UAS and SmallSat Weekly News

Contents

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What you can see with a drone: Amazing photographs 105 PHOTOS July 14, 2020

An aerial view of Queen Square where hearts have been sprayed onto the grass in an effort to encourage social distancing on July 8, 2020 in Bristol, England. England has continued its phased easing of lockdown restrictions by reopening restaurants, pubs and hairdressing salons while the two-meter social distancing rule has been revised to 1m+. MATTHEW HORWOOD, GETTY IMAGES. See them all from around the world at https://www.usatoday.com/picture-gallery/tech/news/2018/07/03/what-you-can-see-with-a-drone-amazing-photographs/36581467/

Stunning images show Dubai from the sky

Photographer Jumana Jolie specializes in images of cities from above, such as this shot of Dubai in the clouds, taken from a helicopter. Scroll through to see more incredible shots of Dubai from the sky. https://edition.cnn.com/style/article/vertiginous-photos-dubai-spc-intl/index.html?gallery=%2F%2Fcdn.cnn.com%2Fcnnnext%2Fdam%2Fassets%2F200701161027-jumana-jolie-4.jpg

Drones for Agriculture Case Study Jess Brown 16th June 2020

Meticulous Research, an Indian based research organization, has created an industry forecast which predicts that the global agriculture drone market's worth will reach a massive net worth of $5.19bn by 2025!

Growth within this market is mainly due to the following factors

- Growing population and rising pressure on the global food supply
- Increase in venture funding for development of agriculture drones
- Growing e-agriculture or information and communication technologies
- Rising automation
- Growing emphasis on enhancing agriculture efficiency

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- Rising need for water conservation across the globe

"Drones in agriculture can ignite a big change in improving the efficiency of agriculture. They are used for soil and field analysis, crop monitoring, irrigation, crop spraying, crop field mapping, crop health assessment and livestock monitoring."
https://www.coverdrone.com/drones-for-agriculture-case-study/?utm_source=Coverdrone+email+subscribers&utm_campaign=967f60022e-Coverdrone+Email+Campaign+17.07.20&utm_medium=email&utm_term=0_3033eb7817-967f60022e-113470153

Drones in Hurricane Response: Florida Power and Light to Deploy Percepto's Sparrow Miriam McNabb July 16, 2020

Israel's Percepto has scored a major win in Florida. Florida Power and Light (FPL) will deploy Percepto's Sparrow drones in hurricane response, after Percepto's drone-in-a-box solution passed level 5 hurricane testing at the Florida International University Wall of Wind. "The box can withstand winds of up to 150mph making it the most rugged AI drone-in-a-box on the market for all weather conditions," says Percepto.

"As soon as the storm passes, we can have this up…inspecting our plant and knowing immediately what sort of damage we have so we're able to get our power back on that much sooner… for a utility to be able to see our infrastructure in areas where we can't get to safely; to quickly fly over it and understand what our conditions are…the safety of our crews is paramount."

FPL plans to put a drone-in-a-box at every substation, transmission yard, plant and solar facility, according to Eric Schwartz, manager of FPL's aerial intelligence response. "We can fly every single day and use image recognition to be able to identify a potential issue and reduce the number of outages to our customers," he said.

"Percepto's system is approved by the FAA for flights two miles Beyond Visual Line of Sight, and FPL's waiver from the FAA enables the solution to cover the entire facility with regular, pre-programmed autonomous flights over the plant's 11,000 acres. The Percepto Sparrow drones stay above 130 feet to avoid power poles and other obstructions. FPL has six drones installed in five different locations. https://dronelife.com/2020/07/16/percepto-drones-in-hurricane-response/

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Russia Launches Drone Testing, UTM Project Jason Reagan July 17, 2020

International Aero Navigation Systems received $7.15 million from Russia's National Technological Initiative Fund to "accommodate UAS flight design and certification testing [at a] UAS Test Site."

Russia's Civil Aviation Authority granted IANS permission to conduct drone flight tests and certification procedures. Located in Orlovka, IANS's complex will include the Droneport Aeronet as well as a flight test center and the UAV test site. In April, IANS conducted drone tests to address "overcoming the spread and consequences of the coronavirus epidemic." The test scenario included:

- joint flights of unmanned and manned aircraft
- development of algorithms to improve interaction among emergency workers, police and drone pilots
- delivery of medical supplies and COVID-19 test samples over long and short distances
- disinfection via drone in pandemic hot spots
- population warning drill

Russian officials hope to expand the project by establishing the Russian Unmanned Aircraft System Traffic Management system. https://dronelife.com/2020/07/17/russia-launches-drone-testing-utm-project/

AiRXOS' New Solution for Drones in Energy Miriam McNabb July 17, 2020

GE's AiRXOS' new solution for energy drone programs provides everything energy companies need for UAS operations: from safe flight to usable insights.

Unmanned Traffic Management provider AiRXOS has announced "a comprehensive Unmanned Aircraft Systems solution for Energy organizations to plan, schedule, operate and monitor all facets of their UAS

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operations from a single platform," says an AiRXOS press release.

AiRXOS' new solution is designed to help large energy enterprises manage every aspect of their drone program. The "Enterprise Energy Solution provides digital compliance, full Situational Awareness of airspace and assets, inspection, emergency response/disaster recovery, analytics, and asset performance tools all in one, connected platform. The Enterprise Energy Solution runs on AiRXOS' Air Mobility™ Platform – a secure, cloud-based platform that enables integration of an energy organization's current applications and other UAS Service Suppliers as well as supports the full lifecycle of UAS Energy operations."
https://dronelife.com/2020/07/17/airxos-new-solution-for-drones-in-energy/

Sweden grants permission for BVLOS powerline inspection flights July 16, 2020 Jenny Beechener UAS traffic management news

The Swedish aviation authority has approved beyond visual line of sight flights by Skyqraft, a Swedish infrastructure inspection company. Skyqraft is using the Vertical Technologies DeltaQuad VTOL Unmanned Aerial Vehicle to inspect a large portion of the Swedish power grid.

Flying fully autonomous from take-off to landing, using long-range radio transmission combined with video and control links, Skyqraft was able to perform multiple BVLOS missions gathering high-resolution images for over 1000KM of powerlines. The resulting data is used for early indicators of failures to the powerlines, isolators and towers.

The missions are planned to follow the powerlines at a safe altitude using automatic terrain following. The onboard camera is automatically triggered to record high-resolution photographs of the selected path while the operator receives live video and keeps a control link over long distances. Using ADS-B transponder receivers, the pilot is made aware of any aviation up to 100km away. https://www.unmannedairspace.info/latest-news-and-information/sweden-grants-permission-for-bvlos-powerline-inspection-flights/

Flirtey granted new patent "instrumental" for safety of drone delivery

APPLICATION DELIVERY ALEX DOUGLAS JULY 20, 2020

This granted patent describes safety-enhancing technologies such as landing a drone safely in the event of failure by using a parachute and steering the drone towards a safe location. This is

the third patent in the critical area of drone delivery safety that the United States Patent and Trademark Office has issued to Flirtey in 2020.

Matthew Sweeny, Flirtey's founder and CEO, said, "We are excited that this new patent comes in time to celebrate the July 17, 2020 Five-Year Anniversary of the 'Kitty Hawk Moment' when Flirtey made the first drone delivery in America and at a time when Flirtey continues to pioneer the commercial drone delivery industry." Flirtey conducted the first drone delivery in Wise County, Virginia, on July 17, 2015. https://www.commercialdroneprofessional.com/flirtey-granted-new-patent-instrumental-for-safety-of-drone-delivery/

Why drones are a great solution for inspecting 1.4 million utility poles in Southern California Josh Spires Jul. 20th 2020

Electricity provider Edison is turning to drones to inspect its electrical equipment across Santa Barbara County's south coast. The company began with helicopters, but is likely to switch to drones after the end of the week.

Edison has 1.4 million utility poles, making it a costly and time-consuming job, not to mention the danger associated with flying a helicopter near live wires. Local residents have reported the low-flying inspection helicopters, forcing the Santa Barbara County Sheriff's Department to put out a public notice: *We have received several reports of low-flying helicopters over Carpinteria and Montecito — they are contract surveyors for Southern California Edison.*

Looking at the above issues with helicopters, it all points to drones being a great replacement. The drones keep workers on the ground. Using drones also lowers long-term costs. https://dronedj.com/2020/07/20/why-drones-are-a-great-solution-for-inspecting-1-4-million-utility-poles-in-southern-california/

China-India drone border feud could turn into US/Israeli tech proxy Josh Spires Jul. 20th 2020

As tensions have risen over recent months between China and India, both countries have been using drones for high-altitude surveillance and reconnaissance over hard-to-reach areas.

India is reportedly purchasing more Heron drones from Israel, with the US Predator drone being another option it's looking into, according to Indian media.

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The IAI Heron drone, which is used by India, has a wingspan of 54 feet 6 inches and capacity of 551 pounds. Heron has a maximum speed of 129 miles per hour and can stay in the air for up to 52 hours at a time. Fourteen countries, including the US and Australia, have used the Heron drones.

China is currently using its own custom-built drones to monitor the borders: the CAIG Wing Loong II or GJ-2 drone. The GJ-2 has a wingspan of 67 feet 3 inches and has a maximum takeoff weight of 9,259 pounds. The drone has a maximum speed of 230 miles per hour and can stay in the air for 32 hours at a time. https://dronedj.com/2020/07/20/china-india-drone-border-feud-could-turn-into-us-israeli-tech-proxy/

"Flight to the Future" Offers Career Relaunch in a Post-COVID World! July 19, 2020 News

Amid the adversity of COVID-19, but just in time for the holidays, Aquiline Drones (AD) – America's fastest-growing drone technology company- launches its jobs initiative dubbed Flight to the Future. Accessed via www.aquilinedrones.com/flight-to-the-future, this drone training and small business start-up program targets all Americans, especially those affected by the pandemic.

AD is offering 500 individual training enrollments, also encouraging all states, municipalities and businesses of every type nationwide to contribute towards reversing the dreadful effects of unemployment by purchasing drone pilot training slots for as many individuals – both employed and unemployed- as they wish. Organizations can contact shop@aquilinedrones.com for information on enrolling multiple participants.

AD's Flight to the Future training course prepares a participant to become a fully licensed drone pilot and business operator. https://uasweekly.com/2020/07/19/flight-to-the-future-offers-career-relaunch-in-a-post-covid-world-2/?utm_source=rss&utm_medium=rss&utm_campaign=flight-to-the-future-offers-career-relaunch-in-a-post-covid-world-2&utm_term=2020-07-20

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AeroVironment Financials Flying High in the Drone World Jason Reagan July 17, 2020

While many companies are plummeting amid the pandemic crisis, drone systems provider AeroVironment is soaring higher.

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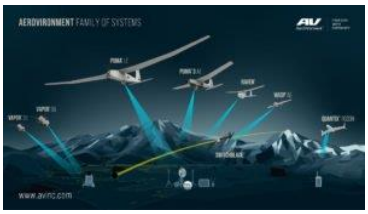

Record fourth quarter and full year revenue of $135.2 million and $367.3 million — an increase of 54 percent and 17 percent year-over-year, respectively. Fourth quarter diluted earnings per share from continuing operations and non-GAAP diluted earnings per share from continuing operations of $0.73 and $0.75, an increase of 47 cents and 49 cents year-over-year, respectively.

Record funded backlog of $208.1 million. Gross margin Q4, fiscal 2020 — $53.2 million, an increase of 44 percent from the fourth quarter of fiscal 2019's gross margin of $37.0 million. Income from continuing operations for the fourth quarter of fiscal 2020 — $21.3 million, an increase of $16.2 million from the fourth quarter of fiscal 2019 income from continuing operations of $5.1 million. https://dronelife.com/2020/07/17/aerovironment-financials-flying-high-in-the-drone-world/

Drones to robots: Pandemic fuels U.S. autonomous delivery Carey L. Biron JULY 20, 2020

WASHINGTON - Cough medicine, snacks, baking ingredients: Kelly Passek has shopping delivered weekly to her yard in Christiansburg, Virginia - by a drone. The flying vehicle comes with little fuss, hovering briefly over her yard and letting down its package. The service is a pilot project by Google parent Alphabet Inc's drone delivery business Wing which is operating similar projects in Finland and Australia. In Christiansburg, residents who sign up can get drone delivery from a locally-owned businesses, a national pharmacy and FedEx.

The pandemic also got Passek, a public school librarian, thinking beyond the confines of her home as her school system changed to distance learning in March, raising concerns about how students would get required resources - including books. After talks with Wing, a book delivery service began for county students in June. https://www.reuters.com/article/us-health-coronavirus-usa-tech-feature-t/drones-to-robots-pandemic-fuels-u-s-autonomous-delivery-idUSKCN24L1OI

CAMCOPTER S-100 UAS Monitors Ship Sulphur Emissions 20 Jul 2020 Mike Ball

Schiebel is working with partners Nordic Unmanned and NORCE Research Institute AS to support the Danish Maritime Authority and the Danish Environmental Protection Agency in this operation.

The operation is taking place in the Great Belt, a strait between the Danish islands of Zealand and Funen and is part of the Remotely Piloted Aircraft System

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services offered by the European Maritime Safety Agency. Measurements taken by the CAMCOPTER S-100 are transmitted in real time to the EMSA RPAS Data Centre and to THETIS EU in Portugal, which creates alerts to be followed up by authorities.

The Schiebel CAMCOPTER S-100 UAS is an unmanned helicopter platform with a flight endurance of more than six hours and the ability to operate both during the day and at night. For this operation, it has been equipped with an Explicit mini sniffer sensor system, an L3 Wescam Electro-Optical / Infra-Red camera gimbal and an Automatic Identification System receiver. https://www.unmannedsystemstechnology.com/2020/07/camcopter-s-100-uas-monitors-ship-sulphur-emissions/?utm_source=UST+eBrief&utm_campaign=b9ec5c871b-eBrief_2020_21Jul&utm_medium=email&utm_term=0_6fc3c01e8d-b9ec5c871b-119747501

American Made Swift High-Altitude-Long-Endurance UAS Completes Landmark First Flight July 21, 2020 News

In partnership with NASA's Ames Research Center, Swift Engineering's high altitude long endurance (HALE) unmanned aerial system completed its maiden flight. The only US-made platform in its class, Swift's flight team, performed a full-system check, validating the vehicle's configuration for high-altitude continuous surveillance missions.

Through the collaboration with NASA, the successful flight trials took place at New Mexico's Spaceport America. Designed to operate unmanned at 70,000 feet, The Swift HALE UAS offers 24-hour persistent and stable upper atmosphere operations for commercial and military surveillance, monitoring, communications, and security applications. An affordable alternative to satellites, the 72-foot solar-powered air vehicle weighs less than 180 pounds and can safely carry 15-pound payloads for missions. https://uasweekly.com/2020/07/21/american-made-swift-high-altitude-long-endurance-uas-completes-landmark-first-flight/?utm_source=rss&utm_medium=rss&utm_campaign=american-made-swift-high-altitude-long-endurance-uas-completes-landmark-first-flight&utm_term=2020-07-21

Indonesia gives Terra Drones permission to carry out long-range flights Josh Spires Jul. 21st 2020

Terra Drone has been granted the first commercial beyond visual line of sight (BVLOS) permit in Indonesia marking another first for the company. The company is now allowed to fly long-distance surveying, surveillance, and patrol missions.

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The Directorate of Airworthiness & Aircraft Operations, Director General of Civil Aviation and Ministry of Transportation of the Republic of Indonesia, issued Terra Drone its latest permit for the BVLOS flights.

Michael Wishnu Wardana, CEO of Terra Drone Indonesia had the following to say on the news of the permit. "Terra Drone Indonesia continues to be committed to introduce the benefits of drone technology through safe operation, as well as supporting the government in ensuring the safety of civil aviation."

The Ministry of Transportation of the Republic of Indonesia already has drone rules in place prohibiting pilots flying drones up to 25kg over crowds and flying beyond visual line of sight. The new permit for Terra Drone will allow the company to fly its drones in a special category with its own set of rules and regulations. https://dronedj.com/2020/07/21/terra-drone-receives-first-bvlos-permit-in-indonesia/#more-32373

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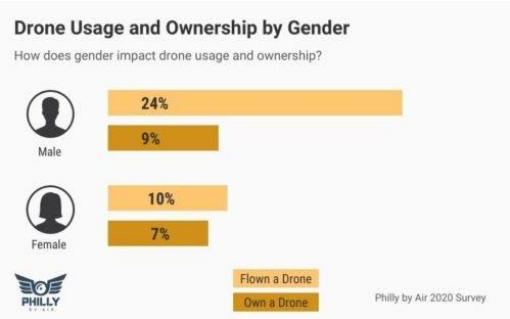
Philly By Air Drone Survey Unveils Gender Gap Jason Reagan July 21, 2020

Philly by Air, a Pennsylvania-based provider drone photography, cinematic-grade aerial photography and video services, recently completed a survey of 1,050 drone owners. The results show that, while a gender gap exists among drone users, the same gap tightens when it comes to drone ownership. Based on the survey of 1,050 subjects:

Only one of every seven Americans (roughly 14 percent) has ever flown a drone.



Men use drones more than women by more than a 2:1 ratio – 24 percent vs. 10 percent.

The gender gap narrowed when it comes to UAV ownership – 9 percent for men vs. 7 percent for women.

Middle age people are more likely to own drones.

Ten percent of UAV users are 35-44.

However, ages 25-34 and 55-63 are not far behind at 9 percent.

For seniors, drone ownership dropped to 4 percent (65+).

The 45-54 demographic spiked at 22 percent.

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Younger age segments held steady for drone usage with a range of 17-20 percent.
With the FAA projecting recreational drone ownership to soar to 1.4 million by 2024, these trends may change, perhaps distributing more evenly across young to middle age demographics. https://dronelife.com/2020/07/21/philly-by-air-drone-survey-unveils-gender-gap/

Second wave of drones deployed to fight mosquitoes in India Josh Spires Jul. 22nd 2020

The Greater Hyderabad Municipal Corporation has sent out another 11 drones in the fight against mosquitoes to control the spread of malaria and dengue fever along the Musi River in India. The new drones will help out in operations along a 21-kilometer (13-mile) stretch of the Musi River from Attapur to Uppal. Three teams of 50 people headed up by two assistant entomologists and two senior entomologists will be working alongside the drones.

The drones in use are specially equipped with six foggers used to kill the mosquitos while they are still in their infant stage. The foggers are filled with the commonly used Temophos larvicide and the naturally occurring Pyrethrum plant, which is known for its insecticide and insect repellent properties.

Houses that are known to have mosquito larvae inside will be contained until they are able to be sprayed by authorities and given the all-clear. The GHMC has also organized 10-minute awareness programs every Sunday to educate the locals of infestation signs and common symptoms associated with malaria, dengue fever and chikungunya virus.
https://dronedj.com/2020/07/22/second-wave-of-drones-deployed-to-fight-mosquitoes-in-india/#more-32507

Canadian drone company gets one-year permit for long-range flights Josh Spires Jul. 22nd 2020

A drone company in Canada has been granted a one-year permit for Beyond Visual Line of Sight flights. Transport Canada is allowing In-flight data to use drones day or night, anywhere in Canada, providing the risk to public safety is low. Obtaining a long-term permit like this is fairly rare at this stage in Canada, as many of the BVLOS approvals are for single-day projects only.

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In-Flight Data owner Chris Healy had the following to say on the news of the permit via a phone interview with the Calgary Herald. *The license allows us to go out and conduct our missions without having to reach back to Transport Canada for permission for every single flight. It used to be a fair amount of planning, phone calls, and time to get a flight planned out.*

While the permit makes the operations of Healy's company much smoother, it nonetheless follows Transport Canada's rigorous safety requirements. Healy says it requires that large amounts of data be recorded after each flight in accordance with Transport Canada, and that the federal regulator always be satisfied that the risk to public safety is acceptably low. https://dronedj.com/2020/07/22/canadian-drone-company-gets-one-year-permit-for-long-range-flights/#more-32513

General Atomics Aeronautical Systems Announces Team SkyGuardian Australia

July 21, 2020 Military | News

General Atomics Aeronautical Systems, Inc. announced its intention to offer a Medium-altitude, Long-endurance RPAS MQ-9B to the Australian Defense Force during AVALON 2017 with the launch of Team Reaper Australia.

Now known as Team SkyGuardian Australia, this group of industry partners consists of 10 world-class companies providing a range of innovative sensor, communication, manufacturing and life-cycle support capabilities. The 10 TSGA members – Cobham (TSGA lead industry partner), CAE, Raytheon Australia, Flight Data Systems, TAE Aerospace, Quickstep, Airspeed, Collins Aerospace, Ultra and Sentient Vision Systems – are well positioned to provide a cohesive approach for sustainable Australian industry content. https://uasweekly.com/2020/07/21/general-atomics-aeronautical-systems-announces-team-skyguardian-australia/?utm_source=rss&utm_medium=rss&utm_campaign=general-atomics-aeronautical-systems-announces-team-skyguardian-australia&utm_term=2020-07-22

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Airial Robotics develops "new type" of UAV for global commercial drone market

APPLICATION HEADLINE NEWS NEW PRODUCTS NEWS UK ALEX DOUGLAS JULY 23, 2020

Airial Robotics, head-quartered in Hamburg and with branches in Hungary and the United Kingdom, has unveiled an innovative UAV, the Gyrotrak..

Its scalable design permits development of different size and weight class models, ranging between 4kg and 300 kg take-off weight. The main rotor autorotation principle requires very little energy in forward flight, and he UAV can land safely even if the motor fails. . It has a maximum take-off weight of 20 kg and is capable of performing LOS and BVLOS flights. The payload of 12.5 kg can be distributed between the battery and additional load, depending on the mission.

"For example, if the GT20 Gyrotrak is fitted with a camera weighing 500g, it can stay in the air for 2.5 hours and cover 150 km at cruise speeds of 90 kph. As a result, it is a tool for police and security service deployments as well as search and rescue, while at the same time being useful for pipeline inspections and securing perimeters. As the payload distribution can be adjusted to suit each application, it can be configured to deliver heavier shipments fast and safely to their destination. https://www.commercialdroneprofessional.com/breaking-news-airial-robotics-develops-new-type-of-uav-for-global-commercial-drone-market/?utm_medium=push&utm_source=notifications

Leonardo to build vehicle-mounted counter-drone systems with sensors and machine guns John Keller Jul 22nd, 2020

REDSTONE ARSENAL, Ala. – Counter-drone experts at Leonardo DRS will develop, build, and deploy a military vehicle-mounted weapon to detect, destroy, or disable small, inexpensive unmanned aerial vehicles like commercial quadcopters that are operating as airborne improvised explosive devices.

Officials of the U.S. Army Contracting Command at Redstone Arsenal, Ala., announced a $189.8 million five-year contract Monday to the Leonardo DRS Land Systems segment in St. Louis to build and support the Mobile-Low, Slow, Small Unmanned Aircraft System Integrated Defeat System (M-LIDS). It uses two military vehicles -- one that detects and tracks UAV threats and the other that shoots them down or jams their control signals.

M-LIDS is mounted on two mine-resistant, ambush-protected all-terrain vehicle -- one carrying the Leonardo DRS elevated mast-mounted surveillance and battlefield reconnaissance equipment and the other with a reconfigurable weapon that fires several different kinds of machine guns. M-LIDS also uses a small UAV.
https://www.militaryaerospace.com/unmanned/article/14180031/counterdrone-small-uavs-sensors-and-machine-guns

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Therapy Drones: Could sUAS Be the Adaptive Therapy Tool of the Future? Miriam McNabb July 22, 2020

Could learning to pilot a sUAS be a new and effective form of adaptive therapy? Joseph Dorando, founder of the Wounded Eagle project, says that the benefits of learning to pilot a drone can't be underestimated – and urges the medical profession to learn more.

Over the many years I've been training disabled veterans into becoming small unmanned aerial systems commercial operators with Wounded Eagle UAS, it's come to my attention that there is an amazing therapy treatment that physical therapists and those in the medical community are unaware of. A therapy treatment that strengthens/teaches eye and hand co-ordination, spatial thinking, muscle training and memory, dexterity, concentration, focus and attention span along with providing employment and enhanced social enabling skills.

Almost all of my students have told me that flying sUAS was something they not only enjoyed but it had also become a form of therapy for them that they looked forward to. They enjoyed coming out to the field gaining more time in flight training operations. As they progressed in their flight skills, I would introduce them to flying via First Person View and one of their comments was "it was like an out of body experience". This isn't some video game, this is real world! https://dronelife.com/2020/07/22/therapy-drones/

Kespry helps The Shelly Company with mine planning and inventory management accuracy APPLICATION MINING AND AGGREGATES ALEX DOUGLAS JULY 23, 2020

The Shelly Company is a leading Ohio limestone, concrete and asphalt paving firm with more than 90 locations and 1,600 employees. It services 81 of 88 counties in the state.

The Shelly Company uses Kespry to measure contours to ensure it creates accurate mine plans, determine accurate stripping calculations, ensure its vendor network plans and deliver precise volumes and quotes. It is also used for before-and-after stripping surveys to validate the amounts of material that have been moved and for updating unit weights and product volume.

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Once our drone lands from a 20 to 30-minute flight, the data are immediately uploaded to the Kespry Cloud for processing. This takes just a few hours, depending on the size of the data collected. We're then able to view the images and client deliverables via the Kespry Cloud. https://www.commercialdroneprofessional.com/kespry-helps-the-shelly-company-increase-mine-planning-and-inventory-management-accuracy/

Alliance for Drone Innovation Launches Drone Operator Insight Series July 22, 2020 News

Today, the Alliance for Drone Innovation, in coordination with the Drone Operators Federation, is launching the "Drone Operator Insight Series" to highlight America's growing small business drone economy. Through an ongoing series of blog posts and social media content, the new campaign will highlight the thousands of ways drone pilots are using this new technology for commercial purposes – from inspections to photography – to create job opportunities and support new and existing businesses across the U.S.

The Series will take readers into the world of some of the more than 60,000 commercial drone pilots who are using drones to transform the way services are provided to customers. The campaign will also reflect on how strategic and flexible drone policies and regulations have paved the way for growth and the vital importance of maintaining this approach in the future.

ADI is a policy-oriented coalition of manufacturers, suppliers, and software developers of personal and professional drones, as well as the innovative Americans who fly them for recreational, artistic, and business purposes. ADI serves as a knowledgeable partner and resource for policymakers seeking thoughtful solutions to the challenges of unmanned flight. Current ADI members include GoPro, DJI, 3DR Skycatch, Horizon Hobby, Indemnis, Kittyhawk, Fat Shark, Pelican Products, Parrot, Mota, Dronenerds, Drones By Us, DroneBase, DRL, DRA, Fluidity, Lantern UAS, PrecisionHawk, Multicopter Warehouse, xCraft, TriStar Multicopters, and Flyability. For more information, or to learn more about joining us, please visit www.droneinnovation.org. https://uasweekly.com/2020/07/22/alliance-for-drone-innovation-launches-drone-operator-insight-series/?utm_source=rss&utm_medium=rss&utm_campaign=alliance-for-drone-innovation-launches-drone-operator-insight-series&utm_term=2020-07-23

Innovative FIXAR VTOL drone with 2KG cargo capacity approved for flights in Canada Scott Simmie Jul. 23rd 2020

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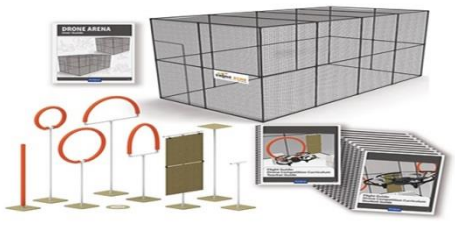
Transport Canada – that country's regulatory agency when it comes to drones – has approved a Latvian drone that takes off like a helicopter and flies like an airplane for Advanced Operations in Canada. That means the unique Vertical Take-off and Landing aircraft can commence operations.

When you think of it, a quadcopter is a VTOL – as it takes off and lands vertically. But many industrial users are interested in a type of VTOL that also incorporates a fixed-wing. This style of aircraft is capable of transitioning between vertical and forward flight. Once in forward flight, the design takes advantage of the lifting power of an airfoil to fly forward with greater efficiency than a quadcopter.

FIXAR stands for "Fixed Angle Rotors." That means the position of the motors does not change when the aircraft transitions. It is instead achieved through the precise angling of the motors in conjunction with software algorithms. The result is that all motors are constantly in use, but without any additional servos. FIXAR has patented the design.
https://dronedj.com/2020/07/23/cool-drone-design-approved-for-use-in-canada/

Pitsco Education Introduces Middle School Curriculum and Arena for Drones July 22, 2020

The increasing popularity and utility of drones has led to interest both inside and outside the classroom. Proper training in drones and drone safety can prepare students for a multitude of careers such as drone pilots, software developers, construction inspectors, and more. Schools can now provide these connections with the newly developed drone curriculum, arena and materials from Pitsco Education.



Using drones in the classroom opens a new set of opportunities to make classes more relevant and engaging for students. And Pitsco offers a variety of options to get teachers and students started with drones.

Designed for Grades 6-8, the curriculum consists of a guide with 12 activities and four competitions as well as resources such as career research links, preflight check, teacher notes and a glossary with basic flight terms and drone principles.

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As students progress through the activities, not only do they practice flying drones, they also learn about real-world FAA flying rules and safety regulations as well as the principles and terminology of quadcopter flight. Culminating competitions pose scenarios that enable students to test their new skills, perhaps rescuing victims from an explosion or capturing footage of a car accident, engaging teamwork and critical-thinking skills. https://uasweekly.com/2020/07/22/pitsco-education-introduces-middle-school-curriculum-and-arena-for-drones/?utm_source=rss&utm_medium=rss&utm_campaign=pitsco-education-introduces-middle-school-curriculum-and-arena-for-drones&utm_term=2020-07-23

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Ride Hail a Drone? Uber Elevate Moves Forward with Hidden Level Collaboration Miriam McNabb July 23, 2020

How soon will it be before you can ride hail a drone? Uber Elevate is investing heavily in urban air mobility (UAM). This week, Uber Elevate announced a collaboration with venture - backed Hidden Level, a company specializing in low altitude airspace monitoring, to advance UAM operations.

Jeff Cole, CEO, Hidden Level said, "The Uber platform was built with safety in mind, and the Uber Elevate team is committed to building upon the aviation industry's safety standards as we bring this new form of on-demand air mobility to our riders," said Tom Prevot, Director of Airspace Systems.

Uber Elevate is about more than ride hailing a drone. Uber has also invested in drone delivery for it's food delivery service, Uber Eats. The evolution of the Uber Elevate platform is moving urban air mobility forward, as cities around the world look to the skies to ease urban congestion. With road infrastructure as large as it can get in many cities, there is nowhere to go but up. https://dronelife.com/2020/07/23/ride-hail-a-drone-uber-elevate-moves-forward-with-hidden-level-collaboration/

Popular Chinese-Made Drone Is Found to Have Security Weakness Paul Mozur, Julian E. Barnes and Aaron Krolik July 23, 2020

Cybersecurity researchers revealed on Thursday a newfound vulnerability in an app that controls the world's most popular

consumer drones, threatening to intensify the growing tensions between China and the United States.

In two reports, the researchers contended that an app on Google's Android operating system that powers drones made by China-based Da Jiang Innovations, or DJI, collects large amounts of personal information that could be exploited by the Beijing government. Hundreds of thousands of customers across the world use the app to pilot their rotor-powered, camera-mounted aircraft.

The Pentagon has banned the use of its drones, and in January, the Interior Department decided to continue grounding its fleet of the company's drones over security fears. DJI said the decision was about politics, not software vulnerabilities.

For months, U.S. government officials have stepped up warnings about the Chinese government's potentially exploiting weaknesses in tech products to force companies there to give up information about American users. Chinese companies must comply with any government request to turn over data, according to American officials.
https://www.nytimes.com/2020/07/23/us/politics/dji-drones-security-vulnerability.html

Four companies win contracts to build the Air Force's Skyborg drone Valerie Insinna July 23, 2020

WASHINGTON — Boeing, Northrop Grumman, General Atomics and Kratos will move forward in the Air Force program to build an AI-enabled drone wingman known as Skyborg.

Each company Thursday was awarded an indefinite-delivery/indefinite-quantity contract worth up to $400 million, but no seed money was immediately allocated as the firms will have to compete against each other for future orders.

Through the Skyborg program, the Air Force wants to field a family of unmanned aerial systems that use artificial intelligence to adapt to battlefield conditions. The drone should be cheap enough where the loss of aircraft in combat could be sustained, yet survivable enough so it could move into a high-end fight and function as a wingman to manned fighter jets.
https://www.airforcetimes.com/unmanned/2020/07/23/four-companies-got-contracts-to-build-the-air-forces-skyborg-drone/

SRC Books $426M Army Contract to Build Counter-Small UAV System Matthew Nelson July 24, 2020 Contract Awards, News

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New York-based research and development company SRC has secured a potential five-year, $425.9M contract from the U.S. Army to produce a system for countering small drones.

SRC will help the branch deploy an Expeditionary-Low, Slow, Small Unmanned Aircraft System Integrated Defeat System and provide support services as part of the cost-no-fee, cost-plus-fixed-fee, firm-fixed-price contract, the Department of Defense said Thursday.

The Pentagon expects contract services to be complete by July 26, 2025.

E-LIDS is intended to help military personnel defend against intelligence gathering and armed UAVs that fly at varying speeds and altitudes. https://www.govconwire.com/2020/07/src-books-426m-army-contract-to-build-counter-small-uav-system/

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