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COVID-19 DRONE DISINFECTING SERVICES





Lyfted Media is now offering drone disinfectant spraying services for arenas, stadiums, and large indoor gathering spaces. COVID 19 has changed the way we gather in large spaces for sports and live events. Spray enabled drones provide an effective and efficient way to disinfect large venues allowing them to reopen safely to the public.

Virginia Beach: https://www.lyftedmedia.com/drone-disinfectant-sprayer

DJI M210 series welcomes new smart parachute rescue system NEW PRODUCTS TECHNOLOGY SAM LEWIS JUNE 12, 2020



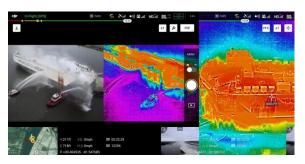
Drone Rescue Systems GmbH will introduce the second smart parachute rescue system for a DJI drone, this time for the Matrice 210. DRS explained in a statement that they designed the product to have a minimal effect on flight time, range and payload capacity.

"With this new product, we are securing commercial drone applications as well as police and fire brigade operations, since the DJI M210 V2 drone is used for many of these applications," reported Andreas Ploier, CEO and co-founder. "Investments for these drones are sometimes quite high. Therefore, in the event of a crash, special attention should be paid to the protection of the drone as well as the payload." He promised a simple installation process for the product. <a href="https://www.commercialdroneprofessional.com/dji-m210-series-welcomes-new-smart-parachute-rescue-system/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-330914-Commercial+Drone+Professional+DNA+-+2020-06-12

Drone equipped with thermal camera helps put out ship fire Josh Spires Jun. 11th 2020

A <u>drone</u> with a thermal camera was used by the Jacksonville <u>Fire and Rescue Department</u> to direct fire crews to the hottest areas of a burning ship to help maintain its structural integrity. The Jacksonville Fire and Rescue Department posted the images on its Twitter account.





The M/V Hoegh Xiamen, used to transport cars and other machinery around the world, caught fire last Thursday after the ship was loaded. All crew managed to escape without injury. The fire crew fighting the fires, however, was injured by an explosion while putting the fire out, with three remaining in hospital.

The fire is said to have started on the seventh deck of the ship where cars were being stored. The firefighters acted quickly, closing the cargo doors of the ship to starve the fire of oxygen. The firefighters then focused on cooling the exterior of the boat. They have been able to accurately focus on various hotspots on the exterior of the ship thanks to the help of a DJI drone equipped with a thermal camera. https://dronedj.com/2020/06/11/drone-equipped-with-thermal-camera-helps-put-out-ship-fire/#more-30164

Drones take down a \$628,000 weed operation in the UK Josh Spires Jun. 12th 2020



The West Midlands <u>Police</u>'s Walsall Taskforce has taken down a weed operation running out of an unused pub in Willenhall town center last week, seeing more than \$600,000 worth of weed during the raid. The task force used a drone with a thermal camera to see hotspots within the building.

The thermally equipped drone was able to see the heat produced by the high-power lights used to grow marijuana, essentially giving the police the ability to see through the walls to get a better idea of what was going on inside. The <u>cannabis operation</u> was said to have been spread out over two floors of what was once a pub. On Tuesday, June 9, police moved into the Castle Pub, seizing all the marijuana in the facility along with the equipment used to grow it.

The taskforce took to <u>social media</u> to share that the Walsall Taskforce had a productive afternoon discovering and taking a down a huge cannabis factory. The force counted nearly 600 cannabis plants with an estimated street value of £500,000 (\$628,000). https://dronedj.com/2020/06/12/drones-takedown-a-628000-weed-operation-in-the-uk/



Swoop Aero triples drone fleet size in Malawi amid COVID-19 Josh Spires Jun. 12th 2020



The increase in the number of drones will allow for 150 flights per day to be conducted if required. The drones will be used to distribute COVID-19 medical supplies and personal protective equipment.

Australian aeromedical logistics company <u>Swoop Aero</u> has been working in Malawi with its drones delivering medical equipment, samples, and emergency medicine to over 650,000 people in the Nsanje and Chikwawa districts in Southern Malawi.

The drones in Malawi, Africa, are currently flown by a team back in Australia with the team on the ground being a full Malawian workforce. Swoop Aero plan on training and employing a local team of 20 to maintain and pilot the drones locally in Malawi.

https://dronedj.com/2020/06/12/swoop-aero-triples-drone-fleet-size-malawi-amid-covid-19/#more-30232

Don't stop them now: Rocket Lab launches 5 satellites to orbit Mike Wall 12June20

A two-stage <u>Electron booster</u> rose off the pad at Rocket Lab's New Zealand launch site at 1:12 a.m. EST (0512 GMT; 5:12 p.m. local New Zealand time), carrying five satellites aloft, including three payloads for the U.S. National Reconnaissance Office (NRO). All five satellites were deployed successfully into their designated orbits, Rocket Lab representatives announced an hour after liftoff.



The three NRO payloads rode to space today via the agency's Rapid Acquisition of a Small Rocket program, which "allows the NRO to explore new launch opportunities that provide a streamlined, commercial approach for getting small satellites into space, as well as provide those working in the small satellite community with timely and cost-effective access to

space," Rocket Lab representatives wrote in a mission description.

Also launching on "Don't Stop Me Now" was a <u>cubesat</u> called ANDESITE (short for "Ad-Hoc Network Demonstration for Extended Satellite-Based Inquiry and Other Team Endeavors"), which was built by students and faculty at Boston University.



ANDESITE, which launched as part of NASA's Cubesat Launch Initiative, will study Earth's magnetic field and space weather. The small satellite will do this using its onboard instruments and eight ultra-tiny "picosatellites" that it will deploy in the near future.

https://www.space.com/rocket-lab-electron-launch-spy-

satellites.html?utm_source=Selligent&utm_medium=email&utm_campaign=9155&utm_content=SDC_Newsletter+&utm_term=3417707&m_i=Za5ZKtqnd_ZP6MgSTgRERMak2p_BgKDO_2R4EGkMSbAX%2B_gOROQV5EOnzN4Zt6rPJbwPSb0DEGULn_TU_PK0ng1x2DX30FLLPmO9D7ZZZc

SpaceX launches 58 Starlink satellites and 3 Planet SkySats, nails rocket landing Amy Thompson June 13, 2020



CAPE CANAVERAL, Fla. — It was a mostly clear morning, with just a few clouds above the launch pad at Space Launch Complex 40 at Cape Canaveral Air Force Station in Florida at liftoff. Onlookers were treated to an awesome view in the predawn sky — the glow from the rocket's engines were visible well into the flight as it launched at 5:21 a.m. The exhaust from the rocket was

illuminated by the sun, which was just below the horizon. The resulting cloud appeared as a nebula hanging in the sky.

The launch is the second Starlink mission so far this month, with one more on the schedule for no earlier than June 22. SpaceX is taking advantage of its fleet of flight-proven Falcon 9 boosters, with plans of launching a record four times in June.

Because the sky was so clear, the landing burn — which enables the rocket to safely land on the drone ship — was clearly visible from the launch site, roughly 350 miles away.

For its third mission, the booster known as B1059 carried 58 Starlink satellites into space, bringing to 540 the number of total Starlink craft launched to date. SpaceX will need at least 800 Starlink craft on orbit to begin providing moderate internet coverage to customers in the United States and Canada. The service will roll out to the rest of the world sometime after that. The initial Starlink mega-constellation is expected to include about 12,000 satellites. <a href="https://www.space.com/spacex-starlink-8-planet-satellite-launch-rocket-landing-success.html?utm_source=Selligent&utm_medium=email&utm_campaign=9155&utm_content=SDC_Newsletter+&utm_term=3417707&m_i=dStw_T12ZE7VmXakeqwXDFIUrAsJrT%2Bm2r_o472a8Rt%2Bk0f3e_83ZHAu0A7wnWkQlHqso7beEh6Fz%2BlyFHQp9WxsNvaLbr5zrXu0oa6ddH



14Jun20

Millions Turn Out to Protest and the Government Watches from Above JASON PALADINO ANALYSIS JUNE 12, 2020



An unmanned aircraft circled Minneapolis for nearly two hours on May 29 as masses of people below protested the police killing of George Floyd. The drone, operated by Customs and Border Protection, flew at 20,000 feet in a hexagon shape, nearly invisible to those on the ground.

reported by the Project On Government Oversight (POGO)—is part of a program the Department of Homeland Security's internal watchdog has repeatedly criticized for being wasteful and ineffective. The watchdog has also found that the agency has failed to safeguard

surveillance video and photographic data collected through its drone program.

POGO used open-source flight-tracking tools to spot the drone over Minneapolis. A group of 35 members of Congress sent a letter demanding that Customs and Border Protection, the FBI, the National Guard and the Drug Enforcement Administration "cease surveilling peaceful protests immediately and permanently." The letter also refers to CBP drone surveillance over San Antonio and Detroit.

CBP began flying the aircraft in 2005, as part of an effort to "identify and intercept potential terrorists and illegal cross-border activity," according to an agency **factsheet** on the program. https://www.pogo.org/analysis/2020/06/millions-turn-out-to-protest-and-the-government-watchesfrom-above/

15Jun20

RAAF and UNSW Canberra launch Cube satellite into space 15 JUNE 2020 NEWS The



University of New South Wales Canberra and the Royal Australian Air Force have launched a miniature satellite into space. Known as the M2 Pathfinder satellite, the CubeSat represents a major step in the development of Australian Defence Forces space systems. It will be used to test radio communications technologies. The small satellite is approximately the size of a loaf of bread. This type of capability will



allow low-cost testing of high-technology abilities in space.

In the following months, UNSW Canberra will conduct a series of communications tests with the M2 Pathfinder satellite. Australian Minister for Defence Linda Reynolds said: "The collaboration between UNSW Canberra and Airforce allows small satellites to be used for evaluating technologies on more complex space systems, such as communications or earth observation satellites. https://www.airforce-technology.com/news/raaf-unsw-canberra-cube-satellite/

Trump aims to sidestep another arms pact to sell more U.S. drones JUNE 12, 2020 Mike Stone



WASHINGTON (Reuters) - The Trump administration plans to reinterpret a Cold War-era arms agreement between 34 nations with the goal of allowing U.S. defense contractors to sell more American-made drones to a wide array of

nations. The policy change could open up sales of armed U.S. drones to less stable governments such as Jordan and the United Arab Emirates that in the past have been forbidden from buying them under the 33-year-old Missile Technology Control Regime. It could also undermine longstanding compliance from countries such as Russia.

Reinterpreting the MTCR is part of a broader Trump administration effort to sell more weapons overseas. It has overhauled https://www.reuters.com/article/us-usa-arms-trump-exclusive/exclusive-trump-aims-to-sidestep-another-arms-pact-to-sell-more-us-drones-idUSKBN23J1HS

Western North Dakota likely to get tower for long drone flights RENEE JEAN Williston Herald Jun 14, 2020



WILLISTON -- North Dakota has selected three giants in the aviation industry to put together its statewide Beyond Visual Line of Sight network for drones. The west, meanwhile, is the likely recipient of a



state tower for the \$28 million plan to build a statewide network for those drone flights.

The three system integrators selected to put together the state's plan are Collins Aerospace, a Raytheon Technologies company; L3Harris Technologies; and Thales USA. Their mission will be to drive approvals from the Federal Aviation Administration and the Federal Communications Commission, as well as support standards, policies and procedures for safe and efficient integration of unmanned aircraft systems into the National Airspace System.

"With this partnership in place, North Dakota is well-positioned to create and implement what is really the next level in the UAS industry," said Nicholas Flom, executive director of the Northern Plains UAS Test Site, which administers the statewide UAS Beyond Visual Line of Sight network. "Nobody else is doing what North Dakota is doing."

North Dakota has already put up one tower in Grand Forks. Subsequently, the Legislature approved an additional \$28 million to create a statewide UAS network. Initial deployment of the statewide plan is going to be in western North Dakota.

https://bismarcktribune.com/news/state-and-regional/western-north-dakota-likely-to-get-tower-for-long-drone-flights/article 50ae97f9-731a-5551-86d0-f63015f5f985.html

Satellite Connectivity to Enable New 'Pop-Up UTM' Service for Drones Woodrow Bellamy III June 12, 2020 Send Feedback @WBellamyIIIAC



Inmarsat and Altitude Angel are collaborating on a new approach to surveillance that they describe as 'Pop-Up UTM' (Unmanned Traffic Management), which could serve as a catalyst for enabling more beyond visual line of sight operations for commercial and civilian drones in the near future.

Initially focusing on emergency services for drone operators that need satellite connectivity in human relief or aid related efforts, the concept will primarily leverage Inmarsat's L-band satellite safety services networks to enable command and control of multiple drones at once. The collaboration is enabled by the use of drones equipped with small L-band antennas that use the same air traffic control frequencies as commercial airliners.

Once drone operators file their flight plan with Altitude Angel, the flight plan is then submitted to the responsible air navigation service provider (ANSP) for approval. That would provide the type of strategic and tactical de-confliction between drone operators and manned aircraft that is necessary to enable more BVLOS drone operations, Spoucer said. The next steps are to start



modifying individual drones with the necessary antennas and satellite data units. https://www.aviationtoday.com/2020/06/12/satellite-connectivity-enable-new-pop-utm-service-drones/

Inventory drones strengthen Post-COVID supply chain Jason Reagan June 12, 2020



California-based startup <u>FlytBase</u> recently partnered with <u>Romark Logistics</u> to deploy inventory drones at warehouses and distribution centers amid coronavirus disruption.

As a provider of third-party logistics ecosystems, Romark had already invested in inventory-management tech such as very narrow aisle racking, swing-reach trucks, robots and cloud-connected information systems. Company officials say adding inventory drones to the mix helps fill in the gaps left by worker loss amid the COVID-19 pandemic.

Romark signed on with Flytbase last year after evaluating inventory drones for automated scans of pallet barcodes at its distribution center in Lancaster, Texas. Since frequent inventory counts consumed valuable resources and equipment, yet were necessary to meet customer expectations, Romark wanted to invest in inventory drones that could autonomously scan front-facing barcodes across all the racking at Lancaster.

Romark deployed <u>FlytWare</u>, a solution that replaces manual inventory cycle counts for large warehouse or distribution centers, saving time and money with intelligent, automation software working behind the scenes. By using autonomous inventory drones, companies can also mitigate COVID-19 health risks for warehouse workers who would otherwise have to work closer together with manual scans. https://dronelife.com/2020/06/12/inventory-drones-strengthen-post-covid-supply-chain/

VIDEO: Spanish drone company tests emergency road breakdown delivery service APPLICATION DELIVERY SAM LEWIS JUNE 15, 2020



Quaternium is a long-range drone specialist headquartered in Valencia, Spain. Its latest venture sees its HYBRiX 2.1 drone delivering a spare car wheel to a driver with a puncture. If the problem is one the driver can fix themselves, given the right



parts, then the need for a delivery driver and mechanic is removed entirely. The video can be viewed below.

Its drones have been used for everything from first response work and surveillance to mining and agriculture. https://www.commercialdroneprofessional.com/video-spanish-drone-company-tests-emergency-road-breakdown-delivery-

service/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-330978-Commercial+Drone+Professional+DNA+-+2020-06-15

HAPSMobile Will Develop High Altitude Platform in New Mexico June 15, 2020 News



HAPSMobile Inc., a subsidiary of Japan's telecommunications operator SoftBank Corp. has chosen New Mexico's Spaceport America for test operations and development of a specialized communications platform designed to provide internet connectivity to hard-to-reach places around the globe, Economic

Development Cabinet Secretary Alicia J. Keyes announced today.

The company, along with its minority owner and aircraft development partner AeroVironment, Inc. (NASDAQ: AVAV), is working on development of the unmanned solar-powered High Altitude Platform Station. The stratospheric telecommunications platform, a so-called cell-tower in the sky, is designed to provide better communications to under-served areas, including rural communities. A lease for development and flight testing at Spaceport America was signed in March, and an investment into the site is planned.

The work at Spaceport America will help HAPSMobile and AeroVironment obtain government certification for the unmanned aircraft system, which has 260-foot wingspan and is designed to circle in the stratosphere for extended periods of time while carrying a telecommunications payload. It is expected to operate at an altitude of 65,000 feet above sea level. <a href="https://uasweekly.com/2020/06/15/hapsmobile-will-develop-high-altitude-platform-in-new-mexico/?utm_source=rss&utm_medium=rss&utm_campaign=hapsmobile-will-develop-high-altitude-platform-in-new-mexico&utm_term=2020-06-15



16Jun20

Honeywell Focuses New Unit on UAS and UAM Sectors Charles Alcock June 15, 2020



Honeywell is supporting eVTOL aircraft developer Vertical Aerospace with flight control technology.

Honeywell is forming a new Unmanned Aerial Systems business unit to advance the aerospace group's ambitions in

the fast-emerging UAS and urban air mobility sectors. The new division, announced today, will have its own engineering and sales resources and will offer aircraft systems, including avionics, hybrid and electric propulsion, thermal management, air traffic management, and ground services such as predictive maintenance.

The new Honeywell division will have a strong focus on developing software to advance key technological needs for UAS and UAM aircraft. These include fly-by-wire autopilot to ensure aircraft stability, detect-and-avoid algorithms to automatically fly an aircraft around oncoming traffic, and artificial intelligence to track landing zones. https://www.ainonline.com/aviation-news/business-aviation/2020-06-15/honeywell-focuses-new-unit-uas-and-uam-sectors

Wing Made History in Drone Delivery. That's Not All: Wing's OpenSky UTM Solutions Miriam McNabb June 15, 2020



As the first recipient of a Part 135 certificate to operate as a <u>commercial drone airline</u> in the U.S., they've brought drone delivery out of the realm of emergencies and made it available to consumers: delivering <u>local food</u>, <u>products</u>, <u>drugstore supplies</u> and even <u>library books</u> to the doorsteps of suburban homes.

Throughout the process of negotiating with aviation authorities around the world, Wing has acquired an understanding of what it takes to integrate commercial drone flights into the skies. The company has gathered data on more than 100,000 flights; they've received feedback from customers and surrounding communities; and they've performed delivery operations safely and accurately. In Australia, Finland and the U.S., thousands of customers have used the service over the last two years.



All of that experience has contributed to the development of their other, less-well known to the public but no less important, offering: OpenSky, Wing's unmanned traffic management solutions. A version of OpenSky available to consumers launched last year in Australia: OpenSky is what Wing uses to manage their drone delivery programs. The system provides complex flight planning mechanisms, de-confliction and communication with airspace authorities. https://dronelife.com/2020/06/15/wing-made-history-in-drone-delivery-thats-not-all-they-do-wings-opensky-utm-solutions/

ALADDIN counter-UAV project enlists help of OpenWorks' SkyWall COUNTER-DRONE SAM LEWIS JUNE 16, 2020



OpenWorks Engineering, creator of the SkyWall Patrol net capture system, has announced that it will be collaborating on the new ALADDIN counter-UAV system. ALADDIN is a joint effort, with a number of other partners helping develop the technology. It will be demonstrated later this year in Greece, with the two systems joining via use of the SkyLink module.

SkyWall Patrol gives a mobile operator the ability to physically capture a drone in a net, used in conjunction with electronic countermeasures for a layered defense or in environments where electronic attack cannot be deployed. ALADDIN will focus on detection, classification and localization; neutralization; and command and control.

Neil Armstrong, director and founder of OpenWorks, commented: "OpenWorks is delighted to be a part of the ALADDIN project. SkyWall Patrol together with SkyLink will allow detection and tracking of a drone, to end with a known outcome – capturing the drone in a net. <a href="https://www.commercialdroneprofessional.com/aladdin-counter-uav-project-enlists-help-of-openworks-skywall/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-331038-Commercial+Drone+Professional+DNA+-+2020-06-16

Iris Automation launches BVLOS waiver resource platform LEGISLATION SOFTWARE SAM LEWIS JUNE 16, 2020



Iris Automation has announced the launching of its new Waiver Resource Center for beyond-visual-line-of-sight flight applications.

The platform will help drone pilots who wish to apply for commercial BVLOS flight waivers complete the process with a high chance of

success and in a timely manner.



It will include information on the legislation of multiple aviation authorities, thus helping the applicant understand the rules. A statement released by the company described the platform as "giving drone operators access to expertise and tools for managing the complex waiver submission". It is a combination of software-as-a-service and expert aviation policy consulting.

"The new Waiver Resource Center is both the crystallization of our policy team's expertise and our years of interactions with multiple aviation authorities," said Gabrielle Wain, vice president of global policy and government affairs, "to simplify what is otherwise a complex and often confusing process." https://www.commercial+Campaign&utm_medium=email&utm_campaign=45819-331038-Commercial+Drone+Professional+DNA+-+2020-06-16

17Jun20

This Drone Company Was Named a Technology Pioneer by the World Economic Forum Miriam McNabb June 16, 2020



German drone manufacturer <u>Wingcopter</u> was named as one of the <u>World Economic Forum's 100 Technology</u>

<u>Pioneers</u>. The annual list is designed to highlight and bring together early stage companies that are innovating to solve sustainability and humanitarian challenges. From a list described as "ranging from the use of artificial intelligence to

diagnose cancers and quantum computing systems, to carbon capture and removing technologies, cell-grown meat production and use of microbiome to track goods," Wingcopter, with their innovative delivery drone, made the list.

"In the South Pacific island state of Vanuatu, the start-up set up a drone-based on-demand supply network, delivering vaccines for children within minutes to 19 remote health clinics. In Tanzania and Malawi, Wingcopter was able to prove that drone delivery can shorten patients' waiting times, especially for urgently needed medicines, from several hours or even days to a few minutes. Recently, Wingcopter completed a COVID-19 response trial together with Skyports and Thales on behalf of the NHS Scotland to provide the Isle of Mull with faster corona testing by transporting test kits and samples from the mainland. Further COVID-19 projects with partners and customers in other European countries are being prepared." https://dronelife.com/2020/06/16/among-100-amazing-new-ideas-this-drone-company-was-named-a-technology-pioneer-by-world-economic-forum/



Wisk resumes eVTOL aircraft flight testing GRACE NEHLS Assistant Editor CompositesWorld

Wisk (Mountain View, Calif., U.S.), the urban air mobility (UAM) company behind the world's first all-electric, self-flying air taxi, Cora, announced on June 10 that it has resumed flight testing in the U.S. and New Zealand. The tests will evaluate the performance of the aircraft in a realworld environment, while collecting data that will inform further development, operation, safety features and certification of the aircraft.



Prior to the pandemic, the company had completed more than 1,300 test flights expanding the flight envelope, providing data for model, design and requirements updates and maturing procedures.

"We are excited to resume test flights following the brief pause caused by COVID-19," says Gary Gysin, CEO of Wisk. "The team's dedication over the past few months has

allowed us to remain focused on critical non-flight areas, such as certification, software development and operations." "As we return to flight testing, we have implemented a number of procedures and social distancing measures,"notes Carl Engel, director of Wisk's flight testing. https://www.compositesworld.com/news/wisk-resumes-evtol-aircraft-flight-testing

ANRA Technologies Partners with Swiggy to Bring Food Delivery to India João Antunes Drone Delivery JUNE 16, 2020



A recent partnership with ANRA Technologies, a provider of end-ANRA to-end drone operations and traffic management solutions, **TECHNOLOGIES** shows <u>Swiggy</u>, a food ordering and delivery platform in India, hasn't deviated from its mission "to make life easier by changing

the way India eats - all with just a tap". As partners, both companies will work towards a Beyond Visual Line of Sight drone delivery program in India.

Building upon years of successful international experience, ANRA was granted exemptions by the Indian Ministry of Civil Aviation to two consortia to operate drones for BVLOS operations in the country. While the initial focus is on delivering food and other essential items in the cities of Ropar and Etah, these operations should help to fast-track India's unmanned systems policy and prepare the local industry for a major push into the drone services segment globally.



Other than Swiggy, the BVLOS operations will also see the participation of two other partners that have commercial and humanitarian use cases: The Indian Institute of Technology, Ropar, which is helping expand the reach and enhance the quality of technical education in the country, as well as BetterDrones, a service provider and training institution for the agriculture, mining, survey, monitoring, and inspection industries.

https://www.commercialuavnews.com/infrastructure/anra-technologies-partners-with-swiggy-to-bringfood-delivery-to-india

Honeywell Launches World's Smallest Satellite Communications Technology for **UAS** June 16, 2020 News



Weighing in at only 2.2 pounds, the new system is 90% lighter than Honeywell's smallest connectivity system and will bring some of the same connectivity capabilities enjoyed by larger aircraft to smaller Honeywell's smallest connectivity system and will bring some of the unmanned vehicles in the air or on land.

Amanda King, vice president and general manager, Aerospace Connected Secure Solutions, Honeywell Connected Enterprise, said "Honeywell's small UAV SATCOM system is a gamechanger for these smaller unmanned aircraft that previously couldn't be equipped with satellite communications. Now, they've got access to everything we've come to expect from the largeaircraft experience — just in a smaller package."

The Honeywell system, powered by Inmarsat's global satellite communications network, provides unmanned aerial vehicles with global connectivity and real-time video streaming. Seamless connectivity is essential for safe and efficient air traffic management that enables beyond-visual-line-of-sight capabilities.

The combination of the Honeywell system and Inmarsat's satellite connectivity can keep vehicles connected even in remote areas or over water where other ground-based communications systems are not available. https://uasweekly.com/2020/06/16/honeywelllaunches-worlds-smallest-satellite-communications-technology-foruas/?utm_source=rss&utm_medium=rss&utm_campaign=honeywell-launches-worlds-smallest-satellitecommunications-technology-for-uas&utm term=2020-06-17



Drones capture Dubai's message honoring COVID-19 frontline heroes Josh Spires Jun. 17th 2020



Brand <u>Dubai</u> has partnered with Drone Events of Arab Media Group and AO Drone to share a thank you message to the heroes on the <u>COVID-19</u> frontline.

The <u>video</u> starts with a quote from Sheikh Mohammed bin Rashid Al Maktoum, the Vice President and Prime Minister

of UAE and Ruler of Dubai. The video then shows the Burj Khalifa light up with the United Arab Emirates flag and a message that reads "To The UAE." Next, we see police cars starting to drive off before we see another message saying, "To Our People." The final message we see on a building is "To Our Heroes."

We then see all the first responder's vehicles driving down the main road to eventually spell out "Thank You." We are then shown an epic drone light show which also shares the message, "Thank You" along with the country's flag and Sheikh Mohammed's hand salute. The show used more than 120 drones and 100 vehicles. See the video at: https://dronedj.com/2020/06/17/drones-capture-dubais-message-honoring-our-frontline-heroes/

18Jun20

Drone Industry Investment: DroneBase Scores Additional \$7.5 Million Miriam McNabb June 17, 2020



Last year, before the coronavirus threw all assumptions and expectations into question, leading drone market analysts DRONEII posited that the <u>drone hype cycle was over</u> – but that drone companies with good fundamentals were still of prime interest to investors. That's one prediction that has proved correct: <u>2019 was a record-breaking year</u>

for drone investments. 2020 may still be just as fruitful.

DroneBase, focused on industrial inspections, has seen record growth. "With flight operations supported by a Pilot Network in all 50 states and over 70 countries, DroneBase can fly contactless missions to ensure safety of pilots and customers during this time." "DroneBase's expansion into renewable energy reflects our belief in the growth potential of the wind and solar energy industries," said Dan Burton, CEO and Founder of DroneBase.



New investors Valor Equity Partners and Razi Ventures join Union Square Ventures, Upfront Ventures, Hearst Ventures, Pritzker Group Venture Capital, and DJI in the current Series C round, bringing the total funding to \$32 million. https://dronelife.com/2020/06/17/drone-industry-investment-dronebase-scores-additional-7-5-million/

Drones for Utilities: How Al is Redefining Utility Inspections Miriam McNabb June 17, 2020



The following is a guest post by Jaro Uljanovs, Lead AI Developer and Data Scientist at <u>Sharper Shape</u>, specialists in automated industrial inspections.

Artificial intelligence (AI) and machine learning (ML) algorithms are redefining how utility companies manage their electric

infrastructure. Taking a comprehensive snapshot of these assets means utilizing a variety of sensors for powerline inspections including light detection and ranging, color, hyperspectral and thermal imagery.

This allows the drone mapping software to capture everything — from vegetation proximity, to infrastructure assets, to individual components (such as insulators on transformers) and their operational integrity, to hot spots indicating potential fire risks. There are a lot of individual elements within that data — even in just one image — to pinpoint and classify, let alone do so accurately. Al and ML tools can accomplish this work in seconds. LiDAR point cloud segmentation can detect conductors with an accuracy of over 95% while hyperspectral image segmentation can identify vegetation species with an accuracy of up to 99%.

By helping readjust sensors' bearings while in flight, AI not only ensures more accurate data collection but also guarantees that the flight doesn't need to be repeated or prematurely ended because of inaccurate data collection. ML techniques can spot any faults in the sensors or the drone's flight path while in the air, recalibrating as needed and identifying individual elements within the data as it comes through the sensor's video feed.

https://dronelife.com/2020/06/17/drones-for-utilities-how-ai-is-redefining-utility-inspections/

FLIR Systems Awarded Contract for Nano Drones 6/17/2020 Mandy Mayfield

The Army awarded FLIR Systems a second contract worth \$20.6 million to provide the service with additional miniature reconnaissance drones as part of the ongoing soldier-borne sensor program.





The FLIR Black Hornet 3 Personal Reconnaissance System is a nano-sized unmanned aerial vehicle that makes surveillance capabilities portable for soldiers at the platoon and small unit levels, said Roger Wells, the company's vice president and general manager for unmanned systems and integrated solutions. "It's extremely light, it's very robust, nearly silent

with flight times up to 25 minutes, which provides an organic surveillance reconnaissance capability," Wells said in an interview.

The Army's soldier-borne sensor is a small situational awareness tool that will assist in providing real-time video feeds and images of operating environments. The drone's sensors allow it to transmit live video and high-definition images back to an operator across a secure data link. https://www.nationaldefensemagazine.org/articles/2020/6/17/flir-systems-awarded-contract-for-nano-drones

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AIAA Aviation: Time for U.S. to get serious about electric, hybrid flight KEITH BUTTON JUNE 18, 2020



Congress should make advanced aerial mobility — the concept of new electric and hybrid aircraft delivering people and packages in novel ways — a national priority, the lead author of a NASA-sponsored report said today.

"If the United States doesn't get together and help establish the rules and the processes so that the system can grow, then someone else will," said Nick Lappos, chairman of the National Academies of Sciences, Engineering, and Medicine's committee on enhancing air mobility, speaking Thursday at the AIAA Aviation Forum. "It will be done somewhere else, somewhere with a government that can simply decree it to be necessary. And then we may be left with air vehicles developed for that marketplace that we have to adapt for ours."

Lappos spoke at the forum with other authors about the findings of their National Academies report, <u>"Advancing Aerial Mobility: A National Blueprint."</u> NASA commissioned the peer-reviewed report, published in February, to examine the potential benefits and challenges of the new mode of transportation. Air traffic control systems should be a top priority, Lappos said.



"That piece of technology which doesn't exist which would explode the system is the air traffic management system," he said. "Right now, the FAA has declared that all participants in the future national airspace system will conduct see-and-be-seen — that's the philosophy that every air vehicle can see every other air vehicle and avoid them. That is a great concept — for 1955 when airplanes are around. It's not a particularly good concept when you've got 1,000 air vehicles over New York City and some of them are carrying a pizza."

https://aerospaceamerica.aiaa.org/aiaa-aviation-time-for-u-s-to-get-serious-about-electric-hybrid-flight-reports-author-says/

500 drones light up the skies above China's Canton Fair Josh Spires Jun. 18th 2020



500 <u>drones</u> lit up the night sky in <u>China</u>'s Guangdong Province on Monday as the Canton Fair opened up. The Canton Fair, also known as the China Import and Export Fair, is the largest trade fair in China. This year the fair is being held online due to the COVID-19 pandemic.

The Import and Export Fair or Canton Fair is held every spring and autumn in Guangzhou, China. The fair is the largest fair with the broadest variety of products. The 10-day fair brings buyers from around the world to source products and allows companies to build manufacturing partnerships both in and outside of China.

The <u>video</u> looks to be captured by a drone and starts off with the 500 drones in the light show raising up in four distinctive layers to begin the show. The drones then begin making shapes in the sky, including the Chinese flag, "I Love Guangzhou," and then the word EHang.

At the end of the drone show, the word EHang was formed. EHang's light-show system is capable of flying over 1,000 drones at a time with the drones getting as close as 5cm to each other. The drones used are custom-made GD2.0X drones that share much of the same design as the EHang Ghost Drone with the same bottom facing propellers.

https://dronedj.com/2020/06/18/500-drones-light-up-the-skies-above-chinas-canton-fair/



Amsterdam airport begins one-week trial of inspection drones Josh Spires Jun. 18th 2020



Schiphol <u>Airport</u> in Amsterdam will soon begin a one-week trial of <u>inspection drones</u> that will be used to check the taxiways, buildings, and aircraft. It will also be using drones to transport light goods between different locations within the airport.

The <u>airport</u> will use drones led by Luchtverkeersleiding Nederland with partners Royal Schiphol Group and Dutch Drone Delta. The drones will be in the air until June 24, thanks to a temporary regulation introduced by the Ministry of Infrastructure and Water Management, which lifts the ban on drones.

The trial will be taking place far away from active runways. The drones will fly in various locations and at different heights to see how drones are able to function and serve a purpose in an airport environment.

All the drones will be operated by certified pilots that will be working in coordination with Luchtverkeersleiding Nederland who are in charge of air traffic control in the Netherlands. The drone pilots will also be in constant contact with the control tower.

https://dronedj.com/2020/06/18/amsterdam-airport-begins-one-week-trial-of-inspection-drones/