



UAS and SmallSat Weekly News

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19Sep20

General Atomics receives \$7.4bn MQ-9 Reaper contract 18 September 2020



General Atomics has won the Agile Reaper Enterprise Solution contract with a ceiling amount of \$7.4bn. The contract has been awarded by the US Air Force Life Cycle Management Center's MQ-9 Program Office. The MQ-9 UAS is equipped with capabilities to perform intelligence, surveillance, reconnaissance and strike missions.

It is expected to stabilize the associated costs, permit the USAF and foreign military sales partners to acquire from four to 36 aircraft annually, and decrease delivery time by around 35%. In addition, the contract includes pre-priced mobile ground control stations, ground data terminal, spares and support equipment. <https://www.airforce-technology.com/news/general-atomics-receives-7-4bn-mq-9-reaper-contract/>

Inspired Intelligence Scans Dahlonga Gold Mine PRESS 2020-09-18



[Inspired Intelligence](#), a small family-owned and operated Drone and Scanning Solutions company from Buford GA has successfully completed a large scale LiDAR scan of [Consolidated Gold Mine](#) in Dahlonga, Georgia, combined with **several underground Drone flights** in the mine to capture data that would help determine if

certain inaccessible areas of the gold mine are safe for public tour access in the near future. The company also performed an Underwater inspection in two separate locations of the Mine using Underwater Drone (ROV) technology.

The LiDAR scans provide a 3D model of the mine, the grounds and buildings above it, producing a map of the area that shows for the first time exactly where the mine is located underground. Additionally, this data was used to create a blueprint of the gold mine to use for safety and emergency evacuation planning, giving the gold mine for the first time an accurate representation of the site where all they had previously were handwritten journals and articles from decades ago. https://www.uavexpertnews.com/2020/09/inspired-intelligence-scans-dahlonga-gold-mine/?utm_source=Master&utm_campaign=6791eba839-EMAIL_CAMPAIGN_2017_12_20_COPY_01&utm_medium=email&utm_term=0_35ad7bc94d-6791eba839-89168288



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Ministry of Defence makes innovation call for drone technology APPLICATION

BUSINESS MILITARY ALEX DOUGLAS SEPTEMBER 16, 2020



Up to £900,000 is available for successful proposals that can help the Ministry of Defence overcome three challenges. The first is the development of an optimized Unmanned Air System suitable for use in urban environments.

The second challenge is to develop a human-controlled lethal payload that could integrate with a platform outlined in the first challenge and the third challenge is to demonstrate a full Unmanned Air System with an integrated payload, bringing together the separate elements of challenges 1 and 2.

“We are looking for ideas that reduce the mental strain on operators and to improve performance – but solutions must ensure that they remain under full human control at all times.” These innovations could in future contribute to a new capability that can remove service personnel and military dogs from complex and **dangerous urban warfare** situations where their lives are put at significant risk.

<https://www.commercialdroneprofessional.com/ministry-of-defence-makes-innovation-call-for-drone-technology/>

New Unmanned Helicopters for Maritime & Law Enforcement Applications

Announced 10 Sep 2020 Mike Ball



[Steadicopter](#) (Israel) has announced the launch of two new models of rotary UAV featuring electric-powered propulsion and VTOL capability and designed for a wide range of law enforcement, maritime, civilian and covert missions. The Black Eagle 25E and Black Eagle 50E unmanned helicopters are rated for operation in even the harshest maritime environments.

Converting Steadicopter’s existing Black Eagle 50 platform to an electric-powered engine has reduced the weight of the new models to 18 kg, allowing them to carry heavier payloads and additional batteries for extended endurance. The new propulsion system also makes the UAVs simpler to operate, easier to maintain and, with no need for fuel storage, safer and more environmentally friendly.



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The Black Eagle 25E is designed for takeoff weights of up to 25 kg, making it suitable for tactical and urban missions, adhering to strict weight and category regulations. The Black Eagle 50E, weighing up to 35 kg, provides a high-performance flight envelope with a wide range of mission payloads for covert operations. With a zero-logistic footprint, the Black Eagle 25E and 50E are an ideal fit for maritime missions including Infrastructure Security, Exclusive Economic Zone Enforcement, Anti-Piracy, Unauthorized Fishing, Search & Rescue and Offshore Cargo Supply.

<https://www.unmannedsystemstechnology.com/2020/09/new-unmanned-helicopters-for-maritime-law-enforcement-applications-announced/>

North Dakota's BVLOS network hits major milestone Josh Spires Sep. 18th 2020



[North Dakota's](#) statewide BVLOS network has begun the initial stages of implementing infrastructure at the Northern Plains UAS Test Site. The milestone means North Dakota is one step closer to beyond visual line of sight drone flights.

The [first test site](#) in the network to receive infrastructure is in an area near Watford City and Williston, North Dakota. The companies deploying the infrastructure are L3Harris Technologies and Thales USA. The rollout is beginning immediately and will include verification and validation system testing to ensure everything is working correctly and is in line with the Federal Aviation Administration standards. The testing is also being done to ensure the state's money is spent as efficiently as possible and to set standard requirements for different drone operations.

<https://dronedj.com/2020/09/18/north-dakotas-bvlos-network-hits-major-milestone/>

Everdrone expands life-saving drone deliveries to Denmark Josh Spires Sep. 18th 2020



Everdrone has announced it has expanded its life-saving drone delivery service into Denmark after an agreement with the Copenhagen Emergency Medical Services. The service is expected to go live in the spring of 2021 and is expected to reach more than 100,000 people. An agreement was reached with the Copenhagen Emergency Medical Services to come on-board as a research partner to work alongside the Karolinska Institute in Sweden.

The drones can be in the air within minutes and have a flight radius of about 3.7 miles. The drones will be carrying defibrillators and will be routed to areas where ambulances aren't able to reach in a reasonable amount of time.



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Once an emergency call comes in, dispatchers send both a drone and an ambulance. The drone will usually arrive before the ambulance. It lowers the defibrillator with a winch from a height of 30 meters (about 98 feet). AEDs are designed to be used by anyone. And the hope is that someone on-site can use the device if paramedics are delayed in getting to the scene. Speed is crucial, as survival rates shoot up to 70% if a patient receives help within the first few minutes.

Everdrone's drone is equipped with an Intel-based RealSense obstacle avoidance system and intelligent route planning to improve efficiency. A parachute system ensures the drone will land safely in the event of a mishap. As the drone in the video below looks to be a DJI Matrice 600 Pro, it also comes with triple IMU and GPS redundancy, low voltage protection, smart return to home and motor fault detection, which allows it to land safely, even if it's missing a propeller.

See the video: <https://dronedj.com/2020/09/18/everdrone-expands-life-saving-drone-deliveries-to-denmark/>

Bees360 Releases Its All-In-One Mobile Platform BeesPilot App September 17, 2020 News



Bees360, the leader in property claim and underwriting inspections, today released its mobile platform BeesPilot™ to offer an all-in-one solution to increase drone pilots' operational efficiency in the field.

Pilots can use the app to fly the drone autonomously or manually to capture roof images, take exterior photos from the ground level using a mobile device's camera and conduct onsite interviews with homeowners, while capturing interior photos. All operational activities on the property can be completed via a single app.

"Our goal is to equip our pilots with a user-friendly and powerful tool to increase their efficiency in the field. The higher efficiency and the greater quality of images they collect, the faster turnaround time and the better quality of inspection reports we can deliver," says Corey Frederick, the Director of Operations at

Bees360. https://uasweekly.com/2020/09/17/16583/?utm_source=rss&utm_medium=rss&utm_campaign=16583&utm_term=2020-09-18



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Volocopter Begins Air Taxi Ticket Sales Kate O'Connor September 17, 2020



Urban air mobility company Volocopter announced on Wednesday that it is now selling tickets for piloted air taxi flights in its VoloCity electric vertical takeoff and landing aircraft. Angling to become “the first electric air taxi company to acquire paying end-customers,” Germany-based Volocopter is limiting its initial offering to 1,000 slots. The €300 (\$355) tickets can be reserved for a 10 percent deposit and are good for a 15-minute flight “scheduled within the first 12 months after commercial launch” plus video of the experience.

“While the final certification for air taxis is still pending, we have a timeline to launch commercial flights in the next 2-3 years,” said Chief Commercial Officer Christian Bauer. “Moreover, those who reserve now can receive the latest updates about our progress and the commercial launch plan.” <https://www.avweb.com/recent-updates/evtols-urban-mobility/volocopter-begins-air-taxi-ticket-sales/?MailingID=451>

Mysterious Drone Incursions Over U.S. THAAD Anti-Ballistic Missile Battery In Guam TYLER ROGOWAY AND JOSEPH TREVITHICK SEPTEMBER 14, 2020 THE WAR ZONE



Earlier this year, a series of bizarre and highly concerning events took place in the late Winter of 2019 at [Andersen Air Force Base](#) on Guam. Between late February and early March of last year, [the massive installation](#) experienced repeated incursions by unmanned aircraft that appeared to be interested in one highly sensitive area of the U.S. Army's [Terminal High Altitude Area Defense \(THAAD\)](#) battery that is tasked with defending the island from ballistic missile attacks. .

The intruding craft were described as "quadcopter-like" vehicles with bright spotlights that flew from over the water and then across the North West Base area at about 20 to 30 feet. On a number of nights, the craft would make multiple incursions in the very early morning hours. They would show up, disappear, then come back a few hours later.

The spotlight that shone down from the craft made it hard to make out a detailed description of the craft. They would maneuver dynamically, appearing with the spotlight on, then disappearing, just to reappear moments later over to one side or another with the spotlight on, which was unsettling to those who witnessed it. There was a concerted effort to identify, track,



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and down the mysterious craft, but it doesn't seem that those efforts were successful.

<https://www.thedrive.com/the-war-zone/36085/troubling-drone-incursions-have-occurred-over-guams-thaad-anti-ballistic-missile-battery>

20Sep20

Public Safety Drones: Disasters & Drones for Good 20Sep20 CHARLES L. WERNER

September 16, 2020

The [DRONERESPONDERS Spring 2020 Research Study](#) revealed that government public safety agencies use of drones dramatically increased to 17 different mission types including situational awareness, tactical over-watch, hazmat, structure fires, wildfires, mapping, earthquakes, tornadoes, volcanic activity, incident command and control, swift water rescue, security over-watch, public information, transportation of cargo and COVID19.



Santa Rosa CA Wildfire

This is a HANGAR hi-res snapshot, which on a computer can be manipulated in a 360-degree view and zoomed into specific areas.

Drones became instrumental during hurricanes Harvey, Irma, and Maria in 2017, with thousands of successful missions in concert with manned aircraft. The major wildfires in 2018 – like the Camp Fire (California) – reinforced the value of drones by providing critical information for responding agencies such as direction of fire, hotspots, new fires identification and major damage assessments. The 2018 volcanic activity in Hawaii further validated the value of drones as they could provide real time information of fissure activity, lava flows and detection of toxic sulfur dioxide gas. This became paramount to warning and evacuating residents. The Lee County (Alabama) Tornado, which caused a wide path of destruction resulting in 23 deaths, marked one of the first news stories reporting that responders immediately deployed drones to complement ground search.

<https://www.domesticpreparedness.com/resilience/public-safety-drones-disasters-drones-for-good/>



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Police Drones Capture 'Beautiful and Ugly Truths' Of Louisville Protests Ryan Van

Velzer METRO LOUISVILLE September 17, 2020



The video comes from a drone owned and operated by Kentucky State Police. It's one of 168 KSP videos and dozens of photos obtained and reviewed by WFPL News.

With demonstrations erupting all over the country following the deaths of Ahmaud Arbery, George Floyd and Breonna Taylor, Louisville residents took to the streets in large

numbers beginning in late May.

At the request of the Louisville Metro Police Department, KSP flew commercial drones to monitor downtown, capturing dramatic scenes of conflict, defiance and peaceful protest.

The high-quality video from the police drones reveals once-in-a-generation gatherings. The video is sharp enough to make out the words "COLOR IS NOT A CRIME" on a cardboard sign carried by a protester sitting on the roof of a Jeep and crisp enough to count the thousands marching through the city streets. <https://wfpl.org/police-drones-capture-beautiful-and-ugly-truths-of-louisville-protests/>

21Sep20

Drone Lighting is a Critical Tool for Accurate Data Day or Night Miriam

McNabb September 18, 2020



Drone lighting is critical for gathering accurate data, during the day – and especially, at night. Unmanned aircraft manufacturer [Autel Robotics](#) and [FoxFury Lighting](#) have come together with lighting equipment made for [Autel Robotics EVO II™](#) Series Aircraft.

During a [demonstration in Las Vegas](#) last year, the Las Vegas Police Department and Sundance Media Group demonstrated a nighttime crime scene investigation – where shadowing could mean the difference between documentation that's admissible in court, or not.



FoxFury specializes in lighting – making portable, rugged lighting solutions designed to assist in a wide variety of applications. FoxFury was early in applying their lighting expertise to the drone industry, creating drone solutions to help drones fly in any lighting condition.

Robert Rea | Axcel Innovation | Charlottesville and Portsmouth, VA
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<https://dronelife.com/2020/09/18/drone-lighting-is-a-critical-tool-for-accurate-data-day-or-night-the-autel-and-foxfury-partnership/>

Rocket Lab gears up for 1st launch from US soil Mike Wall 2 days ago



A Rocket Lab Electron booster stands on the pad at the company's Launch Complex 2, at the **Mid-Atlantic Regional Spaceport in Virginia**, shortly after completing a "wet dress rehearsal" in September 2020.

The California-based company, which has launched 14 missions to date from its New Zealand site, just wrapped up a "wet dress rehearsal" at its [Launch Complex 2](#) at the Mid-Atlantic Regional Spaceport in **Wallops Island**, Virginia.

"With this major milestone complete, the Electron launch vehicle, launch team and the LC-2 pad systems are now ready for Rocket Lab's **first launch from U.S. soil**," However, NASA must finish certifying Rocket Lab's autonomous flight termination system. A targeted launch date will not be set until this hurdle has been cleared.

Rocket Lab aims to greatly increase access to space with the 57-foot-tall Electron, which gives **small satellites** dedicated rides to Earth orbit. Rocket Lab will use Electron and its new Photon satellite bus to send a [cubesat to the moon for NASA next year](#), and the company plans to launch a private [life-hunting mission to Venus in 2023](#). The upcoming mission will loft a microsatellite called Monolith for the United States [Space Force](#). <https://www.space.com/rocket-lab-first-us-launch-rehearsal.html>

General Atomics Lands \$7.4B Air Force MQ-9 Reaper IDIQ Jane Edwards September 21, 2020 Contract Awards, News



The U.S. Air Force has [awarded General Atomics a potential five-year, \\$7.4B contract to deliver up to 36 units of the MQ-9 Reaper unmanned aerial vehicle per year](#).

The [contract](#) includes a ground data terminal, mobile ground control stations, spares and related support equipment and is expected to reduce by about 35 percent the time it takes to bring the UAVs to operational units. The service branch and foreign military sales customers can place an order for four to 36 Reapers within a single year under the price quantity curve of \$3.3B.



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"Prior to ARES, the standard contract award timeline was roughly 380 days," said Alicia Morales, aircraft production manager with the Medium Altitude Unmanned Aerial System program office. "Now, once we have a budget, and it's in our account, we can award in just a couple of days and field the aircraft in 26 months."

<https://www.govconwire.com/2020/09/general-atomics-lands-74b-air-force-mq-9-reaper-idig/>

Altitude Angel to launch BVLOS drone corridor with no on-board hardware needed September 20, 2020 Philip Butterworth-Hayes UAS traffic management news



UK UTM company Altitude Angel has announced the creation of "the world's first commercial drone corridor" available to support fully automated drone flights beyond visual line-of-sight from any drone company which completes a series of basic technical integrations which do not require specialist hardware on-board the drone.

General aviation aircraft and drones will **share the same airspace**.

The Thames Valley to the west of London will be the site of the corridor, an area of open and unrestricted airspace operated and managed by Altitude Angel according to plans submitted to the UK's Civil Aviation Authority.

"The proposed zone, for which the necessary infrastructure deployment will begin within weeks, was put forward as part of the [CAA's Innovation Sandbox](#) under the moniker 'Project Arrow' and will be situated south of Reading, Berkshire. "Nearby manned aviation and even other non-participating drones are mapped in real-time so safe distances are maintained, and appropriate avoidance actions can be taken if they are predicted to be breached. If a conflict is detected, drones involved will be automatically given appropriate avoidance instructions, such as an instruction to change flight path, hold, return or land. A remote pilot will also be alerted, and manual control of the drone can be taken at any time. Drones flying within Arrow Drone Zones need no specialist equipment, such as new sensors, to utilize the Zone.

<https://www.unmannedairspace.info/news-first/altitude-angel-to-launch-commercial-bvlos-drone-corridor-with-no-on-board-hardware-needed/>

Regional authority to finance UAM program in Ingolstadt with EUR100 million grant

September 20, 2020 Philip Butterworth-Hayes Urban air mobility

The Bavarian Council of Ministers in Germany is supporting the Urban Air Mobility Initiative in Ingolstadt with a EUR100 million grant. A year ago, Bavaria started a nationwide Hightech Agenda program and is funding the development of the latest technologies with EUR2



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billion. This also includes the Air Mobility Initiative in the Ingolstadt area, for which EUR15 million will be made available in the coming year, EUR25 million in 2022 and a **further EUR 60 million in the following years.**



"It is a clear commitment to this regional initiative, which over **70 German and international partners** have joined. The basis is now being laid to expand Bavaria's position as a technology leader in the field of urban air mobility while at the same time supporting economic diversification. <https://www.unmannedairspace.info/latest-news-and-information/regional-authority-to-finance-uam-programme-in-ingolstadt-with-eur100-million-grant/>

Singapore plans more BVLOS flights to support police, medical and emergency response September 18, 2020 Jenny Beechener UAS traffic management news



The Singapore government science and technology agency HTX reports completion of its **first** long-distance beyond visual line of sight flights for Unmanned Aerial Vehicles and plans to apply the capability saving lives, protecting properties and enhancing public safety and security.

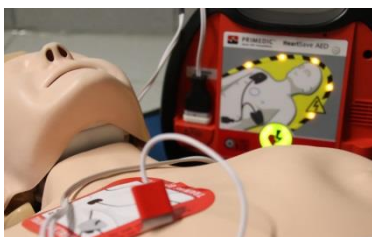
During the COVID-19 circuit breaker period, HTX augmented Singapore police force resources on the ground by operating BVLOS flights for patrolling operations around industrial areas to ensure security. These **autonomous** flights enabled long distance and large area patrols, requiring only a very lean team to operate remotely.

HTX is currently working with various Home Team departments to design and customize effective BVLOS UAV solutions to meet their specific needs and requirements.

<https://www.unmannedairspace.info/latest-news-and-information/singapore-technology-agency-htx-plans-more-bvlos-flights-to-support-police-medical-and-emergency-response/>

Denmark's emergency defibrillator drone delivery program goes global

APPLICATION DELIVERY EMERGENCY SERVICES EUROPE HEALTH NEWS SAM LEWIS SEPTEMBER 21, 2020



The service, currently reaching 80,000 residents in the Gothenburg area, is a collaboration with Sweden's national emergency call center, SOS Alarm and the Centre for Resuscitation Science at Karolinska Institutet.

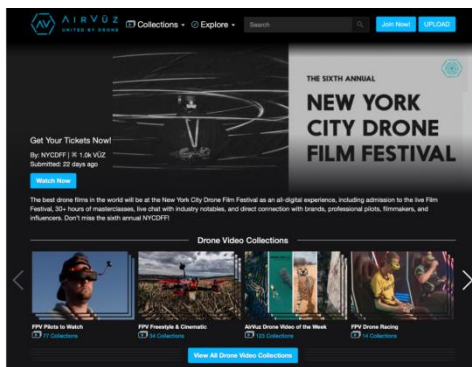
Now the company has announced that operations are **expanding internationally** thanks to an agreement with the Copenhagen Emergency Medical Services.



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“The research project in Sweden is running along as planned, and final evaluation of feasibility will take place during autumn,” said Andreas Claesson, principal investigator for the project at KI. The collaborating partners have established a roadmap where the drone service will be deployed in Denmark during the spring of 2021. Expectations are to initially reach more than **100,000 people** in rural and semi-urban areas where the ambulance response times are relatively long. <https://www.commercialdroneprofessional.com/denmarks-emergency-defibrillator-drone-delivery-programme-goes-global/>

Coming Soon: A drone TV channel, from AirVūz and Loop Media Scott Simmie Sep. 19th 2020



There’s a ton of drone videos out there. Some of them are fantastic. Others? Probably not worth the hard drive space they’re occupying. Plus, you need to have a device — laptop, tablet, phone — to actually watch them. Yes, you can use your smart TV. But then you’re back to sorting through what’s available on YouTube,

Vimeo, etc. Of course, there are places like AirVūz, which attract some of the very best drone videos out there. And now, thanks to a new partnership, those videos will be available through devices like your Roku streaming box.

It’s all been made possible through a deal between AirVūz and Loop Media Inc. The latter is a company that specializes in premium, short-form videos.

AirVūz has a massive collection of professional and amateur drone footage. Some of it, like this work from Russia, is **absolutely breathtaking**: <https://dronedj.com/2020/09/19/coming-soon-a-drone-tv-channel-from-airvuz-and-loop-media/>

22Sep20

Air taxi firm Volocopter teams up with Schenker to deploy heavy-lift drones Nadine Schimroszik, Douglas Busvine SEPTEMBER 21, 2020



BERLIN (Reuters) - German aviation startup Volocopter has teamed up with logistics group DB Schenker to deploy its heavy-lift drones in a

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project that will gather practical flying experience before its air taxis enter service.

The remote-controlled drone can lift a load of 440 lb and has a range of 25 miles, making it ideal for jobs such as delivering medicines to a hospital or dropping off components at a factory. And, while e-commerce giant Amazon and others have received U.S. approval to test drone deliveries to customers, the Volocopter-Schenker partnership is aimed at business-to-business. "When people associate logistics with drones they always think of the 3 kg, last-mile delivery to the doorstep," Reuter said. "It's the middle mile, not the last mile, we are serving."

Schenker picked Volocopter after backing the nine-year-old startup's \$103 million funding round in February. In total, Volocopter has raised **122 million euros** from investors.

<https://www.reuters.com/article/us-aviation-volocopter/air-taxi-firm-volocopter-teams-up-with-schenker-to-deploy-heavy-lift-drones-idUSKCN26C0SI>

DRONEUP, WALMART, AND QUEST DIAGNOSTICS PILOT DRONE COVID-19 KIT DELIVERY



NORTH LAS VEGAS, NV – Sept. 22 – DroneUp, Walmart, and Quest Diagnostics today announced a pilot program to provide drone delivery of COVID-19 at-home self-collection kits to single-family homes in the North Las Vegas-area. Drones will launch from the North Las Vegas

Walmart to single-family homes within a 1-mile radius of the store. This pilot will help determine what roles drones can play in pandemic response, health care delivery, and retail.

Once delivered, patients will perform a self-administered nasal swab and ship the sample to a Quest Diagnostics lab using a pre-paid shipping envelope for processing at the lab and will receive their COVID-19 test results through the secure Quest Diagnostics MyQuest online portal or app.

"Walmart has been serving the community throughout the pandemic with drive-thru testing sites, and we wanted to provide another way to access testing that provides convenience and learning how drones could impact healthcare delivery in the future," said Amanda Jenkins, Vice President of Operation Support and Implementation, Walmart U.S. Health and Wellness. "We are grateful to our Quest and DroneUp partners and our pharmacists and associates for their support in launching the pilot as we continue to work together during the pandemic." Amy Wiegand amy.wiegand@droneup.com



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New Award Supports Unmanned Aircraft Systems and Geospatial Technology

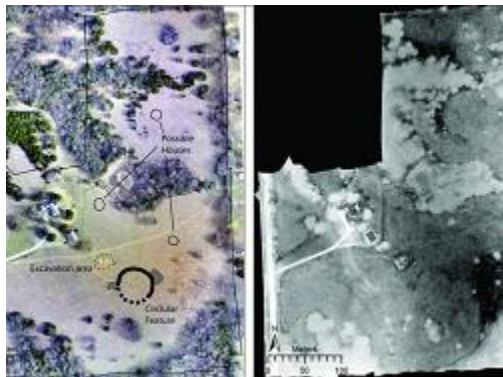
Workforce September 22, 2020 Chris Carter, Deputy Director, cxcarter@odu.edu, 757-766-5210

Faculty and students at community colleges across the Commonwealth will continue to learn how to operate unmanned aircraft systems and collect and analyze geospatial data. The **Virginia Space Grant Consortium** is leading a statewide partnership to develop the geospatial technology and UAS workforce in Virginia. The new award of **\$561,977** from the National Science Foundation Advanced Technological Education program is the **fifth** award to VSGC and partners targeting the technician workforce in these emerging technologies.

VSGC, Germanna Community College, the Virginia Community College System and Virginia Tech are partnering on the Improving Pathways into the Geospatial and Unmanned Aircraft Systems Technician Workforce project. GeoTED-UAS will prepare students for success as geospatial technicians and small UAS operation technicians who will plan and fly sUAS missions and analyze geospatial data to solve problems and answer questions.

Drone Imaging Reveals Pre-Hispanic 'Great Settlement' Beneath Kansas Ranch

Theresa Machemer SMITHSONIANMAG.COM SEPTEMBER 16, 2020



Archaeologists using new drone-sensing technology have found evidence of an enormous, horseshoe-shaped trench hidden beneath a Kansas ranch, reports Kiona N. Smith for [Ars Technica](#).

The rounded earthwork, which may be part of the [largest pre-Hispanic settlement](#) north of Mexico, appears to be what's known as a council circle. To date, notes Bruce Bower for [Science News](#), researchers have identified five such structures across 22 sites in the area.

Ancestors of the modern [Wichita and Affiliated Tribes](#) lived in what is now southeastern Kansas between about 900 and 1650 A.D. Per *Ars Technica*, they lived in grass-roofed pit houses; hunted bison; and farmed crops like squash, beans and corn. Over time, erosion filled the newly discovered earthwork with topsoil, concealing it from view. But modern sensors can detect subtle differences in temperature and foliage between the filled trench and the earth around it.



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As detailed last month in the journal [American Antiquity](#), the researchers located the ditch through a combination of **drone surveying** and LiDAR, infrared and thermal imaging.

Modern construction and farming have damaged many historic Wichita sites. Now, study co-author [Donald Blakeslee](#), an anthropological archaeologist at Wichita State University, tells *Science News*, "We apparently have located the sixth council circle and the only one that has not been disturbed." <https://www.smithsonianmag.com/smart-news/drone-imaging-finds-evidence-pre-columbian-great-settlement-under-kansas-ranch-180975818/>

23Sep20

Walmart to test drone delivery of COVID-19 test kits Reuters Staff HEALTHCARE & PHARMACEUTICALS SEPTEMBER 22, 2020

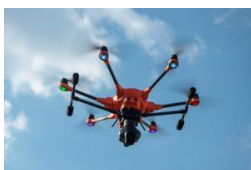


(Reuters) - Walmart Inc said on Tuesday it would run a pilot project to deliver self-collection test kits for coronavirus through automated drones at customers' doorsteps. The U.S. retailer has partnered with Quest Diagnostics and drone services provider **DroneUp**, to test-deliver collection kits in north Las Vegas from Tuesday and plans to conduct a trial run in Cheektowaga, New York in early October. Earlier this month, Walmart piloted drone delivery of grocery and household products in Fayetteville, North Carolina, as it accelerated the expansion of its pickup and delivery services with virus-wary consumers preferring home delivery.

The drones launched on Tuesday will drop the COVID-19 self-collection kits on driveways, front sidewalks or backyards of homes within a one-mile radius of designated Walmart stores. Customers can self-administer the nasal swab and send back samples to Quest Diagnostics for testing. Walmart has also teamed up with Zipline to make on-demand deliveries of select health and wellness products near its headquarters in northwest Arkansas.

<https://www.reuters.com/article/walmart-dronedelivery/walmart-to-test-drone-delivery-of-covid-19-test-kits-idUSL3N2GJ27H>

FAA Type Certification for Unmanned Systems: An Op-Ed by AUVSI President Brian Wynne Miriam McNabb September 22, 2020



On Friday, September 18th the Federal Aviation Association released the [final policy on type certification](#) for certain unmanned aircraft systems. On behalf of the Association for Unmanned Vehicle Systems International and our **5,000 members**, I want to congratulate FAA Administrator Steven



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Dickson and Department of Transportation Secretary Elaine Chao on continuing to show leadership to encourage growth in the unmanned sector.

A core tenet for our association and our industry is safety. This new type certification policy will allow our innovative members to continue thinking big while balancing responsible operations. Maintaining a high degree of safety is critical in advancing our industry, as we grow services offered by unmanned aerial systems including [package delivery](#), assisting firefighting teams in managing blazes and delivering [live-saving drugs to opioid abuse](#) victims.

<https://dronelife.com/2020/09/22/faa-type-certification-for-unmanned-systems-an-op-ed-by-auvsi-president-brian-wynne/>

Pandemic opens new doors for the drone industry APPLICATION DELIVERY DRONES AT WORK EMERGENCY SERVICES HEALTH SAM LEWIS SEPTEMBER 23, 2020



The drone industry has seen a significant uptick in business during the last six months, believes North Dakota-based UAS flight operator SkySkopes, as drone companies cook up new unmanned solutions to problems posed by the pandemic.

“Amid the pandemic crisis,” the company revealed, “drone service providers are increasingly being classified as **‘essential service personnel’**, delivering critical, contactless solutions across a diversity of cases – healthcare, Covid research, energy, transportation, oil-and-gas, surveying and construction.” Other uses include reconnaissance, mapping and imagery for police, fire and search-and-rescue agencies, as well as medical deliveries.

Drone service providers are aiming to revolutionize the new role of UAS tech as an essential service in a pandemic world. Headquartered in North Dakota, SkySkopes deploys drones to produce intelligence for utilities and oil companies by using sensors such as LiDAR, optical gas imaging and EO. Services will continue to expand to meet new challenges — aerial disinfection of public facilities, social distancing communications and essential services support. <https://www.commercialdroneprofessional.com/pandemic-opens-new-doors-for-the-drone-industry/>

New 140mph first responder drone achieves lift off APPLICATION EMERGENCY SERVICES NEW PRODUCTS SAM LEWIS SEPTEMBER 23, 2020



Manufacturer Sonin Hybrid, based in Atlanta, GA, said that the Recruit drone can fly for upwards of **three hours** and hit

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speeds of three times that of most other UAVs. The drone works with a hybrid petrol-electric engine. Coupled with a lightweight airframe and carbon fiber body, it can fly faster than most drones and carry a heavier payload.

As it is for first responders, it also offers enhanced payload capabilities. These include a 30X optical/12X digital zoom 4K video camera with fixed and mobile target-tracking; a forward-looking infrared camera with night vision; PA speakers; a spotlight and other sensors.

<https://www.commercialdroneprofessional.com/new-140mph-first-responder-drone-achieves-lift-off/>

24Sep20

Russia's Weird Fixar Drone Offers Military Capabilities At Commercial Rates

Kelsey D. Atherton Aerospace & Defense



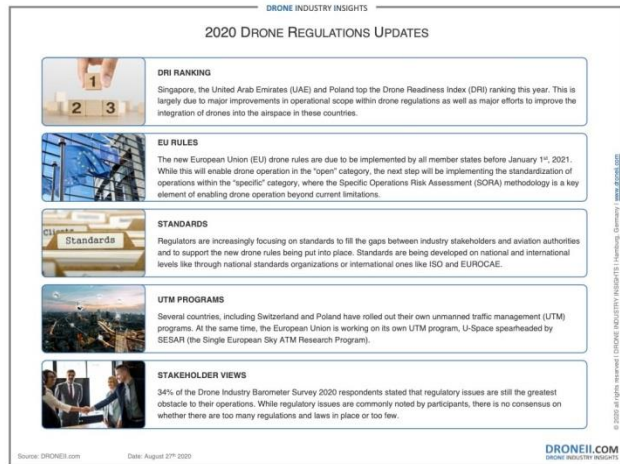
Russia's Fixar drone is designed for the sweet spot between quadcopters and fixed-wing aircraft. With rotors set at an angle and wings for efficiency, it can take off and land vertically, while still offering endurance over distance. Fixar went on sale in Russia this September, with a plan for foreign exports by the end of the year.

With its bright red carapace and oddly placed rotors, the Fixar drone, made by Russia's Innovative Integrated Systems, exemplifies the dual-use nature of modern drone platforms. All-electric, it can fly for up to **60 minutes** on a single charge, carrying a modest 4.4-pound payload, with a cruising speed of 45 mph. Fixar has a 5-foot wingspan but can be disassembled and reassembled into a more compact carrying case. The manufacturer boasts it can also operate in temperatures as cold as -22 Fahrenheit, as warm as 140 Fahrenheit, and at altitudes up to 16,000 feet. Its unique airframe and flying style is also designed to better handle high winds.

<https://www.forbes.com/sites/kelseyatherton/2020/09/23/russias-weird-fixar-drone-is-a-dual-use-aerial-scout/#346769b623a6>

25Sep20

DRONEII: 2020 Drone Regulation Update Miriam McNabb September 24, 2020



Drone industry analysts DRONEII have published their 2020 Drone Regulation Update: survey results that show how the international landscape is evolving to support the use of drones.

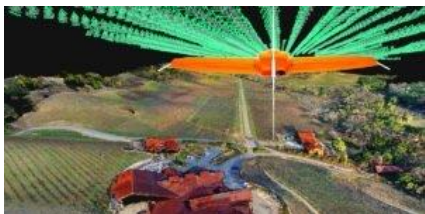
With the publishing of our new [Drone Regulation Report](#) come a whole set of new drone regulations updates from across the globe. We have collated the updates from the past year into five key topics that industry stakeholders should keep in mind:

the 2020 Drone Readiness Index ranking, new EU regulations, an increasing focus on standards, UTM programs and stakeholder concerns with current drone regulations.

<https://dronelife.com/2020/09/24/droneii-2020-drone-regulation-update/>

New Integration Makes Orthomosaic and Point Cloud Generation 2X Faster

Miriam McNabb September 24, 2020



[Wingtra](#)'s recent WingtraHub 1.0 release introduces a lean workflow between the WingtraOne drone and [Pix4Dmatic](#), a "fresh [Pix4D](#) product for reliable speedy processing of large datasets," says a Wingtra press release. "This integration is especially key since Wingtra's VTOL drone is designed to map large sites fast and safely while providing the best possible

data quality. The high-quality datasets that result can now be processed into point clouds and orthomosaics at **twice the speed** on average with Pix4Dmatic."

Wingtra is rapidly gaining traction as a major provider of VTOL fixed wing aircraft for their speed, endurance, and performance. Users can use the 'accurate geolocation and orientation pipeline that increases processing speed 20 percent on average, and up to 40 percent for large projects. With the new WingtraHub release, you can now output geotagged images, which include all required information in the image metadata (EXIF & XMP tags) like image locations, orientations, accuracies, coordinate system and vertical reference. This improves compatibility



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with all major photogrammetry engines and is especially well integrated with Pix4Dmatic, which now enables up to two times faster large dataset processing,” explained Julian Surber, Product Manager at Wingtra. <https://dronelife.com/2020/09/24/pix4d-and-wingtra-new-integration-makes-orthomosaic-and-point-cloud-generation-2x-faster/>