time collaboration. Available through annotation features, integrated conversation threads and instant notifications from team members, allowing drone data to be overlaid with other geospatial data.

Industry-optimized analytics. For the mining industry, this means efficient methods to control and report inventory, or monitor site safety. Construction clients can oversee job progress and “dig into” the logistics of earth-moving jobs.

In November, Delair [introduced a new drone model](#) focused on the agriculture. Built on the UX11 fixed-wing drone footprint, the new version combines the productivity benefits of long-range/BVLOS flight operations with survey-grade mapping and plant data collection capabilities.

https://dronelife.com/2019/02/06/delair-offers-new-drone-platform-aimed-at-construction-mining-industries/?mkt_tok=eyJpIjoiWWpJM01qSXpNRFPoTURrMCIsInQlOiJXC9POVdHaEZWVm9NVzc4ZDNjb1dma204bFQzMkR5NDJYdnh0NHZsUlwwS2VKTUErd2U5MjJPdTJGbDlqRmtTbERkUmlUczUxNXUwU04xb1FrUTImUGJ3RUVjOFBXTlg2S2JFcEYyRTF5dkcxNFJITFRFWkhWaDkrK2o3aGx1S0N4In0%3D

Sulzer & Schmid Rolls out Drone Inspection Tool for Wind Turbines Betsy Lillian

February 7, 2019



[Sulzer & Schmid Laboratories AG](#), a Swiss company designing next-generation technology for the inspection of wind turbine rotor blades, has launched a new drone-based platform.



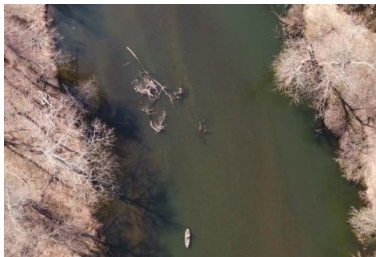
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The company designed its new 3DX HD product to be a cost-effective solution for collecting large volumes of high-definition data of turbine blades. The solution offers a “fully digital, end-to-end process [that] creates a foundation for trend analysis and predictive maintenance.”

Whereas critical inspections, such as end-of-warranty or change of ownership, call for the images provided by the 3DXTM Ultra-HD product, regular inspections can be carried out by the 3DXTM HD platform at a **fraction of the cost**. It is compact enough to be checked in as regular luggage for air travel and can be deployed easily on ships for offshore wind inspections.

https://unmanned-aerial.com/sulzer-schmid-rolls-out-drone-inspection-tool-for-wind-turbines?utm_medium=email&utm_source=LNH+02-08-2019&utm_campaign=UAO+Latest+News+Headlines

Drone Surveys Help Flood Mitigation Efforts in North Jersey Betsy Lillian February 7, 2019

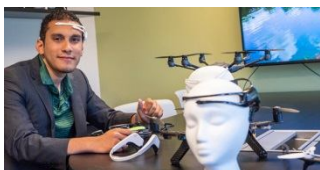


In at-risk riparian areas of northern New Jersey, surveyors are using drones as part of the documentation for a FEMA program that **saves** Pompton Lakes **residents hundreds of thousands of dollars** per year on flood insurance premiums.

Land-use consultancy [Dresdner Robin](#) of Jersey City, N.J., recently worked with the Borough of Pompton Lakes, N.J., using unmanned aerial vehicles to gather overlapping photographs of three rivers in the borough. Images were snapped every two seconds (1,042 total) and analyzed to locate obstructions in the river channel. The photos aided a stream-cleaning project that is part of the borough's flood mitigation program.

The UAV-collected data was submitted as part of Pompton Lakes' application to FEMA's Community Rating System program. Active participation saves the borough's residents over **\$300,000** on flood insurance premiums. The program also saved the borough's volunteers hundreds of hours of analysis time. https://unmanned-aerial.com/drone-surveys-help-flood-mitigation-efforts-in-north-jersey?utm_medium=email&utm_source=LNH+02-08-2019&utm_campaign=UAO+Latest+News+Headlines

USF Holding Race with Brain-Controlled Drones Betsy Lillian February 7, 2019



This Saturday, the University of South Florida (USF) is holding an event during which teams will race drones using their brains.

The [2019 USF Brain-Drone Race](#) is being organized by assistant



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professor Marvin Andujar from the Department of Computer Science and Engineering. He led a University of Florida group that started the competition in 2016.

The underlying technology is part of a much larger field of study into brain-computer interfaces (BCI), a term first coined in the 1970s. BCIs are devices that create a pathway between the brain and an external device, such as a drone, computer or prosthetic limb. BCI technology reads the brain's electrical signals to function. Scientists are able to detect and interpret these signals and translate them into commands for external devices.

"When you imagine a movement, your brain produces the same electrical activity as if you were performing the movement with your muscles," Andujar says. "For drone racing, we have our pilots imagine they're pushing an object forward. Then we capture that signal, classify it and send the information to the drone which has already been programmed to move when it receives that data." https://unmanned-aerial.com/usf-holding-race-with-brain-controlled-drones?utm_medium=email&utm_source=LNH+02-08-2019&utm_campaign=UAO+Latest+News+Headlines

DRONEII – The Drone Job Market: What is it and Where is it Going? Miriam

McNabb February 07, 2019

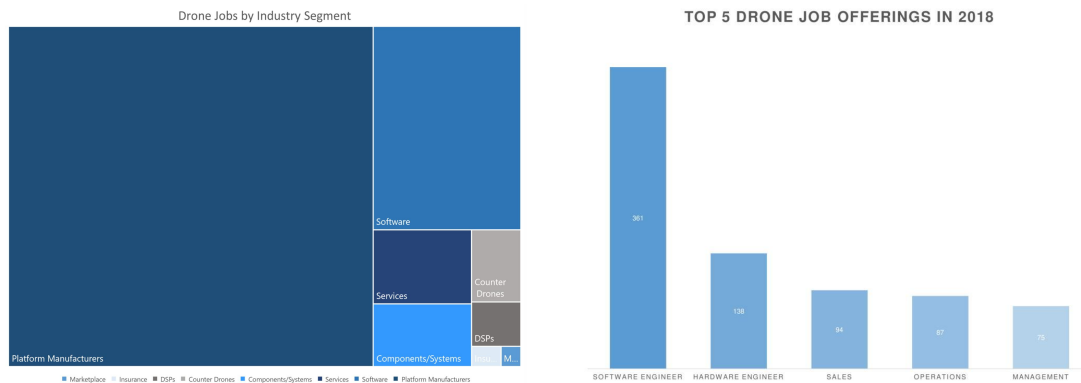


With the industry maturing, the drone job market is becoming increasingly complex and more difficult to navigate – companies are competing not only to develop the latest UAV technology, but also to grab the very best engineers and the marketing and management professionals who know how to sell these products.

Last year DRONEII conducted market research to produce a snapshot of the job market in the drone industry in the summer of 2018. Our team looked at over 400 companies in the hardware, software and services sectors of the drone industry. The United States, and especially California, is home to most of the companies hiring. Within the Europe, France, the UK, Germany, Switzerland and the Netherlands remain dominant hot spots. In the Middle East, Israel is home to a particularly booming drone industry, thanks to [Airobotics](#), [Percepto](#) and [Civdrone](#).



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1. **Software engineers** are the most sought after in the drone industry both by platform manufacturers and by software companies. This is partly because some companies like [Thales Alenia Space](#) or [DELAIR](#) are both hardware and software manufacturers.
2. **Hardware engineers** are exclusively sought after by hardware manufacturers. They come from a variety of backgrounds: electrical engineering, mechanical engineering, and aeronautical engineering.
3. **Sales** roles are the portion of drone jobs which are customer-oriented, and as companies grow bigger, they focus on specific regions (California, or the Eastern Cape).
4. **Operations** job offerings include the work of technicians, inspectors, and warehouse staff.
5. **Management** jobs include both project managers and business intelligence analysts.

Fun fact: DJI even had an advertisement seeking an English teacher in Shenzhen.

<https://dronelife.com/2019/02/07/droneii-the-drone-job-market-what-is-it-and-where-is-it-going/>

8Feb19

CIT GAP Funds Invests in DroneUp to Revolutionize Commercial Drone Pilot Services Amy Weigand



Herndon, VA – February 8, 2019 – The Center for Innovative Technology (CIT) announced today that CIT GAP Funds has invested in **Chesapeake, VA** based **DroneUp**, the creator of a patent-pending platform that organizes drone pilots into a network that serves commercial markets, government agencies, and public safety organizations.



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There are currently 1.2 million drone pilots in the United States alone, and the FAA estimates that number will increase to 3 million by 2022. In fact, Goldman Sachs recently issued a report stating, "between now and 2020, we forecast a \$100 billion market opportunity for drones." DroneUp maintains a comprehensive network of drone pilots and, through their *Mission Match*™ app, locates, qualifies and deploys single pilot or multi-pilot crews according to client requirements.

droneUp operates a global on-demand drone services fleet, tracking pilot certification, experience and location through its proprietary "always-on" mobile app to guarantee qualified pilots are alerted to matching missions. From the moment a mission alert is launched, pilots and commanders communicate in real time via encrypted channels, ensuring projects and data are always secure. With an operating capacity of over one million simultaneous missions, the DroneUp platform is **the only system** able to match, mobilize and support drone teams **on a global scale**. <https://www.droneup.com/blog/>

Drones becoming a common tool to herd farm animals February 6, 2019 Feilidh Dwyer



Herding sheep with drones

It's becoming increasingly popular for farmers to send drones to help round up animals, particularly on high-country farms.

New Zealand, home to 25 million sheep, is a country already seeing farmers adopting drones to herd stock. The drones are deployed for about 25 minutes at a time, the batteries are replaced and they keep going. Farmers report that the benefit of using drones is the **time saving** it offers. A farmer can easily see the location of their animals, without having to travel there on horseback or quadbike.

New Zealand has less than 5 million people and 25 million sheep. Not surprisingly, there are more than a few national sheepdog competitions in the country. In a sheepdog trial, a dog with the guidance of their owner will corral a group of three sheep and direct them towards a gate. The timer stops once the gate is shut. Some of these **competitions are now allowing** a new category: **drones**.

Farmers will try to use their drones to round up the sheep as quickly as possible. To see what this looks like, check out this video: https://www.wetalkuav.com/drones-becoming-a-common-tool-to-herd-farm-animals/?utm_source=WeTalkUAV&utm_campaign=7001a83b70-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_1d410cb84d-7001a83b70-83642867