UAS and SmallSat Weekly News

Contents

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FAA Tests Echodyne Ground-Based Radar for Drone Traffic Mgmt Pilot Program

Matthew Nelson September 06, 2019 News

The Federal Aviation Administration used an Echodyne-built ground-based radar system to conduct an airspace traffic management pilot program at Northern Plains Unmanned Aircraft System Test Site in North Dakota.

Echodyne incorporated Echoguard radar systems into Simulyze's situational awareness tools to support beyond visual line-of-sight operations and enable airspace management capabilities in the area. Echoguard was used to clear airspace traffic through verification and UTM messaging functions.

"As an official FAA program, we sought to integrate high quality sensors and technologies to demonstrate the viability of UTM in an operational system," said Chris Theisen, director of research and development at NPUASTS. "The Echodyne radars performed well in all scenarios." https://blog.executivebiz.com/2019/09/faa-tests-echodyne-ground-based-radar-for-drone-traffic-mgmt-pilot-program/

Drones in Construction: Inside the Approval of a Waiver for Flight Over Humans

Harry McNabb September 06, 2019

Hansel Phelps has completed over $1 billion in hospitality projects in the Washington DC metro area and recently received FAA approval for flight over humans.

Avi Lozowick of ParaZero says that the Hansel Phelps safety focus made them the ideal partner for applying for a waiver for flight over people. ParaZero provides the SafeAir drone safety system that was critical to the waiver approval. "Hansel Phelps was one the first waivers approved for flight over people in construction – that was done in June of this year," says Lozowick.

Hansel Phelps had the perfect drone operations program to support the application – and ParaZero had the data and statistics. ParaZero has invested heavily in working closely with regulatory agencies to provide them with the data they need. The company had a leading role in establishing the ASTM standards for drone parachutes. ParaZero's team did more than 45

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test flights where they deployed their parachute with 100% success. Those 45 test flights resulted in 45 pages of data: "Each test had a one page report that we use as part of our waiver process," says Lozowick.

Producing all of that data has paid off for the company. "Hansel Phelps was the first one, now we have 17 waivers: including CNN and Fox," says Lozowick. "Today, we provide documents that help both large and small companies get through the waiver process." https://dronelife.com/2019/09/06/drones-in-construction-inside-the-waiver-approval-for-flight-over-humans-with-hansel-phelps-and-parazero/

Topside Drone project keeps the USS Midway corrosion free Josh Spires - Sep. 6th 2019

Drones are being used to keep the USS Midway, once an active vessel, corrosion-free as a part of project Topside Drone. The drones utilize various sensors and a corrosion checking algorithm to detect possible rust. The project is a result of the Office of Naval Research sponsoring the technology. The project is a part of the ONR's rapid-response science and technology prototype initiative.

USS Midway was used by the US Navy during the Vietnam War along with Operation Desert Storm. It now resides in San Diego as a museum exhibit.

Corrosion is always present, and with the drones, they can detect corrosion from 80 feet away. The process of checking for rust starts with a drone, carrying a LiDAR payload to accurately create a model of the ship. A second drone is then sent up with a visible and infrared camera payload to take images which are placed on the previously created model. The images are then run through an algorithm that can detect corrosion. https://dronedj.com/2019/09/06/topside-drone-project-keep-the-uss-midway-corrosion-free/#more-19092

HYCOPTER Drones to Begin Safety Inspection of Hydropower Dams in Brazil

September 5, 2019 Mapping and Surveying

H3 Dynamics has partnered with Curitiba-based EPH Engineering in Brazil, a firm that specializes in hydropower design, dam inspections and safety plans, to launch a turnkey dam inspection solution that combines AI-enabled damage assessment

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and HYCOPTER fuel cell drones capable of flying 3.5 hours at a time.

With over 5,000 dams submitted to the Brazilian Dam Safety Plan and two recent collapse incidents causing more than 300 deaths and major environmental damage, Brazilian authorities have tightened inspection and upkeep requirements.

Some of the dams are so large they would require months of battery-powered drone flights to fully scan their surfaces. The new fuel cell drones can scan 6 times more surface area, making large-scale dam inspections faster to complete.

Designed in Austin, Texas- the drone is also equipped with new data acquisition software successfully tested last month at a hydropower dam site in Brazil. Data collected links to a new AI-assisted inspection platform designed to speed up expert validation. Many defect types can now be reported by H3 Dynamics' machine learning engine. "We can now improve the coverage area, agility, scalability, frequency and quality of visual dam inspections."
https://uasweekly.com/2019/09/05/hycopter-drones-to-begin-safety-inspection-of-hydropower-dams-in-brazil/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_09_06_2019&utm_term=2019-09-07

U-space SAFIR consortium hosts DronePort open day APPLICATION BUSINESS EUROPE EVENTS NEWS ALEX DOUGLAS SEPTEMBER 6, 2019

The consortium, a group of 13 public and private organizations, today hosted an open day at DronePort, Sint-Truiden**.** The event was used to showcase integrated drone traffic management for a broad range of drone operations.

The day is among several demonstration projects taking place within the framework of SESAR Joint Undertaking –responsible for coordinating all EU research and development activity in air traffic management. Together, the projects are offering support to the European Commission's U-space vision of ensuring safe and secure integration of drones into European airspace.

Marc Kegelaers, CEO of Unifly, the company leading the consortium, said: "U-space as a concept has been launched less than three years ago. It brings the drone industry, regulators and ANSPs together to reach a common goal: the safe integration of drones into the airspace. The ambitious SAFIR project is a clear example of how far U-space has evolved and how valuable that vision was."

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Led by Unifly, the SAFIR consortium consists of Amazon Prime Air, Aveillant, C-Astral, DronePort, Elia, Explicit, Helicus, the Port of Antwerp, Proximus, SABCA, skeyes and Tekever. https://www.commercialdroneprofessional.com/u-space-safir-consortium-hosts-droneport-open-day/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311535-Commercial+Drone+Professional+DNA+-+2019-09-07

9Sep19

Northwest UAV Flight, Analysis, & System Test (FAST) range completes first test flight September 9, 2019 Jenny Beechener UAS traffic management news

Northwest UAV's Flight, Analysis, and System Test (FAST) UAV Range in Oregon completed its inaugural flight on 4 September when a quadrotor supplied by Klein Engineering flew just under 1000 feet in a 1 nautical mile radius of airspace. The Certificate of Authorization obtained by the University of Alaska Fairbanks allows Northwest UAV to operate its own test range under the Pan-Pacific UAS Complex. The range facilitates flights up to 4,000 feet in a 5 nautical mile radius of airspace just 12 miles south of NWUAV's main campus, which offers a variety of UAV products and services. https://www.unmannedairspace.info/latest-news-and-information/northwest-uav-flight-analysis-system-test-fast-range-completes-first-test-flight/ For more information visit: www.acuasi.alaska.edu

Kansas UAS pilot program commences beyond line of sight flights September 9, 2019 Jenny Beechener UAS traffic management news

The Kansas Unmanned Aircraft Systems Integration Pilot Program team is starting several months of tests using Applied Aeronautics' fixed wing Albratross drone to conduct automated inspection of utility industry infrastructure. The Kansas Department of Transport first received permission from the Federal Aviation Administration to fly Beyond Visual Line of Sight drone operations without visual observers or ground-based radar in August 2019. Tests by the 31-member Kansas UAS IPP team will be carried out using the 22 lb maximum takeoff weight Albatross which is fitted with Iris Automation's detect-and-avoid equipment. Participants include Kansas State University Polytechnic, Kansas City-based electric utility Westar Energy and Iris Automation. https://www.unmannedairspace.info/latest-news-and-information/kansas-uas-pilot-program-commences-beyond-line-of-sight-flights/ For more information visit: www.appliedaeronautics.com

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China says its drone can hunt like Spiderman Brad Lendon, CNN Wed September 4, 2019

Drones are used in an anti-terrorism drill on August 23, 2019, in Deyang, China.

Hong Kong (CNN) Call it the Spiderman of drones.

China says it has developed a new hunter drone that can disable other drones -- or even small aircraft -- by firing a 172 square foot web at them.

"Caught by the web, the hostile drone should lose power and fall to ground," said a report on the Chinese military's English-language website. Developed by the China Aerospace Science and Industry Corporation, the drone can work alone but also can integrate with China's defense system for small, slow and low-flying targets, according to the report. The hexacopter drone can also perform surveillance and reconnaissance. https://www.cnn.com/2019/09/04/asia/china-hunter-net-drone-trnd-intl-hnk/index.html

CBP to test first truck-portable drone for monitoring border Dave Nyczepir SEP 5, 2019 FEDSCOOP

U.S. Customs and Border Protection plans to begin testing its first portable drone — small enough to launch from and land on the bed of a moving truck — in operational settings.

The Department of Homeland Security's Science and Technology Directorate awarded San Diego-based Planck Aerosystems, Inc. $200,000 to try out its autonomous, small unmanned aircraft system. CBP hopes the sUAS will serve as a portable, ruggedized detection system providing real-time situational awareness in the field through a combination of full-motion video, automatic detection and geolocation. The drone performs tasks autonomously, secures to the truck bed, features advanced computer vision and has communications interfaces that can be customized.

DHS already uses drones and other aerial technology to monitor the border, but this sUAS can be deployed on the go. https://www.fedscoop.com/cbp-portable-autonomous-drone-svip/

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Turkey grants state support for UAV development Charles Forrester, London - Jane's Defence Weekly 06 September 2019

Turkish President Recep Tayyip Erdoğan has committed to providing financial support to the country's unmanned aerial vehicle sector as part of the country's efforts to further develop its own capabilities and platform export markets.

Under Presidential Decree 1506, announced on 4 September and officially gazetted on 5 September, the Turkish government is to provide support valued at TRY600 million (USD105.5 million) for the development of the Baykar Bayraktar TB2 UAV and Akinci armed UAV, including the development and manufacture of avionics, ground control stations, and other subsystem components.

The support is to come in the form of value-added tax exemptions and returns and customs duty exemption, as well as investment contributions and insurance support. According to the decree, the support will be for a period of up to 10 years. The financial support will employ 1,122 personnel in the sector. https://www.janes.com/article/90885/turkey-grants-state-support-for-uav-development

SeekOps Inc. Secures Venture Funding to Scale Energy Sector Emissions Inspection Solutions September 7, 2019 Mapping and Surveying News

SeekOps Inc., a company which develops and fields advanced sensor technology to detect, localize, and quantify natural gas emissions through integrated drone-based systems, has secured funding from two strategic investors as part of its Series A-1 fundraising. These investors include the OGCI Climate Investments fund, and Equinor Technology Ventures, the venture arm of Norwegian multinational energy company Equinor.

SeekOps was formed in 2017 as a technology spinoff from NASA's Jet Propulsion Laboratory. The company manufactures miniature gas sensors, called SeekIR®, and integrates them onto drones to provide unique capabilities for emissions detection, localization, and quantification enabaling emissions inspection in a fraction of the time required by traditional ground surveys.

SeekOps currently offers energy sector drone services using its gas-sensing capabilities in the upstream and downstream oil and gas markets. https://uasweekly.com/2019/09/07/seekops-inc-

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secures-venture-funding-to-scale-energy-sector-emissions-inspection-solutions/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_09_09_2019&utm_term=2019-09-09

10Sep19

The Eagle has landed

September 9, 2019 *Kate Andrews | kandrews@virginiabusiness.com*

A company with close ties to Wise County in Southwest Virginia unveiled a new home-delivery drone, the Flirtey Eagle, Monday at the National Press Club.

Flirtey, a Reno, Nevada-based startup, conducted the nation's first Federal Aviation Administration-approved drone delivery in July 2015, an event that took place at Wise's Lonesome Pine Airport. The drone carried a payload of medications to the county fairgrounds, where the annual RAM free health clinic was being held. Last month, U.S. Sen. Mark Warner and other Virginia officials marked that first drone delivery with a historical marker at the airport.

When he moved to the U.S. in 2014, Sweeny, an Australian native, set a goal of carrying out the first FAA-approved drone delivery. "People told us at the time it was impossible," he says, but when shopping around for locations that would embrace the idea, Wise stood out for its enthusiasm. "From that point in time, we had that 'Kitty Hawk moment' in Wise County."

Sweeny expects the Eagle to deliver packages, including medications, within less than 10 minutes of an order being placed. Drone delivery would cost customers $5 to $10, about the same cost as the last mile of delivery by car or truck, which is the most expensive leg of a delivery, Sweeny says. However, the time between order and delivery would be much faster than it takes the pizza guy or the mail carrier. http://www.virginiabusiness.com/news/article/the-eagle-has-landed

FAA UTM Project: Decentralized UAS Traffic Management Demonstration

Miriam McNabb September 09, 2019 *Originally published on Anra Technologies, by Brent Klavon.*

This summer, the FAA held their Unmanned Aircraft System Traffic Management demonstration at three of its designated UAS test sites. Called the UAS Pilot Program (UPP), ANRA supported these demonstrations to further develop low altitude airspace management at the Mid-Atlantic Aviation Partnership facility in Blacksburg, VA. and the

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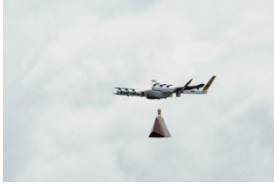
Nevada Institute for Autonomous Systems in Las Vegas, NV.

The FAA provided specific guidance for these demonstrations and ANRA worked alongside partners including Wing, AiRXOS a GE Company, AirMap and Uber to develop, demonstrate, and provide decentralized and federated services that will support implementation of initial UTM operations. This enterprise service will support sharing intent and situational awareness information among participants.



Tests included flying drones beyond visual line-of-sight (BVLOS), implementing dynamic restrictions and operating multiple drones within close proximity of each other. This required the drones to share flight path information before and during its flight. It also required providing the drone pilots critical information such as weather and controlled airspace locations. ANRA's UTM platform (DroneUSS™) provided that capability so the drone pilots could avoid operating in the same airspace as another drone, or avoid airspace that had a restriction such as a life-flight helicopter. https://dronelife.com/2019/09/09/decentralized-uas-traffic-management-demonstration/

KFC is using drones to deliver its chicken in China Josh Spires Sep. 7th 2019

Fast-food giant KFC is delivering its finger-licking good chicken by an autonomous drone system. KFC has teamed up with Chinese tech company, Antwork to bring drone delivery to the people of China. Drone delivery in China is nothing new with various companies already delivering food.

The video shared on LinkedIn originally appeared on TikTok of a female KFC employee placing food into a drone station where a drone then appears out of the top and flies off.

Previously, Antwork worked with Starbucks delivering coffee to more than 10,000 people while completing around 9,000 drone deliveries. Antwork also worked with China Post to lower delivery costs and shorten delivery times to just 15 minutes. While also delivering medical supplies from Zhejiang Provincial Blood Center to affiliated hospitals.

From the video, we can see a drone station with a slide-out box where the food is placed into it by the employee. The box then slides into the drone station where it is automatically placed in the drone. The drone then flies off to its drop off location, where we assume the customer will be waiting for their food. https://dronedj.com/2019/09/07/kfc-drones-deliver-chicken-china/

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MSU research group uses drones to examine climate trends in Alaska Haye Kesteloo Sep. 8th 2019

A team of researchers from Montana State University's College of Agriculture brought drones to examine climate trends to Fairbanks, Alaska. The research group will use data from the drones in combination with ground measurements and data from other sources to improve their understanding of how thawing permafrost contributes to boreal greenhouse gas emissions.

…as permafrost thaws it creates wetlands which emit methane, a greenhouse gas up to 30 times more potent than carbon dioxide. Because variables like vegetation growth and soil temperature can vary widely over the boreal and sub-Arctic terrain of Alaska, attempting to extrapolate data drawn from fine-scale drone images can lead to inaccurate conclusions about trends over larger areas. Part of the ongoing research will include combining data from the team's drones and ground measurements with satellite data and data from a NASA project in the Fairbanks area that uses aerial imaging to collect images from an altitude higher than drones but lower than satellites. Hopefully this will improve the accuracy of those extrapolations. https://dronedj.com/2019/09/08/drones-to-examine-climate-trends-alaska/#more-19186

Stratospheric Solar-Powered UAV Receives NASA Approval for Test Flight 10 Sep 2019

HAPSMobile, a developer of high-altitude pseudo-satellite technologies, has announced that it has received a limited flight release from NASA's Armstrong Flight Research Center (AFRC) Airworthiness and Flight Safety Review Board to conduct a test flight of the HAWK30 solar-powered unmanned aerial vehicle in restricted airspace.

AFRC will be responsible for ground and range safety during the flight tests. HAPSMobile, a joint venture between AeroVironment and Japanese telecoms company Softbank, aims to use the HAWK30 as a stratospheric telecommunications platform.

Ground tests of the HAWK30 were previously carried out at AFRC's facilities in California. Following lower-altitude test flights and other preparations, HAPSMobile will accelerate

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preparations to perform stratospheric test flights at the Hawaiian island of Lanai.
https://www.unmannedsystemstechnology.com/category/news/ugv-news/

Do You Trust Your Roofer? New Partnership Sets the Standard for Drone Based Inspections Miriam McNabb September 10, 2019

MENLO PARK, Calif., Sept. 10, 2019—Kespry today announced it has partnered with XAP 360, a nationwide network of certified roofing contractors, to deliver a new country-wide drone-based residential roofing inspection program. The new program is designed to create the most transparent and accurate roof inspection experience possible for homeowners, and help ensure claims payouts occur rapidly.

Historically, home roofing inspections have often been a frustrating experience. Many homeowners have stories to tell about unethical or unlicensed roofers that provide unsubstantiated damage claims. These roofers have also frustrated insurers tired of dealing with questionable assessments who then have to conduct their own secondary inspections for verification.

XAP 360 and Kespry are working together to regain the trust of residential property owners by establishing verifiable, credible standards for residential roof inspections involving artificial intelligence and machine learning analytics. Both companies are engaged with top insurers who value the transparency and accuracy they deliver. In addition, Kespry and XAP 360 are cutting time and costs for inspection by 50-75%. Manual inspections that used to take 90 minutes are being replaced by an autonomous drone-based solution that takes as little as 10 minutes to complete the same work. https://dronelife.com/2019/09/10/do-you-trust-your-roofer-new-partnership-sets-the-standard-for-drone-based-inspections/

FlyLogix launches North Sea drone initiative with oil and gas multinational

APPLICATION BUSINESS EUROPE HEADLINE NEWS UK ALEX DOUGLAS SEPTEMBER 10, 2019

FlyLogix has announced the launch of a North Sea drone initiative with the oil and gas multinational, Total.

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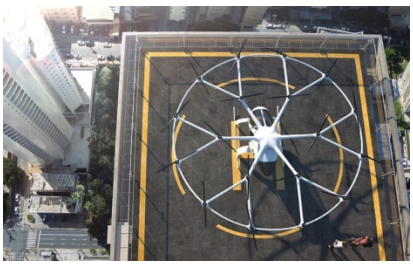
The project aims to overcome the challenges associated with drone inspection activities in the North Sea and allow commercial operators easier access to controlled airspace in the UK for BVLOS flight.

The four-partner collaboration is developing and testing a concept for drone operations that will allow UAV operators to react within hours of an inspection request and enable routine BVLOS in the North Sea. It involves extensive consultation with stakeholders and aims to establish a leading example of safe and reliable drone operations alongside existing users in controlled airspace.

Charles Tavner, executive chairman of FlyLogix, said: "We are delighted to partner with Total, NATS and OGTC to enable routine beyond the horizon unmanned aircraft operations in the North Sea. This project enables us to conduct daily inspections and emissions measurement without the cost and risk of sending deploying personnel offshore."
https://www.commercialdroneprofessional.com/flylogix-launches-north-sea-drone-initiative-with-oil-and-gas-multinational/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311722-Commercial+Drone+Professional+DNA+-+2019-09-10

Volocopter signs off Series C funding round in excess of £45m APPLICATION BUSINESS EUROPE HEADLINE NEWS ALEX DOUGLAS SEPTEMBER 9, 2019



Led by Zhejiang Geely Holding Group

The new funds will be used to bring the VoloCity aircraft to commercial launch within the next three years. The company remains in discussions with additional investors for a second closing around year-end. The first closing will increase the total capital that Volocopter has raised to €85m.

Florian Reuter, CEO of Volocopter, said: "Urban mobility needs to evolve in the next few years to meet rising demand. With our Volocopter air taxis, we are adding a new level of mobility in the skies. This funding round is allowing us to take great strides towards bringing Urban Air Mobility to life while being respectful of our shareholder's money."
https://www.commercialdroneprofessional.com/volocopter-signs-off-series-c-funding-round-in-excess-of-45m/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311624-Commercial+Drone+Professional+DNA+-+2019-09-09

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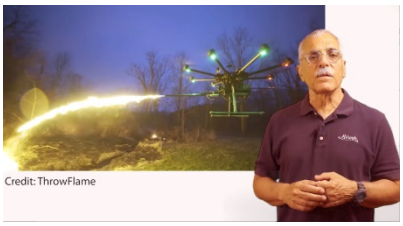
Admit It: You Want a Flamethrower Drone Paul Bertorelli September 8, 2019



Well, maybe you don't. But the fact that these exist gives the FAA regulatory heartburn nearly as hot as the drone's flaming stream of gasoline.

See the video https://www.avweb.com/multimedia/votw/admit-it-you-want-a-flamethrower-drone/?MailingID=156&utm_source=ActiveCampaign&utm_medium=email&utm_content=Bahamas+TFR%2C+Boeing+MAX+Pilot+Takes+The+Fifth&utm_campaign=Bahamas+TFR%2C+Boeing+MAX+Pilot+Takes+The+Fifth-Monday%2C+Sepember+9%2C+2019

12Sep19

Relativity signs launch agreement with Momentus Jeff Foust September 11, 2019

PARIS — Small launch vehicle developer Relativity Space announced Sept. 11 a contract with Momentus to carry a set of small satellites to geostationary orbit.

The launch agreement, announced during Euroconsult's World Satellite Business Week here, covers one launch of Relativity's Terran 1 rocket in 2021 with an option for up to five additional launches. The companies did not disclose the terms of the agreement, but Relativity offers the Terran 1 for a list price of $10 million.

The 2021 launch will fly Momentus' Vigoride Extended tug, capable of carrying up to 350 kilograms of satellites. The tug will transport the satellites from an initial low Earth orbit to geostationary orbit using its water plasma thruster technology.

Momentus is developing a range of tugs, starting with the Vigoride, which can accommodate payloads of up to 250 kilograms. Three Vigoride missions are planned for 2020, said Negar Feher, vice president of product and business development at Momentus, at the conference Sept. 11. Two of those will be on launches to sun-synchronous orbit and one will be deployed from the International Space Station. https://spacenews.com/relativity-signs-launch-agreement-with-momentus/

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Police warn Heathrow activists against Friday drone disruption plan Damien Gayle 11 Sep 2019

Heathrow Pause, a splinter of Extinction Rebellion, vowed to shut down the airport on Friday morning by flying small drones within the 5km exclusion zone.

The police commander in charge of policing drone protests intended to shut down Heathrow airport has said his officers will take any opportunity to pre-emptively stop activists from causing disruption to flights.

Activists from Heathrow Pause, a splinter of the environmental protest group Extinction Rebellion, have vowed to shut down the London airport on Friday morning by flying small drones within the 5km exclusion zone.

Their action is specifically against plans for a third runway at the airport, the UK's busiest and the seventh-busiest in the world. They say the protest has been scrupulously planned to ensure no one will be put at risk.

Protesters taking part in the action "can expect to be arrested" and police would be looking at "all the powers and options and tactics available to us to prevent disruption".
https://www.theguardian.com/uk-news/2019/sep/11/heathrow-protesters-warned-drone-disruption-plan-police

BP launches drones to monitor methane emissions Haye Kesteloo Sep. 10th 2019

Today, BP said that the company is launching a new system of gas cloud imaging drones to monitor and help reduce methane emissions.

The British energy major said it will deploy a system of continuous measurement of methane emissions for all of its new major projects worldwide and that it will use frequent drone flights to detect methane emissions.

The continuous measurement on new projects, including technology called gas cloud imaging, has been pilot tested and installed at BP's giant natural gas Khazzan field in Oman. With all these new technologies, inspections that used to take seven days will now only take 30 minutes, BP said.

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While BP very recently rolled out drone inspections at shale wells, BP also just successfully tested drone monitoring at its Clair oilfield in the North Sea.

Using advanced sensor technology originally designed by NASA for the Mars Curiosity Rover with a fixed-wing drone, BP said it broke the UK's record for the longest commercial drone flight. The specialty drone system will monitor all of BP's North Sea sites in 2020. BP said the drone flights identity the source and size of methane leaks and issue work orders to fix them. https://dronedj.com/2019/09/10/bp-launches-drones-to-monitor-methane-emissions/#more-19266

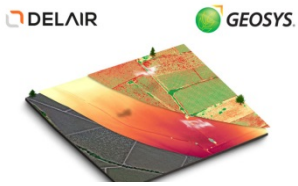
Drone Software Company vHive Lands New Investment Betsy Lillian September 11, 2019

vHive, a software solution that enables enterprises to digitize their field assets and operations using autonomous drone "hives," has announced a $5.5 million investment led by Octopus Ventures, with repeat participation from StageOne Ventures and private investors. This funding will support vHive's mission to expand its customer base and accelerate growth.

The vHive platform orchestrates multiple autonomous drones using off-the-shelf hardware to deliver a rich and accurate overview of field assets. Uniquely, it does this without requiring expert pilots and in a workflow which can be used across the enterprise. We believe that their cutting-edge technology will allow vHive to maintain its leadership in this domain and further capitalize on opportunities with some of the world's largest enterprises."

Since its seed investment, vHive says it has attracted Fortune 500 companies that use its software platform for inspection across a variety of industries: cell towers, construction, insurance and rail. https://unmanned-aerial.com/drone-software-company-vhive-lands-new-investment?utm_medium=email&utm_source=LNH+09-12-2019&utm_campaign=UAO+Latest+News+Headlines

Delair partners with Geosys strategic partnership for precision agriculture offering AGRICULTURE APPLICATION INTERNATIONAL NEWS ALEX DOUGLAS SEPTEMBER 11, 2019



Initially, the two companies will offer an integrated solution to help ag professionals with variable rate fertilization management.

France will be the first market to benefit from the enhanced service through the Cerelia platform – a precision agriculture platform

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offered by Geosys in France to more than 40 coops and Ag services providers.

Matthieu Hyrien, vice president of business development at Geosys, commented: "The combination of Delair's flexible and high-performance visual intelligence platform with our powerful analysis and decision support tools can have a significant impact on the performance and profitability of agriculture operations." https://www.commercialdroneprofessional.com/delair-partners-with-geosys-strategic-partnership-for-precision-agriculture-offering/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311824-Commercial+Drone+Professional+DNA+-+2019-09-11

Growing drone use is prompting commercial customers to examine future applications BUSINESS FINANCIAL INTERNATIONAL NEWS UK ALEX DOUGLAS SEPTEMBER 11, 2019

A report published by CompTIA has found that as commercial drone services take on an expanding role in the business world, companies are examining how best to use unmanned vehicle systems to deliver even more value and productivity.

Findings suggest that there is significant untapped market potential for drone manufacturers, drone solution providers managed service providers, distributors, operators, and others in the drone ecosystem.

The report details how about one-third of current business customers report managing drone technology internally, while 27 percent rely on external DSPs or related firms. The remaining 39 percent utilize a hybrid approach of internal and external management.

Just under one-half of the companies surveyed said they expect to continue working with their current DSP or technology partner over the next two to three years. But one-third expect to transition to a more capable firm; one with greater competencies and expertise in areas such as data and analytics, broad-based information technology, cybersecurity, software development, and managed services.

Discussing the next wave of customers, the report described how potential customers cite budget constraints as their top hurdle, followed by a lack of internal expertise and challenges in making a business case for drone investments.
https://www.commercialdroneprofessional.com/growing-drone-use-is-prompting-commercial-customers-to-examine-future-applications-study-finds/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311824-Commercial+Drone+Professional+DNA+-+2019-09-11

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BT launches counter-drone solution with DroneShield APPLICATION BUSINESS COUNTER-DRONE HEADLINE NEWS ALEX DOUGLAS SEPTEMBER 11, 2019

The new counter drone solution, provided by BT's Enterprise unit and in partnership with DroneShield, will give organizations the capability to detect, track and identify drones which breach airspace and site limits, helping security staff respond to threats quickly and pro-actively.

Where lawful, the drone detection service can also extend to provide safe and effective countermeasures once a drone threat has been detected.

Powered by multi-sensor detection technology, an enterprise-grade network and a real-time alert system, BT's counter drone solution will help organizations determine if a drone poses any risk. It will provide an operating range of up to 5km and 360-degree detection coverage, the BT system will continuously monitor the surroundings and provide early warnings so security teams are equipped to identify, assess and respond to threats.
https://www.commercialdroneprofessional.com/bt-launches-counter-drone-solution-with-droneshield/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-311824-Commercial+Drone+Professional+DNA+-+2019-09-11

The Silent Arrow drone delivers goods to troops and firefighters Josh Spires Sep. 12, 2019

Yates Electrospace Corporation has released its Silent Arrow tactical resupply drone made to carry over 1,600 pounds to soldiers and first responders. The drone folds into itself for easy transport and a minimum set-up time required.

Silent Arrow is a new take on the delivery drone by replacing the common rotors with a duo glider with full-length elevons on all wings. Since there are no propellers, there is no sound, making the Silent Arrow virtually undetectable. The drone is impressively less than half the cost of current solutions and fits inside its 8-foot fuselage for easy transportation.

The Silent Arrow is designed to be utilized by ground troops that are unreachable by current troop-support methods, along with keeping first responders safe and out of harm's way.

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The drone has impressive specs with a range of 35 nautical miles, max cargo weight of 1,631 pounds, and a landing accuracy of 100 meters. Silent Arrow is fully autonomous using a modified Pixhawk Cube with built-in GPS, LiDAR, and an FPV camera.

A successful test flight shows the Silent Arrow being lifted by a small helicopter in its folded configuration where it is then deployed. The Silent Arrow spreads its wings and begins to glide to its target location almost silently. https://dronedj.com/2019/09/12/silent-arrow-drone-delivers-goods-troops-firefighters/

13Sep19

Region's growing alternative energy opens new market for drone company

Mella McEwen, MRT.com/Midland Reporter-Telegram September 12, 2019

The rise of wind and solar farms is opening up new markets for drone companies, such as Midland's Thermal Cam USA. Drones are increasingly dotting Permian Basin skies, looking for methane and pipeline leaks and scouring both proposed pipeline routes and well locations.

The rise of wind and solar farms is opening up new markets for drone companies, such as Midland's Thermal Cam USA.

"We can survey major turbine blades, take digital photographs and map them into a program that tells the severity of damage, the location of the damage," said Peter Walper, Thermal Cam's chief executive officer. "We can do seven or eight turbines a day and fly a drone to where it looks within an arm's length. "We can do the same on solar panels and transmission lines," Walper said. "We can do digital photos of the damage or thermal photos of transformer damage."

With its high-end cameras – digital, thermal, OGI, mini-laser, NDVI, orthomosaic and volumetric -- Walper said his company can serve multiple markets, among them solar panel inspection, wind turbine inspection, right-of-way, facility mapping, gas facility mapping, inspecting pipelines for methane leaks and frac sand pile inspection to measure the volumes of sand for investors. The company has formed a partnership with ONDAKA in San Francisco that allows it to use augmented 3-D virtual reality analysis.

"We are now looking at a drone that is gas-powered that can fly hundreds of miles, stay in the air for hours and collect RGB, thermal, methane and NDVI data," he said.

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https://www.mrt.com/business/oil/article/Region-s-growing-alternative-energy-opens-new-14434794.php#photo-18252311

AeroVironment Unveils VAPOR All-Electric Helicopter UAS at DSEI September 10, 2019 News

AeroVironment, Inc. today announced the availability of its VAPOR all-electric Helicopter UAS at Defence & Security Equipment International, the world's largest land, sea and air defense and security exhibition.

Fully automatic flight operation allows VAPOR to complete missions without operator intervention, with dynamic re-tasking to ensure safety, reliability and adaptable mission execution. With a modular payload bay, and up to 10 lbs.of usable payload capacity, it is multi-mission capable with access to a variety of sensors and third-party payloads including gimbaled EO/IR, survey grade PPK mapping, LiDAR and hyperspectral sensors, and an available Drop/Delivery Mechanism. https://uasweekly.com/2019/09/10/aerovironment-unveils-vapor-all-electric-helicopter-uas-at-dsei/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_09_10_2019&utm_term=2019-09-13

Drones Document Widespread Damage and Devastation Across Northern Bahamas September 11, 2019 News

As the death toll continues to climb in the aftermath of Hurricane Dorian's September 1 landfall on the Abaco Islands in The Bahamas, professional All Hazards and emergency management teams from the private and public sectors have come together to use aerial drones combined with cutting-edge rapid mapping technology to assess damage and offer situational awareness to local Bahamian government officials.

Members of the Airborne International Response Team, a Miami-based non-profit organization that provides unmanned aircraft system capabilities for disaster response, teamed up with members of the Southeast Florida Region 7 All-Hazards Incident Management Team, a professional All Hazards disaster and emergency management team in Southeast Florida, to form a joint-reconnaissance team to survey damage across the hardest hit areas of the Grand Bahama and the Abaco Islands in the Northern Bahamas. "The combination of massive storm

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surge and fierce Category 5 winds was more than most structures could bear, no matter what code they were built under."

At its peak, Dorian's sustained winds were marked at 185 miles-per-hour, gusting up to 220mph, according to the National Hurricane Center in Miami. The storm surge over some parts of The Bahamas is projected to have been higher than 20-feet, according to local Bahamian officials.

"The debris field at Marsh Harbor was unlike anything I have ever seen," according to Christopher Todd, Executive Director, AIRT. "By combining the drone with the latest rapid mapping technology, we were able to produce a highly accurate and incredibly detailed digital map of the hardest hit areas of Marsh Harbor and other the towns."
https://uasweekly.com/2019/09/11/drones-document-widespread-damage-and-devastation-across-northern-bahamas/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_daily_newsletter_09_11_2019&utm_term=2019-09-11