UAS and SmallSat Weekly News

Contents

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4Feb23

SkyDrive picks South Carolina as base of its US eVTOL business Bruce Crumley - Feb. 3rd 2023

Japan's electric vertical takeoff and landing aircraft (eVTOL) developer, SkyDrive, is looking beyond the planned debut of its SD-05 "flying car" at the 2025 World Expo in Osaka by establishing a base in South Carolina as its operational foothold for future business in the US.

SkyDrive said its new offices in South Carolina will oversee the company's work to develop an advanced air mobility (AAM) ecosystem that will benefit use of its two-seat SD-05 eVTOL plane, as well as the state's efforts to promote next-generation aircraft services. Based on information in the company's announcement, it appears the headquarters will focus on identifying and pursuing operational and marketing opportunities in the US, and at least initially not involve production capabilities.

In addition to working with the BCEDC, SkyDrive said it had already begun interfacing with South Carolina authorities and other AAM stakeholders, and was pursuing a "variety of practical use cases originating from two of its key airports" interested in facilitating the company's eVTOL operation. https://dronedj.com/2023/02/03/skydrive-picks-south-carolina-as-base-of-its-us-evtol-business/

Why FAA denying exemption for Percepto drones is a good thing Ishveena Singh - Feb. 3rd 2023

The Federal Aviation Administration (FAA) has denied autonomous drone solutions provider Percepto's latest exemption request. And that regulatory ruling is something that not only Percepto but the entire drone industry needs to celebrate. Confused? Read on…

The FAA has previously required both a Part 107 waiver approval and an exemption to 14 CFR Sections 107.15 (condition for safe operation) and 107.49 (preflight familiarization, inspection, and actions for aircraft operation). Percepto highlights that this is an onerous rulemaking

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process, and that exemption typically takes years to approve and is disproportionate to the risk involved.

"There is also nothing in the text of Part 107 that requires pre-flight inspections to take place in person," Percepto explains. So the company demonstrated to the FAA that its pre-flight inspection went above and beyond Part 107 requirements and therefore did not require an exemption. Percepto's procedures include drone inspection with cameras on and around the base and images to confirm safe deployment. Percepto also ensured to proactively engage with the FAA to address its questions, exceeding the federal agency's expectations of pre-flight inspection processes.

The final result is a first-ever exemption denial move by the FAA, allowing Percepto to operate drones BVLOS without a flight crew on-site without applying for case-by-case exemptions. This advancement for Percepto will benefit the entire industry as it seeks to streamline applications and approvals for BVLOS drone operations. https://dronedj.com/2023/02/03/why-faa-denying-exemption-for-percepto-drones-is-a-good-thing/#more-90711

6Feb23

The Hidden Pilot Project on Drone Radio Podcast: Helping Marginalized Communities Miriam McNabb February 05, 2023

Stream here: Drone Radio Show · Helping Marginalized Communities Enter The Drone Industry – Sedgrid Lewis, Founder of The Hidden Pilot Project

Sedgrid Lewis is Founder of The Hidden Pilot Project. The mission of The Hidden Pilot Project is to teach and train black returning citizens and citizens under the supervision of the criminal justice system how to become licensed drone pilots. Individuals are provided with hands-on training to enter the unmanned systems industry.

Sedgrid Lewis holds an MA in Criminology from the University of West Georgia. He has worked in the criminal justice field for the past 20 years developing evidenced based social programs for juvenile courts and state agencies across the United States. He is also the owner of Blackhawk Aerial LLC. As a part 107 commercial drone pilot, he has flown for several national construction firms providing progression aerial photos. https://dronelife.com/2023/02/05/the-

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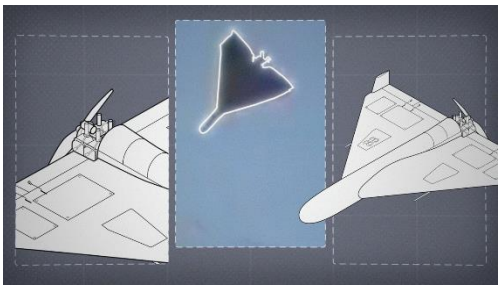
hidden-pilot-project-on-drone-radio-show-podcast-helping-marginalized-communities-enter-the-industry/

Moscow, Tehran Advance Plans for Iranian-Designed Drone Facility in Russia Dion Nissenbaum and Warren P. Strobel Feb. 5, 2023



Self-destructing drones play a key role in Russia's strategy to strike cities and civilian infrastructure in Ukraine. Clues in videos and photos indicate that unmanned aerial vehicles are provided by Iran, despite Moscow's denials.

Moscow and Tehran are moving ahead with plans to build a new factory in Russia that could make at least 6,000 Iranian-designed drones for the war in Ukraine, the latest sign of deepening cooperation between the two nations, said officials from a country aligned with the U.S.

As part of their emerging military alliance, the officials said, a high-level Iranian delegation flew to Russia in early January to visit the planned site for the factory and hammer out details to get the project up-and-running. The two countries are aiming to build a faster drone that could pose new challenges for Ukrainian air defenses, the officials said.

Russia has used the drones to target Ukraine's power grid in an attempt to cripple the country's electricity supply during the cold winter and undermine morale. Over time, Ukraine's air defenses have succeeded in largely neutralizing the drone threat. The Shahed-136 is a slow-moving and loud drone with propeller engines, making it relatively easy to spot and shoot down. Ukraine has shot down more than 540 drones since they started appearing over the country's skies last fall, according to the nation's air force. https://www.wsj.com/articles/moscow-tehran-advance-plans-for-iranian-designed-drone-facility-in-russia-11675609087?mod=Searchresults_pos1&page=1

DARPA selects two teams to develop Liberty Lifter X-Plane program February 3, 2023 Jenny Beechener

The US Defense Advanced Research Projects Agency (DARPA) has selected two teams to develop the Liberty Lifter X-plane concept launched in May 2022. The Liberty Lifter program aims to design, build, float, and fly an affordable, innovative, and disruptive seaplane that operates efficiently in ground effect, can sustain flight altitudes up to 10,000 feet, and enables efficient theater-range transport of large payloads at speeds far exceeding existing sea lift

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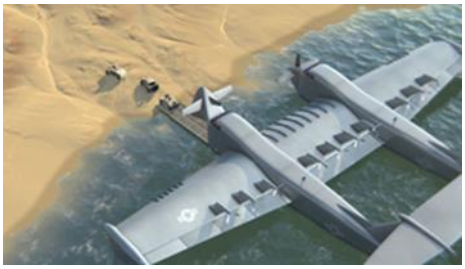
platforms. Liberty Lifter will use low cost manufacturing akin to ship fabrication in building a highly innovative seaplane capable of meeting Department of Defense (DoD) heavy lift requirements (100+ tons) that operates with runway and port independence.



During Phase 1, DARPA will work with both performer teams and Department of Defense stakeholders to refine the Liberty Lifter designs with particular attention to operational needs and operating concepts. The Phase 1 contract awards are for an 18-month period of performance with six months of conceptual design work and nine months of design maturation culminating in a preliminary design review. There will be an additional three months for manufacturing planning and test/demonstration planning reviews. https://www.unmannedairspace.info/latest-news-and-information/darpa-selects-two-teams-to-develop-liberty-lifter-x-plane-programme/

Urban drone/eVTOL benefits and obstacles: AI, rules, public perception expert workshop February 3, 2023 *Philip Butterworth-Hayes*

Public demonstrations of the positive benefits of electric vertical take-off and landing aircraft (eVTOLs) and drones by comparing the noise of eVTOLs with helicopters and replacing firework displays with pet-friendly light shows were just two proposals from a December 2022 “Navigating the opportunities and obstacles in UAM” expert workshop organized by the EU-funded Flying Forward 2020 project, along with the AiRMOUR and AURORA consortia.

More than 40 UAM experts attended the event, which was designed to identify and explore the key UAM challenges; to gather input from selected target audiences on how to solve these challenges; and bring together the selected target audiences to exchange knowledge and ideas for future explorations and to expand the network

Workshop conclusions were divided into three areas: the regulatory framework; public acceptance; and technical maturity. https://www.unmannedairspace.info/news-first/urban-drone-evtol-benefits-and-obstacles-ai-rules-public-perception-explored-in-expert-workshop/

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Ukraine conflict: General Atomics offers to donate two UAVs to Ukraine 03 FEBRUARY 2023 Marc Selinger

US-based General Atomics Aeronautical Systems Inc (GA-ASI) has offered to transfer two company-owned MQ-9A Reaper unmanned aerial vehicles (UAVs), a ground-control station, and related equipment to Ukraine for the symbolic price of $1 to help the war-torn country improve its airborne intelligence, surveillance, and reconnaissance (ISR) capabilities, according to GA-ASI's chief executive.

The offer includes free training for the first cadre of Ukrainian pilots and maintainers. It excludes the cost of readying the aircraft for combat, transporting them to Ukraine, setting them up in that country, obtaining satellite bandwidth, or providing additional supporting labor, all of which are “outside of our control”, according to Blue.

GA-ASI made its proposal public amid months-long US government resistance to sending the company's UAVs to Ukraine. While Ukraine has received artillery, tanks, and other much-needed military support from the West, it continues to lack “high-quality” UAVs, GA-ASI spokesperson C Mark Brinkley told *Janes.* https://www.janes.com/defence-news/industry-headlines/latest/ukraine-conflict-general-atomics-offers-to-donate-two-uavs-to-ukraine

D-Fend Solutions’ EnforceAir Wins 2023 Homeland Security Service of the Year Award February 4, 2023 News

D-Fend Solutions, the leader in radio frequency cyber-based counter-drone, takeover technology, is pleased to announce that their flagship product, EnforceAir, is the recipient of the 2023 Intersec Homeland Security/Service of the Year Award. This honor was announced at the 2023 Intersec Expo on January 18 at the Ritz Carlton DIFC in Dubai, UAE.

“They’ve developed a product that not only has a wide bandwidth of capture from potentially hostile drones, but also they’ve developed technology that can take control of that drone and send it to a safe place,” said Howard Leedham, MBE, MSc, Aviation and Security Expert Consultant, former UK Special Forces Officer, former Royal Navy Commando Pilot, and 2023 Intersec Award Juror, “The company is well deserved of this award.” The Awards, which

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recognize people, products, and companies for exceptional performance attracted almost 1300 entries across ten categories.

Jeffrey Starr, Chief Marketing Officer, said "The criteria, competitiveness, and rigorous selection process, combined with the specific mention of our capture, control, and safety attributes, represents tremendous validation for our performance in the growing and demanding counter-drone space." https://uasweekly.com/2023/02/04/d-fend-solutions-enforceair-wins-2023-intersec-homeland-security-product-service-of-the-year-award/?utm_source=rss&utm_medium=rss&utm_campaign=d-fend-solutions-enforceair-wins-2023-intersec-homeland-security-product-service-of-the-year-award&utm_term=2023-02-06

Savings of up to $7,000 in eBee mapping drone trade-up program Ishveena Singh - Feb. 6th 2023

Offering up to 90 minutes of flight time, the eBee X is a lightweight fixed-wing drone with a ton of regulatory advantages up its sleeve.

The drone is approved to fly over people in the United States and Canada, a capability essential for city mapping and many kinds of cadastral surveying jobs. It also has Remote ID approved by the FAA.

So if your business operations require flying BVLOS and over populated areas that are not accessible to heavy drones, you may trade-up your VTOL, quadcopter, or multirotor for a $5,000 discount on the eBee X Premium Bundle which includes the following: eBee X aircraft, One premium camera of choice, RTK/PPK activation, eMotion flight planning software, backpack and accessories, One year warranty.

It's worth highlighting that the FAA slates the eBee as the most popular commercial fixed-wing drone in the US. Over 40% of all commercial fixed-wing drone registrations in America since 2016 have been for the eBee, which was first released in 2013.
https://dronedj.com/2023/02/06/ebee-x-drone-trade-up/

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DRONERESPONDERS charles@droneresponders.org

On **Tuesday, February 7 at 3:00 pm EST**, join Miriam McNabb (DroneLife), Tim Martin (The Regional Training Center) as they open a new monthly ***Public Safety Drone Review*** to look at new technologies, related incidents, issues, trends and events. This webinar will be held on the first Tuesday of each month at 3 pm EST.
https://us02web.zoom.us/webinar/register/WN_7ornmILfRvytelRMaGPr7A

On **Wednesday, February 8 at 4 pm EST**, join FAA's Mike O'Shea and other FAA guests on the monthly DRONERESPONDERS
webinar. **https://us02web.zoom.us/webinar/register/WN_wsIxyK_8S8ybCz7-Pkpfww**

-For information on the **DRONERESPONDERS National Public Safety UAS Conference on March 14, 15 at Busch Gardens in Historic Williamsburg, VA. https://bit.ly/3JsxWCU**

Tentative DRONERESPONDERS National Public Safety UAS Conference Program:
https://bit.ly/3RCbTeR

7Feb23

World's Largest Autonomous Electric Cargo Aircraft Unveiled

Phoebe Grinter / 02 Feb 2023

Pyka claims that Pelican Cargo is the world's largest zero-emission cargo airplane and the first autonomous vehicle of its class.

With a range of up to 200 miles, a payload of up to 400 pounds in 66 cubic feet of cargo volume, and a nose-loading system with a sliding cargo tray, Pyka believes its Pelican Cargo platform will enhance express logistics networks, enable connectivity of remote rural communities, and ensure fast and reliable access to vital goods and supplies for areas in need.

Following the commercial success of its agricultural spray aircraft, which led to a $37 million Series A raise in April 2022, Pyka has secured pre-commitments of over 80 orders and options for its Pelican Cargo from three launch customers across North America and Europe. The aircraft is currently undergoing rigorous testing at Pyka's flight test facility in Northern California. The first commercial operation of the new product is expected for the second half of

2023. https://www.unmannedsystemstechnology.com/2023/02/worlds-largest-autonomous-electric-cargo-aircraft-unveiled/?utm_campaign=Energy%20Drone%20%26%20Robotics%20Coalition%20Content&utm_medium=email&_hsmi=244999114&_hsenc=p2ANqtz-_JMFtr2vqHjxKCkJgEEemLPRPJIby9TmGbKI9gus8tebzkAkaB3ao0uw5eOGWBuvNbtraRn2_6ImCw6JBhSD8pnDWsHw&utm_content=244999113&utm_source=hs_email

New Water Take-Off & Landing Capability Added to Beluga Mini Drone Phoebe Grinter / 01 Feb 2023

EuroLink Systems has confirmed that it has extended the capability of its Beluga mini-drone to provide a unique water take-off and landing capability, a feature the company believes will open-up a range of applications not previously met.

An essential capability for many maritime and aquatic-related applications, EuroLink believes Beluga's new water take-off and landing capability is a statement of how flexible and configurable the platform is.

EuroLink has designed and integrated various technologies into the Beluga drone platform to allow customers to 'pick and choose' those capabilities that fit the target application to realize an integrated, out-of-the-box capability.

According to EuroLink, it offers the Beluga as a fully tested, validated and certified deployable drone solution, consistent with customer specifications, at around a third of the cost of other similar solutions. https://www.unmannedsystemstechnology.com/2023/02/new-water-take-off-landing-capability-added-to-beluga-mini-drone/?utm_source=UST+eBrief&utm_campaign=72b9c4893c-ust-ebrief_2023-feb-7&utm_medium=email&utm_term=0_6fc3c01e8d-72b9c4893c-119747501&mc_cid=72b9c4893c&mc_eid=0d642a9d48

New York State Grows UAS Industry with GENIUS NY Accelerator – Applications Now Open Sarah Simpson / 07 Feb 2023

GENIUS NY – the world's largest business accelerator focused on uncrewed aerial systems – is now accepting applications for the seventh round of the year-long program.

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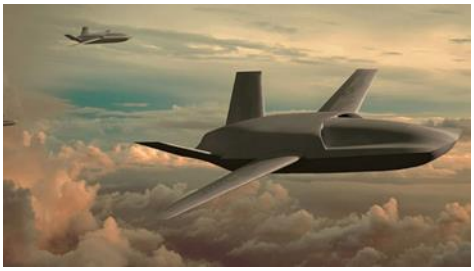
The in-residence accelerator, funded by Empire State Development, will invest more than $3 million in five finalist companies, including a $1 million grand prize. The program also offers company stipends, resources, programming, mentorship, fundraising support, and networking opportunities to assist innovative startups with the tools they need to take advantage of emerging opportunities. *To start your application click here >>*

New York has worked to establish itself as the nation's premier destination for drones and related UAS industry businesses in the Central New York and Mohawk Valley regions. Since 2016, the state has been making robust investments to supercharge the industry, including an initial investment of $35 million to develop the 50-mile UAS flight traffic management system with NUAIR, $9 million for Skydome, Oneida County's indoor drone testing facility, and more than $30 million for six rounds of GENIUS NY. Applications are being accepted at www.geniusny.com through May 17, 2023 from tech startups focused in uncrewed aerial systems, IoT, big data, and robotics. https://www.unmannedsystemstechnology.com/2023/02/new-york-state-grows-uas-industry-with-genius-ny-accelerator-applications-now-open/?utm_source=UST+eBrief&utm_campaign=72b9c4893c-ust-ebrief_2023-feb-7&utm_medium=email&utm_term=0_6fc3c01e8d-72b9c4893c-119747501&mc_cid=72b9c4893c&mc_eid=0d642a9d48

AFRL Selects General Atomics Aeronautical Systems Inc. for Obstacle Avoidance System for UAVs February 6, 2023 Military | News



General Atomics Aeronautical Systems, Inc. will manufacture and perform demonstration flights of the Air Force Research Laboratory's (AFRL) unmanned Off-Board Sensing Station aircraft. Following a 12-month base period that culminated in a critical design review, AFRL exercised a build and flight test option.

GA-ASI's innovative Gambit Series aircraft will validate the "genus/species" concept first developed by AFRL as part of the Low-Cost Attritable Aircraft Platform Sharing program focused on building several aircraft variants from a common core chassis. It is a major air vehicle effort under AFRL's Autonomous Collaborative Enabling Technologies portfolio which is focused on

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developing technologies for Autonomous Collaborative Platforms.
https://uasweekly.com/2023/02/06/afrl-selects-general-atomics-aeronautical-systems-inc-to-develop-obstacle-avoidance-system-for-unmanned-aerial-vehicles/?utm_source=rss&utm_medium=rss&utm_campaign=afrl-selects-general-atomics-aeronautical-systems-inc-to-develop-obstacle-avoidance-system-for-unmanned-aerial-vehicles&utm_term=2023-02-07

Demand for Unrestricted Drone Operation Fueling Production Increase at Asio Technologies February 7, 2023 News

Asio Technologies, a leading provider of geospatial position systems for navigation, positioning, mission planning, and mission management, has announced a major expansion in response to the growing demand for its products. With the increasing threat of drone jamming and spoofing, aviation regulatory agencies and militaries are strengthening their requirements for navigational robustness. To meet this demand, Asio Technologies is doubling its production and assembly lines and recruiting additional employees to ensure the successful delivery of its NavGuard jam-proof navigation solution, a unique solution that offers unrestricted drone operation.

According to David Harel, CEO of Asio Technologies, "We are thrilled to open the new year with this exciting expansion which will allow us to better serve our customers and provide the reliable and robust navigation and mission management solutions they need.
https://uasweekly.com/2023/02/07/demand-for-unrestricted-drone-operation-fueling-production-increase-at-asio-technologies/?utm_source=rss&utm_medium=rss&utm_campaign=demand-for-unrestricted-drone-operation-fueling-production-increase-at-asio-technologies&utm_term=2023-02-07

Swoop Aero to launch health care drone deliveries in New Zealand Bruce Crumley - Feb. 7th 2023

Australian drone delivery and logistics company Swoop Aero is preparing to initiate beyond visual line of sight (BVLOS) services for New Zealand's health care system, initially operating flights of lab samples between the South Island west coast towns of Westport and Greymouth. Swoop Aero announced its health care delivery launch after the green light it said it received in late December to conduct BVLOS drone flights from New Zealand's regulator.

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In December, the company said it had begun building what it called "the world's first, and largest, fully integrated drone logistics network" of both medicines and commercial goods. That will eventually roll in drone deliveries of patient lab samples and medical supplies to the Queensland town of Goondiwindi – which has been battered by flooding and other extreme weather – and similar aerial shuttles between Brisbane and the Moreton Bay islands off its eastern coast.

Now Swoop Aero is readying those kinds of drone delivery services for Te Whatu Ora Health New Zealand. The company says the initial bilateral network between Westport and Greymouth will be orchestrated from its remote flight center, where one person can pilot up to five UAVs at the same time. https://dronedj.com/2023/02/07/swoop-aero-to-launch-health-care-drone-deliveries-in-new-zealand/

How drones dogfight above Ukraine Feb 7th 2023

During the first world war, fighter pilots dueled with pistols and rifles. Today, in the skies over Ukraine, a new type of dogfight is taking place—between drones. In October a video emerged on social media showing a Ukrainian drone ramming a Russian one, causing the latter to crash. It was the first known wartime duel between drones.

Downing enemy drones is essential, but can be tricky. Supplies of the kit used to jam signals from the drone's operator are limited, and jammers are often turned off to allow friendly drones to function. Small drones are hard to spot and harder to shoot. Blasting them out of the air is expensive too: a single missile from a Patriot or nasams air-defence system can cost $1m or more. Dogfighting with drones provides an alternative mode of attack that costs a few thousand dollars a pop.

The Ukrainians' early attacks on Russian drones involved human operators directing the attacking craft to ram the enemy in whatever way they could. But they appear to have refined their technique: now Ukrainian attackers dive. Quadcopters have rotors on top, and their cameras point downwards. A rapid descent on a target from above makes use of this blind spot. Striking the rotor will usually cause at least one blade to break, sending the enemy spinning out of control but leaving the attacker undamaged. There are more experimental approaches, too. A video shared on social media on December 2nd shows a Russian drone dropping a grenade on a Ukrainian one. The grenade does not detonate, but breaks a rotor blade as it passes, downing

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the target. https://www.economist.com/the-economist-explains/2023/02/07/how-drones-dogfight-above-ukraine

8Feb23

THIS HONG KONG DISNEYLAND DRONE IS PRETTY COOL February 7, 2023 Sally French

The Hong Kong Disneyland drone video takes you on a tour of the construction site. It shows how the natural landscape of Lantau Mountain behind Hong Kong Disneyland serves as a backdrop. It reveals that most construction around Arendelle village is almost complete, with landmarks including the clock tower, Elsa's Ice Palace sitting atop the North Mountain and Arendelle Castle.

The World of Frozen at Hong Kong Disneyland will be the park's largest expansion and the world's first Frozen-themed land. It'll house two new attractions: Frozen Ever After and the first-of-its-kind Frozen-themed family-friendly roller coaster Wandering Oaken's Sliding Sleighs. There's also a quick-service restaurant and other merchandise outlets.

This is just one of many instances of the Walt Disney Company leaning big into drones. In January 2023, Disney launched a Marvel-themed drone show at its Walt Disney Studios Park in Paris. The show debuted to rave reviews, which features 500 drones that form a series of lighting sequences themed to the powers of heroic Super Heroes such as Captain America, Captain Marvel, Scarlet Witch and, for the first time at Disneyland Paris, Shang-Chi.

The folks at DLP Dream Plus shared their fan video of the show, which lasts about 7 minutes, here: https://www.thedronegirl.com/2023/02/08/hong-kong-disneyland-frozen-drone/

Solar-Powered Skydweller Completes First Autonomous Flights Graham Warwick February 07, 2023

Skydweller Aero has conducted the first fully autonomous flights of its solar-powered, heavy-payload, long-endurance uncrewed aircraft after equipping the former Solar Impulse 2 with an internally developed fly-by-wire flight control system.

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U.S.-Spanish startup Skydweller acquired the Solar Impulse 2 in 2019 after the aircraft had completed the piloted circumnavigation of the world on solar power. Initially it was converted to an optionally piloted aircraft by connecting flight-control computers to the existing mechanical controls.

In flight tests from Albacete airbase in Spain, the aircraft demonstrated remotely piloted, three-dimensional guidance from the ground. But to exploit the aircraft's months-long endurance capability required development of a full-authority, fully redundant autonomous flight control system, Skydweller CEO Robert Miller says.

Upgraded with the human-rated fly-by-wire system, the aircraft was awarded an experimental airworthiness certificate by Spanish aviation regulator AESA. In the initial validation flight tests, the system flew the aircraft autonomously from takeoff to landing without pilot input, although there was a safety pilot on board. https://aviationweek.com/aerospace/aircraft-propulsion/solar-powered-skydweller-completes-first-autonomous-flights

DroneBase Soars to New Heights with $55 Million Investment and Rebranding as Zeitview February 8, 2023 News

Led by Valor Equity Partners, an operational growth investment firm backing technology and technology-enabled companies, the round was followed by existing investors Union Square Ventures, Upfront Ventures, Euclidean Capital, Energy Transition Ventures, and Hearst Ventures. The new funding will support the company's AI-enabled software and global footprint in advanced inspection solutions. This announcement caps a year of rapid growth within the renewable sector, including the launch of the North American Solar Scan, the first standardized set of solar asset ratings to ensure better oversight of U.S. solar power plants. Last year, Zeitview inspected 43 GW of solar capacity.

As Zeitview, the company will continue building advanced inspection software that delivers fast, accurate insights, lowers costs for asset owners and improves performance and longevity. The name change comes with the company's increasingly diverse data capture tools: alongside rotary wing drones, Zeitview inspection professionals use crewed aircraft and smartphone technologies to create relevant, flexible solutions for clients. Its accompanying software platform with deep insights and analytics allows clients to easily view data results anywhere. https://uasweekly.com/2023/02/08/dronebase-soars-to-new-heights-with-55-million-investment-and-unveils-rebranding-efforts-as-

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zeitview/?utm_source=rss&utm_medium=rss&utm_campaign=dronebase-soars-to-new-heights-with-55-million-investment-and-unveils-rebranding-efforts-as-zeitview&utm_term=2023-02-08

Airobotics, SkyGo plan autonomous drone network for Abu Dhabi Ishveena Singh - Feb. 8th 2023

Airobotics has announced a $3.5 million purchase order and joint venture with SkyGo, a UAE-based company that has a commercial license to provide uncrewed aerial transport of goods and services across the city of Abu Dhabi. This news follows the recent acquisition of Airobotics by Ondas Holdings.

The companies will move forward in launching a first-of-its-kind deployment of "Urban Drone Infrastructure" throughout Abu Dhabi for public service. Airobotics Optimus System, an autonomous drone platform with powerful capabilities, will be leveraged for the project. It's hoped that the system will serve as a benchmark for the rest of the world, especially major cities.

Airobotics and SkyGo expect to deploy more than 20 drone systems across Abu Dhabi over the next few years. Airobotics explains that the drones, subject to necessary approvals and permits, will be deployed at industrial and municipal sites for various services and capabilities including providing public services in a sustainable and scalable manner.

The drone infrastructure, which is designed to operate as a network of smart drones, will be used in various cases such as aerial priority delivery and monitoring missions to increase the safety and quality of industrial operations in facilities such as ports, railways, and highways.
https://dronedj.com/2023/02/08/airobotics-skygo-drone-abu-dhabi/

9Feb23

Joby Completes G-2 Means of Compliance with FAA Ben Goldstein February 08, 2023

FAA Acting Administrator Billy Nolen and Joby Head of Aircraft OEM Didier Papadopoulos watch Joby's prototype S4 air taxi take off at Marina Airport, California, on Jan. 30.

Joby Aviation announced that it has effectively completed its G-2 Means of Compliance approval process with the FAA,

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becoming the first electric vertical takeoff and landing (eVTOL) vehicle startup in the U.S. to complete the second phase of the five-stage aircraft certification process.

In the G-2 stage of the certification process, companies agree with the FAA on specific ways in which they will demonstrate compliance with the regulatory intent of the safety rules that were defined in the G-1 Certification Basis, which is the first stage of the process. Joby was also the first OEM to complete the G-1 stage when its certification basis was published in the Federal Register in November.

Aside from Joby, Archer Aviation is the only other U.S.-based company that has completed its G-1 Certification Basis with the FAA, and it also expects to have its G-2 MOC fully approved sometime in the second quarter of 2023. https://aviationweek.com/aerospace/advanced-air-mobility/joby-completes-g-2-means-compliance-faa

Don't panic: Ingenuity helicopter reaches 42 flights on Mars Elizabeth Howell 8Feb23

Reaching 42 represents "the meaning of life, the universe, and everything," wrote NASA's Jet Propulsion Laboratory on Twitter(opens in new tab) of the Feb. 4 flight. The number has resonance for fans of the 1979 Douglas Adams novel and associated television series and films, who learned of 42's significance to our cosmos via a fictional supercomputer quoted in the book.

Ingenuity's original manifest called for only five flights after the four-pound rover alighted on the surface of Mars underneath the belly of the Perseverance rover. The mission has a larger agenda to search for ancient life in Jezero Crater, which hosted a river delta eons ago.

As Ingenuity proved flights were possible on the Red Planet, its scope quickly expanded. Now the drone has become a reliable partner in scouting ahead for Perseverance's sampling and sorties, so much so that NASA altered its Mars sample return plans in 2022 to include two fetch helicopters. https://www.space.com/nasa-mars-helicopter-ingenuity-42nd-flight

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FCC Seeks Industry Input on Licensed Spectrum Rules for Drone Operators Naomi Cooper February 8, 2023

The Federal Communications Commission has begun requesting industry comments on proposed rules to enable unmanned aircraft system operators to access licensed spectrum to ensure the reliability of drone operations.

A notice published Tuesday in the Federal Reserve states that the FCC is seeking companies' input on the cost and benefits of adopting a band plan and service rules to grant drone operators access to interference-protected control-and-non-payload-communications in the 5030-5091 MHz band.

FCC aims to develop band plans and service rules for two broad UAS use cases: non-networked operations, which occur within the radio line-of-sight of the UAS operator; and network-supported operations, which use network infrastructure to go beyond radio LOS.

The commission also plans to establish a licensing process for UAS operators to communicate with air traffic control and other aircraft to facilitate flight coordination and ensure the safe integration of drone operations in controlled airspace. Responses are due March 9. https://executivegov.com/2023/02/fcc-seeks-industry-input-on-licensed-spectrum-rules-for-drone-operators/

Natilus Deal with Ameriflight for 20 Freight Planes Total Orders 460 Aircraft Worth $6.8 Billion February 8, 2023 News

Natilus, a U.S. corporation specializing in the design and production of autonomous aircraft for sustainable freight transportation, has made a big announcement. Ameriflight, a leading player in the freight operations industry, has signed an Aircraft Purchase Agreement with Natilus, becoming the first regional U.S. carrier to do so. This agreement, valued at $134 million, includes 20 Natilus Kona feeder aircraft and brings the total commitments to $6.8 billion for the delivery of 460+ aircraft.

Ameriflight is the largest Part 135 cargo airline in the nation, operating more than 1,500 weekly departures to 200 destinations across the United States, Canada, Mexico, the Caribbean, and

South America. As a crucial part of the supply chain with UPS as its largest customer, Ameriflight's primary business is transporting high-priority air freight to and from remote areas across the country for overnight express carriers.

Natilus' fleet of carbon fiber, blended-wing-body designed cargo aircraft offers a 60% reduction in operational costs and cuts carbon emissions in half. This enables the opening of new and emerging markets in remote areas where larger aircraft cannot land due to runway capacity and infrastructure limitations. The autonomous technologies used by Natilus aim to improve labor efficiency by allowing a single pilot to control multiple aircraft, helping to address the dire pilot shortage issue in the industry. https://uasweekly.com/2023/02/08/natilus-secures-deal-with-ameriflight-for-20-freight-planes-boosting-total-orders-to-over-460-aircraft-worth-6-8-billion/?utm_source=rss&utm_medium=rss&utm_campaign=natilus-secures-deal-with-ameriflight-for-20-freight-planes-boosting-total-orders-to-over-460-aircraft-worth-6-8-billion&utm_term=2023-02-09

Maersk North America Adopts Verity's Technology for Warehouse Inventory Management February 9, 2023 News

After a successful six-month trial at four of the company's North American sites, the plan is to roll out the drones to all its pallet storage warehouses.

Inventory management in warehouses is a crucial aspect of the supply chain, affecting flow, costs, and business decision-making. However, this task can be time-consuming, repetitive, and prone to inaccuracies, particularly when it involves workers climbing to great heights.

Erez Agmoni, Senior Vice President of Innovation & Strategic Growth for Maersk North America, says, "As a supply chain integrator, we are always seeking innovative and effective solutions for our warehouse operations. With Verity's system, we aim to improve accuracy and safety while reducing the carbon footprint for our customers."

Verity's warehouse drones efficiently collect inventory data by scanning barcodes and capturing images in three dimensions using high-resolution cameras. The electric-powered drones operate autonomously, returning to their charging pad when necessary and functioning even during off-hours and in low-light conditions. The system requires just one day of training for operators. https://uasweekly.com/2023/02/09/warehouse-inventory-management-drone-technology-

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supply-chain-optimization/?utm_source=rss&utm_medium=rss&utm_campaign=warehouse-inventory-management-drone-technology-supply-chain-optimization&utm_term=2023-02-09

DJI Takes the Lead as Title Sponsor of NestGen'23: The Drone Autonomy Summit Februrary 8, 2023

NestGen is a one-day virtual summit that brings together a community of drone autonomy experts to delve into the latest advancements in the industry. With over 45 expert speakers and 30 informative sessions, attendees will gain a comprehensive understanding of key topics such as BVLOS operations, regulatory landscape, drone delivery, and various applications in industries such as construction, security, utility inspections, energy, and power distribution.

"We are honored to have DJI join us as a title sponsor to share their vision and technology," said Nitin Gupta, Founder & CEO of FlytBase. DJI's Global Solutions Engineering Director, Freda Peng, further stated, "We are eager to join NestGen and share the capabilities of our DJI Dock with this dynamic community. This is a fantastic opportunity to drive the industry forward and discuss the future of drone operations."

Register for NestGen today at https://explore.flytbase.com/nestgen2023."
https://uasweekly.com/2023/02/08/dji-takes-the-lead-as-title-sponsor-of-nestgen23-the-drone-autonomy-summit/?utm_source=rss&utm_medium=rss&utm_campaign=dji-takes-the-lead-as-title-sponsor-of-nestgen23-the-drone-autonomy-summit&utm_term=2023-02-09

Proposed Bill Would Streamline BVLOS Approvals FEBRUARY 9, 2023 Commercial UAV News Staff

This week, Senators Mark R. Warner (D-VA) and John Thune (R-SD) introduced the "Increasing Competitiveness for American Drones Act of 2023." The proposed legislation would revamp the process for acquiring waivers from the Federal Aviation Administration for drone flights beyond visual line of sight (BVLOS).

If passed, the bill would require the FAA to establish a "risk methodology" that would determine specific levels of regulatory scrutiny for approving BVLOS flights of different sizes of uncrewed vehicles.

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Moreover, the bill would create an "Associate Administrator of UAS Integration" position and a UAS Certification Unit that would have "the sole authority to issue all rulemakings, certifications, and waivers."

The legislation has been endorsed by the Commercial Drone Alliance. In a statement, the organization said the proposed law "provides necessary direction to the FAA that will enable beyond visual line of sight UAS operations which is critical to scaling the use of UAS for cases ranging from infrastructure inspection and agriculture to fighting wildfires and package delivery." https://www.commercialuavnews.com/regulations/proposed-bill-would-streamline-bvlos-approvals?mkt_tok=NzU2LUZXSi0wNjEAAAGJ1oh_H2-tqr-VN4k3e8NRduzRkk5VMt9dU6Vqp7UlbEh3rEcQ2ouERjkzOPuQYrRPcpd3LbTeQ-5uYxZlVj6QrRmsTA8m12vH1ESLA8Qs8o_O54Q

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U.S. Air Force Considers Case for Remotely Piloted Aircraft

Charles Alcock - February 9, 2023

The U.S. Air Force has commissioned Reliable Robotics to investigate how flight automation technology might allow large military transport aircraft to be remotely piloted for cargo operations. Under a contract announced on February 8, the company will prepare a feasibility study for the application of full and limited automation features on multiple aircraft.

The Air Force is looking at ways to increase the pace and frequency of its missions worldwide and is interested in leveraging technology now being developed for commercial aircraft. The California-based company is working to achieve FAA approval to convert existing utility aircraft, such as Textron's Cessna Caravan, to operate with its autopilot engaged in all phases of flight, including taxi, takeoff, cruise, and landing.

According to Reliable Robotics, its technology will deliver more precise navigation than is available in current piloted flight decks, as well as sophisticated flight-planning capabilities and robust controls for managing operations. It claims that remotely piloted flights will reduce common causes of fatal accidents. https://www.ainonline.com/aviation-news/defense/2023-02-09/us-air-force-considers-case-remotely-piloted-aircraft

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