



UAS and SmallSat Weekly News

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Russia and Ukraine are fighting the first full-scale drone war Isabelle Khurshudyan, Mary Ilyushina, Kostiantyn Khudov December 2, 2022



KHARKIV, Ukraine — A war that began with Russian tanks rolling across Ukraine's borders now has a more modern dimension: soldiers observing the battlefield on a small satellite-linked monitor while their palm-size drone hovers out of sight.

With hundreds of reconnaissance and attack drones flying over Ukraine each day, the fight has transformed into a digital-age competition for technological superiority in the sky. Drones are integrated into every phase of fighting with extensive fleets, air defenses and jamming systems on each side. It is a war fought at a distance — the enemy is often miles away — and nothing bridges the gap more than drones, giving Russia and Ukraine the ability to see and attack each other without ever getting close.

Ukrainian forces have also used drones to strike targets far from the fighting — in Crimea, which Russia illegally annexed in 2014 and in Russia's Belgorod border region. Russia has repeatedly struck Ukraine's critical civilian infrastructure with self-detonating drones — a cheap substitute for high-precision missiles.

Drones have become so critical to battlefield success that at times they are used to take out other drones. <https://www.washingtonpost.com/world/2022/12/02/drones-russia-ukraine-air-war/>

SpaceX gets U.S. approval to deploy up to 7,500 satellites David Shepardson December 1, 2022



WASHINGTON, Dec 1 (Reuters) - The U.S. Federal Communications Commission said on Thursday it approved SpaceX's bid to deploy up to 7,500 satellites but put on hold some other decisions.

SpaceX's Starlink, a fast-growing network of more than 3,500 satellites in low-Earth orbit, has tens of thousands of users in the United States so far, with consumers paying at least \$599 for a user terminal and \$110 a month for service. The FCC in 2018 approved SpaceX plans to deploy up to 4,425 first-generation satellites.



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SpaceX has sought approval to operate a network of **29,988 satellites**, to be known as its "second-generation" or Gen2 Starlink constellation to beam internet to areas with little or no internet access.

"Our action will allow SpaceX to begin deployment of Gen2 Starlink, which will bring next generation satellite broadband to Americans nationwide," the FCC said in its approval order, adding it "will enable worldwide satellite broadband service, helping to close the digital divide on a global scale." <https://www.reuters.com/technology/us-fcc-partially-grants-spacexs-application-second-gen-satellite-system-2022-12-01/>

Archer's Maker eVTOL prototype makes its first full transition flight Bruce

Crumley - Dec. 2nd 2022



Next-generation aircraft developer [Archer](#) passed another milestone in what had already been an eventful year for the company, with its Maker prototype [electric vertical takeoff and landing](#) (eVTOL) aircraft making its first full transition flight this week.

[Archer announced](#) the news two days after Maker on Tuesday successfully completed what sector experts consider one of, if not the most critical tests in eVTOL development. Maker made its first vertical-to-forward-thrust flight [just under a year](#) after its rose from the ground for the first time ever in a hover trial.

That transpired only three weeks after Maker obtained the FAA's all-clear for testing with its [Special Airworthiness Certificate](#), setting the pace for what has been Archer's swift progress in moving the eVTOL toward operational certification.

Now, after fulfilling pledges that it would start Maker's full transition flight testing [by the end of 2022](#), Archer officials say they expect to obtain FAA certification in 2024, and [commence air taxi service](#) of the production Midnight version of the eVTOL the following year.

<https://dronedj.com/2022/12/02/archers-maker-evtol-prototype-makes-its-first-full-transition-flight/>

18 fabulous drone photos from weekly selections of DJI and SkyPixel's annual contest Ishveena Singh - Dec. 2nd 2022

With the [SkyPixel Annual Photo & Video Contest](#) currently ongoing, tech giant DJI and its social media arm SkyPixel are celebrating the work of drone creators with weekly selections. The



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photos being featured typically follow a theme and are meant to inspire fellow drone users to get out there and get clicking. The themes for weeks 1 and 2 are drone portraits and creatures.



While there are several selections that have been shot using DJI's top-of-the-line aerial photography platform [Mavic 3](#), it's particularly striking to see fabulous photos being delivered using the entry-level [Mini 2](#) or the company's 2016 release [Mavic Pro](#).

The SkyPixel Annual Photo & Video Contest has always been more than a competition; it is a **celebration of stories** that made the work possible... With the creative imaging community growing wider to realize more perspectives, DJI and SkyPixel want the world to see the breathtaking aerial stories that this technology can capture and be inspired to capture their own amazing images. Let's look at the weekly selections now, beginning with drone portraits: <https://dronedj.com/2022/12/02/dji-skypixel-contest-drone-photo/#more-89152>

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Xwing awarded contract for the FAA's COSTA Traffic Management Research Program

Press DEC 5, 2022



Autonomous aviation company, [Xwing](#), today announces its participation in the Crosscutting Operations Strategy and Technical Assessment (COSTA) project put forth by the Federal Aviation Administration with support from the National Aeronautics and Space Administration. The COSTA project explores the

management of large commercial UAS and general aviation when transiting complex operating environments, such as Fire Traffic Areas during wildfire suppression events.

As wildfires continue to plague the Western regions of the United States, with over [5,000](#) occurring annually in California alone, it is essential that U.S. agencies determine how to leverage new technologies and services to best address and manage natural disasters. Current methods involve dynamic flight operations that primarily require manual coordination among helicopters, **small drones**, **large drones**, and manned aircraft to drop water/fire suppression safely and simultaneously in a small area. Recognizing these gaps, NASA is collaborating with disaster response agencies and the FAA to integrate UAS and UTM-based



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information services to improve disaster response efficiency.

<https://www.suasnews.com/2022/12/xwing-awarded-contract-to-participate-in-the-faas-costa-traffic-management-research-program/>

Skypersonic Drones on Mars? NASA's Fascinating Simulated Mars

Missions Miriam McNabb December 04, 2022



[Skypersonic](#) has announced that it recently delivered to NASA the hardware and software for a rover and drone system that the crew members of [NASA's Simulated Mars Mission](#) will use to remotely explore Martian-like terrain around Earth – all from their 1,700-square-foot simulated Martian habitat at the Johnson Space Center in Houston, Texas. The Skypersonic drone and rover system were recently tested on an active volcano, demonstrating their suitability for use in the challenging environment found on Mars.

In a fascinating project, crew members of the Simulated Mars Missions [CHAPEA](#), will spend one year living and working in a habitat at Johnson Space Center that has been designed and built to simulate life on the Red Planet. “The Skypersonic drones and rover will be taken to an area on Earth that is similar to Martian terrain – such as a desert or mountainous region – where they will be controlled **remotely** by crew members in Houston. The exercise is designed to test the ability of astronauts on Mars to remotely explore the planet with drones and rovers,” says the release. <https://dronelife.com/2022/12/04/skypersonic-drones-on-mars-nasas-fascinating-simulated-mars-missions/>

European Commission launches Drone Strategy 2.0 – a EUR 14.5 billion market in 2030

November 29, 2022 Philip Butterworth-Hayes UAS traffic management news



The European Commission has today adopted the [European Drone Strategy 2.0](#), which sets out a vision for the further development of the European drone market. It builds on the EU's safety framework for operating and setting the technical requirements of drones, which is the world's most advanced. The new Strategy lays out how Europe can pursue large-scale commercial drone operations while offering new opportunities in the sector, according to a Commission press release.

“With the arrival of a new generation of electrically powered aircraft capable of operating in an urban and regional environment, we need to ensure that, beyond maintaining the safety of



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operations in our skies, conditions meet both the operators' commercial needs and citizens' expectations with regard to privacy and security," said Adina Vălean, Commissioner for Transport. "With the right framework in place, the drone services market in Europe could be worth EUR14.5 billion, and create 145,000 jobs, by 2030."

<https://www.unmannedairspace.info/news-first/european-commission-launches-drone-strategy-2-0-a-eur-14-5-billion-market-in-2030/>

Sweden re-issues tender call for a national UTM system December 5, 2022 Philip Butterworth-Hayes UAS traffic management tenders



Sweden's air navigation service provider Luftfartsverket (LFV) has re-issued its "Call for Competition, UAS Traffic Management solution for Sweden" (Reference number: Ä-2022-018144) with a new deadline data of 30 January 2023.

(<https://www.unmannedairspace.info/uas-traffic-management-tenders/swedens-lfv-publishes-tender-for-national-utm-u-space-system/>).

According to the text of the tender outlined in the European Union's Tenders Electronic Daily on-line portal: "The purpose of this procurement is to establish a Framework Agreement with 1 strong and dynamic Partner. The intended scope for LFV is to establish a reliable, robust and efficient UAS/UTM solution for LFV and its associated government authorities, customers and other stakeholders in a cost-efficient manner. <https://www.unmannedairspace.info/latest-news-and-information/sweden-re-issues-tender-call-for-a-national-utm-system/>

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Private Aviation Group Volare to Operate Lilium eVTOL Aircraft Charles Alcock - December 5, 2022



Private aircraft management and charter group Volare has agreed to add up to **20** of the Lilium Jet eVTOL aircraft to its UK-based fleet. In an agreement announced on December 5, the UK company's eVolare division placed firm orders for 10 of the Lilium Pioneer Edition version of the all-electric aircraft, with options to take another 10.



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Volare is the launch customer for the Pioneer Edition, with Lilium intending to build just 50 examples of the model. The “limited edition” version of the [Lilium Jet](#) will seat four passengers and a pilot, with a more spacious interior than the standard six-passenger model. Owners will have the option to customize the cabin with special fabrics and materials, with the price for the aircraft ranging from **between \$7 million and \$10 million** depending on the interior fittings and other specifications.

From its headquarters at Oxford Airport, eVolare intends to operate the Lilium Jet for charter flights throughout the greater London area. The aircraft, which will have **30 electric motors** installed in its wing and canard, is expected to have a range of 155 miles. It will be able to comfortably reach destinations such as London’s sole public access heliport in Battersea and airports including Heathrow, London City, Gatwick, Luton, and Stansted.

<https://www.ainonline.com/aviation-news/business-aviation/2022-12-05/private-aviation-group-volare-operate-lilium-evtol-aircraft>

Savback Helicopters Commits to Speeder Air Utility Vehicles: First Civilian Sale

Miriam McNabb December 05, 2022



The [Mayman Aerospace](#) Air Speeder is a unique addition to the drone market – a fast, maneuverable cargo aircraft with heavy payload capabilities.

Now, US-based manufacturer Mayman has announced that their Nordic sales and marketing partner, Savback Helicopters, has signed a Letter of Intent for **25 Speeders** intended to support military customers in the

Scandinavian region.

The deal is valued at **\$45 million**, based on list price. Michael Savback, chairman of Savback Helicopters, said, “This aircraft is well placed to satisfy the growing needs of our military forces for vehicles that can support contested logistics, evacuation, and cargo missions in minimal time with maximum reliability.”

From the Mayman press release: *Comparable to a quadbike in size, the Speeder is being designed and modelled to lift 1000 lbs and fly 400 miles at over 500 mph in unpiloted cargo mode. The company is currently working closely with the FAA toward flight*



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certification. <https://dronelife.com/2022/12/05/savback-helicopters-commits-to-mayman-aerospace-speeder-air-utility-vehicles-first-civilian-sale/>

Russia-Ukraine War: Drone Attacks Hit Russia for 2nd Straight Day



A blast at a Russian airfield came a day after Ukraine used drones to target two military bases deep inside Russia. Credit...MIC Izvestia/IZ.RU via Reuters

KYIV, Ukraine — A drone attack on Tuesday struck near an air base in Russia, a local official said, a day after Ukraine used drones to [hit two military bases deep inside](#) the country in one of its most brazen attacks in the nine-month war. If Ukraine's forces are confirmed to have been involved in the latest strike, it would add to signs that Kyiv is willing to bring the war closer to Moscow.

Russian officials did not directly accuse Ukraine in Tuesday's attack, which hit an oil facility near an airfield in the Kursk region, **80 miles from the Ukrainian border**. The regional governor said on Tuesday that a fire caused by the strike had been extinguished and that there were no injuries.

Ukraine's willingness to hit far inside Russia's border has altered the geography of the war, shown failures in Moscow's air defense systems, and signaled Kyiv's determination that Russia pay a heavier price for its unrelenting assault on Ukraine's infrastructure.

https://www.nytimes.com/live/2022/12/06/world/russia-ukraine-war-news?campaign_id=9&emc=edit_nn_20221206&instance_id=79425&nl=the-morning®i_id=76945057&segment_id=115147&smid=url-share&te=1&user_id=f3d322e93016f7ce6835ec0bc3368a5c#a-ukrainian-drone-struck-an-oil-depot-within-russia-a-local-official-says

MQ-20 Avenger UAS Performs Autonomous Collaboration Mike Ball / 05 Dec 2022



General Atomics Aeronautical Systems (GA-ASI) has confirmed that it has paired a company-owned MQ-20 Avenger Unmanned Aircraft System (UAS) with a Sabreliner, operated by Lockheed Martin and acting as a surrogate fighter, and two F-5 Advanced Tigers from Tactical Air Support configured with internal TacIRST sensors, to perform **multi-platform infrared sensing**. During this event, all aircraft performed



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coordinated maneuvers to sense relevant airborne targets in the infrared spectrum. The MQ-20 and Sabreliner were digitally connected over a Tactical Targeting Network Technology mesh network to share sensing observations.

All live aircraft had operational next-generation Tactical Infrared Search and Track (TacIRST) sensors during the test to provide Air-to-Air Moving Target Tracking. These live tracks were provided by Lockheed Martin's TacIRST sensor and were processed on a General Dynamics Mission Systems EMC2 Multi-Function Processor, commonly referred to as "the Einstein Box." Using this software-defined architecture, the flight demonstrated crewed and **uncrewed teaming** between the MQ-20s, Sabreliner and manned F-5 AT tactical fighters.

https://www.unmannedsystemstechnology.com/2022/12/mq-20-avenger-uas-performs-autonomous-collaboration/?utm_source=UST+eBrief&utm_campaign=292daa6de3-ust-ebrief_2022-dec-06&utm_medium=email&utm_term=0_6fc3c01e8d-292daa6de3-111778317&mc_cid=292daa6de3&mc_eid=acabe18a61

US-made E400 mapping drone integrates EO/IR camera Ishveena Singh - Dec. 6th 2022



Ohio-based drone manufacturer Event 38 says that its latest fixed-wing mapping drone E400 is now available with a gimbaled Electro-Optical/Infra-Red (EO/IR) camera from NextVision. This new integration makes the E400 apt for time-critical scenarios such as search and rescue, emergency management,

and disaster response.

The E400 has been designed for durability and rugged field applications. Instead of foam, it sports a carbon fiber frame, which is typical of military-grade drones. The E400 can cruise at 31 knots, cover a straight line distance of [54 miles](#), and fly in winds up to 23 knots and light rain. All these are capabilities that are highly valued in emergency and public safety cases.

The drone is now integrated with an EO/IR camera which can capture high-quality visual and thermal imagery and video that can be streamed directly to a ground station. This makes the E400 ideal for surveillance and security applications as well. And as Event 38 [points out](#), since the E400 is fully electric and very quiet, it can fly much lower than other drones without being detected. <https://dronedj.com/2022/12/06/e400-vtol-drone-mapping-camera/>



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Lilium inks VIP eVTOL deal for future AAM operation in the UK Bruce Crumley - Dec. 6th 2022



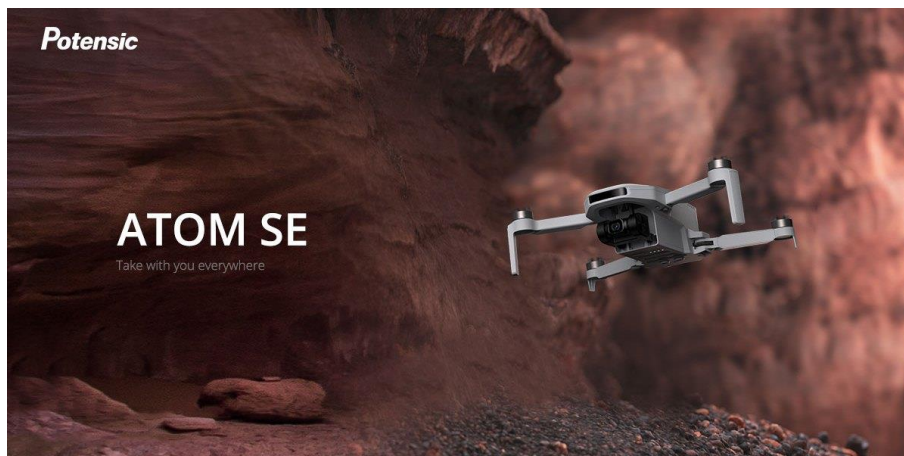
German electric vertical takeoff and landing (eVTOL) aircraft developer [Lilium](#) says it has secured a deal with a UK air services provider for **10 confirmed orders** for the Pioneer Edition of its [advanced air mobility](#) (AAM) vehicles and an option for another 10 – nearly half of the **50** luxury planes the company plans to produce.

[Lilium said](#) it had inked the deal with eVolare, [an eVTOL](#) subsidiary of UK helicopter and private jet operator Volare Aviation for future AAM services for its well-heeled clients. Under the agreement, eVolare will provide an undisclosed pre-delivery payment amount for 10 Pioneer of Lilium's Edition electric jets with an option to order another 10 at a future date.

Once [Lilium](#) obtains certification and launches production of the [high-end eVTOL](#), eVolare will sell those to private owners, for whom it will provide AAM flight and aircraft maintenance services. The plan is for eVolare to base that operation out of Oxford and oversee air transportation to and around the Greater **London** area. <https://dronedj.com/2022/12/06/lilium-inks-vip-evtol-deal-for-future-aam-operation-in-the-uk/>

Potensic releases Atom SE sub-250 drone just in time for the holidays Seth

Kurkowski - Dec. 6th 2022



If you're looking for a last-minute gift for your drone-interested loved ones, Potensic just dropped a new drone that gives you the thrill of flying without the major hit to your wallet. The Atom SE is now available on Amazon and Potensic's website.



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The Atom SE packs a pretty good punch for the price point. Targeted towards those that want to create content but are on a budget, Potensic's latest offering of a sub-250 drone features a 12 MP camera that can shoot up to 4K 30 video.

Each battery has an estimated flight time of 31 minutes and in sport mode can fly up to 16 m/s; both are similar to DJI's Mini 2 but \$150 cheaper. All of this comes in less than 250 grams, meaning if you get this for someone new to flying drones, if they are flying recreationally, they won't have to register it in most countries.

You can order the Atom SE directly through [Potensic's website](#) where for right now, you can get a \$20 off coupon automatically applied at checkout. You can also order the Atom SE from Amazon and still get it before Christmas if you're in the United States. When you order, you get the drone, a smartphone controller, two batteries, and all the required cables for [\\$299.99](#). The same price as DJI's Mini SE but with higher quality video.

<https://dronedj.com/2022/12/06/potensic-releases-atom-se-sub-250-drone-just-in-time-for-the-holidays/#more-89228>

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FAA APPROVES FIRST-EVER DELIVERY DRONE PRODUCTION CERTIFICATE December 5, 2022 Sally French



This news makes **Matternet** the first (**and currently only**) company able to produce certified delivery drones in the U.S.

The Production Certificate was granted by the FAA to Matternet, a Silicon Valley-based drone company that builds and operates its own delivery drones. The certificate is specifically for the company's Matternet M2 drone, and it basically means that the FAA believes Matternet has demonstrated quality management and manufacturing capabilities needed to produce aircraft in that design.

The M2 drone earlier this year also achieved another type of certification from the FAA, which is the FAA's [standard Type Certification](#) which was granted in September 2022.

The M2 is the first non-military unmanned aircraft to achieve Type Certification in the U.S.

<https://www.thedronegirl.com/2022/12/07/faa-approves-first-ever-delivery-drone-production-certificate/>



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ADVANCED AIR MOBILITY



NASA is making soaring over traffic in an air taxi, providing medical and emergency response to the public, receiving packages faster, and participating in a sustainable and safe mode of transportation a reality. NASA's vision for Advanced Air Mobility (AAM) is to map out a safe, accessible, and affordable new air transportation system alongside industry,

community partners, and the Federal Aviation Administration. Once developed, passengers and cargo will travel on-demand in innovative, automated aircraft such as electric vertical take-off and landing aircraft, or eVTOLs, across town, between neighboring cities, or to other locations typically accessed today by car.

The recently established Virginia Advanced Air Mobility Alliance (VAAMA), comprised of aviation industry, education, and research representatives across the Commonwealth, consists of two divisions: The Virginia Department of Aviation (DOAV) and the Virginia Innovation Partnership Corporation (VIPC). Each division having its own distinct mission, shares one voice for AAM in Virginia. The DOAV Team, led by **Dr. Amber L. Wilson**, focuses on infrastructure, education and policy aspects that are necessary to enable AAM operations. The VIPC team, led by Director **Tracy Tynan** focuses on technology development and implementation, pilot projects and operational framework. <https://files.constantcontact.com/19bd4922601/f27653fc-1a6f-4de6-9cb1-c459d6eb9cbb.pdf?rdr=true>

GA-ASI Flies UAS in the Canadian Arctic December 5, 2022



In a flight that originated from its Flight Test and Training Center (FTTC) near Grand Forks, N.D., General Atomics Aeronautical Systems, Inc. (GA-ASI) flew a company-owned MQ-9A "Big Wing" configured Unmanned Aircraft System north through Canadian airspace past the 78th parallel.

A traditional limitation of long-endurance UAS has been their inability to operate at extreme northern (and southern) latitudes, as many legacy SATCOM datalinks can become less reliable above the Arctic (or below the Antarctic) Circle – approximately 66 degrees north. At those latitudes, the low-look angle to geostationary Ku-band satellites begins to compromise the link.



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GA-ASI has demonstrated a new capability for effective ISR operations by performing a loiter at 78.31° North, using Inmarsat's L-band Airborne ISR Service.

The flight over Haig-Thomas Island, in the Canadian Arctic, demonstrated the UAS's flexibility by operating at very high latitudes. The flight, which took off on Sept. 7 and returned to the FTTC on Sept. 8, was conducted with cooperation from the Federal Aviation Administration, Transport Canada and Nav Canada. Covering **4,550 miles in 25.5 hours**, one of the longest-range flights ever flown by a company aircraft. <https://www.legendaryleadersininnovation.com/public/topics/19/Autonomous>

Japan Posts seizes BVLOS rule tweak to launch drone deliveries Bruce Crumley - Dec. 7th 2022



[Japan](#) Post, the archipelago nation's mail company, has jumped on the easing of certain drone restrictions introduced only last week to announce its plans to prepare for [aerial delivery](#) of parcels starting next year.

Japan Post made the announcement Tuesday, just three working days after regulators [relaxed restrictions](#) on certain UAV operations over populated areas. The modifications made Thursday apply to so-called Level 4 drone flights, which are defined as entirely automated [beyond visual line of sight](#) (BVLOS) use above residential or urban zones.

The move reflects Japan Post seeking to remedy what was one of the main motivators behind the government's revision of Level 4 rules in the first place: a shortage of drivers to distribute regular mail which has been even more problematic for Japan Post's Yu-Pack parcel delivery service amid surging online purchases.

Modification of Level 4 regulations will still require operators of automated drone missions to obtain permits, but those are expected to be more readily issued – even if widespread flights above populated areas will only be gradually introduced. <https://dronedj.com/2022/12/07/japan-posts-seizes-bvlos-rule-tweak-to-launch-drone-deliveries/#more-89243>



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Skydio unveils new drone-in-a-box product line: Dock, Dock Lite Ishveena Singh - Dec. 7th 2022



US drone maker Skydio has announced the launch of three new drone-in-a-box products: Skydio Dock, Skydio Dock Lite, and Remote Ops software.

Typically, drone-in-a-box systems are docking and recharging stations that can help to automate drone flights if the local regulations permit so. They can prove incredibly useful in a variety of scenarios, including remote site inspection and monitoring as well as situational awareness.

Now, Skydio Dock and Dock Lite are no different, but they come with the added advantage of Skydio Autonomy, an AI-powered technology that has helped the company to produce some of the smartest drones out there. And, of course, these offerings come from American shores instead of global drone leader China.

But there's an even bigger reason why the Skydio Dock could prove especially lucrative to enterprises. And that is the company's regulatory team. The regulatory process requires organizations to document their program policies and flight operations extremely thoroughly so that risk mitigation and safety measures are clear. Naturally, most drone users find this process to be daunting.

Skydio's regulatory team makes it [easier to obtain approvals to conduct remote operations](https://dronedj.com/2022/12/07/skydio-dock-lite-drone-box/). It's filled with experts who have experience with the largest and most complex enterprise programs and have already obtained multiple pathbreaking remote operations waivers for US and global customers. <https://dronedj.com/2022/12/07/skydio-dock-lite-drone-box/>

Drone Express Partners with Microsoft to Develop Artificial Intelligence (AI) Delivery Drones December 7, 2022 News



Drone Express, an innovative last-mile logistics company, has partnered with Microsoft to launch a new version of their DE-2020 drone using Artificial Intelligence for in-flight navigation systems. This creative collaboration will equip delivery drones with Microsoft Azure to host the AI solutions and use Azure Machine Learning to train machine learning models. With AI implemented, drones can safely make live, in-flight decisions to deliver packages in an urban



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environment. The first aircraft with this specific hardware will enter production at the end of 2022 and provide customers with safer and faster last-mile delivery solutions.

Drone Express is currently on track to become one of the first companies to attain a Part 135 FAA certification for autonomous drone delivery. You may read more about Drone Express and Microsoft [here](https://uasweekly.com/2022/12/07/drone-express-partners-with-microsoft-to-develop-artificial-intelligence-ai-delivery-drones/?utm_source=rss&utm_medium=rss&utm_campaign=drone-express-partners-with-microsoft-to-develop-artificial-intelligence-ai-delivery-drones&utm_term=2022-12-07). https://uasweekly.com/2022/12/07/drone-express-partners-with-microsoft-to-develop-artificial-intelligence-ai-delivery-drones/?utm_source=rss&utm_medium=rss&utm_campaign=drone-express-partners-with-microsoft-to-develop-artificial-intelligence-ai-delivery-drones&utm_term=2022-12-07

FAA to Add Powered Lift to Air Carrier Aircraft Categories December 7, 2022 FAA & Drone Laws



The FAA signed a draft Notice of Proposed Rulemaking (NPRM) document on November 21st that adds a “powered lift” aircraft to the existing types of air carrier operations, a move that would set the stage for air carrier regulations that would apply specifically to eVTOL and aerial mobility aircraft in the future.

The 98-page document outlines the mechanics of the new categories integration into existing regulations, as well as proposes the addition of “powered lift” aircraft to 14 CFR 110.2 and extends rules applicable to air carriers in certain operations to aerial mobility operations.

Additionally, the NPRM states that powered lift operational experience will be required for air carriers intending to operate powered lift type aircraft in air carrier capacities, meaning that the initial pool of powered lift experience will reside largely with OEM’s. Existing Part 135 and 121 carriers do not yet operate eVTOL aircraft as they’ve not yet been certified and will seek operating experience with these new aircraft types as soon as possible to meet the proposed requirements for issuance of operation certificates (Part 119). Importantly, the NPRM extends the regulations to ensure coverage to the foreseeable applications of eVTOL use cases beyond just point to point transportation. https://uasweekly.com/2022/12/07/faa-to-add-powered-lift-to-air-carrier-aircraft-categories/?utm_source=rss&utm_medium=rss&utm_campaign=faa-to-add-powered-lift-to-air-carrier-aircraft-categories&utm_term=2022-12-07



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MQ-9A Leased to India by GA-ASI Complete 10,000 Flight Hours in 2 Years

December 6, 2022 Military | News



On November 22, 2022, a General Atomics Aeronautical Systems, Inc. (GA-ASI) MQ-9A Remotely Piloted Aircraft that is on lease from GA-ASI to India's Navy completed its 10,000th flight hour in support of India national security missions. The 10,000-flight hour mark has been achieved by two MQ-9As being operated by the Indian Navy during a period of almost exactly two years, with the maiden flight of MQ-9A taking place on November 21, 2020.

"The Indian Armed Forces have been impressed by the MQ-9A's over-the-horizon ISR support for surface units and Indian warships, as well as the exceptional endurance and operational availability of the platform," said GA-ASI CEO Linden Blue. "Our MQ-9As have helped the Indian Navy to cover over 14 million square miles of operating area."

The MQ-9As are supplied to India by GA-ASI as part of a Company-Owned, Company-Operated lease agreement. MQ-9As are operated by the United States, the United Kingdom, France, Italy, the Netherlands, and Spain. GA-ASI's newer MQ-9B variant has been acquired by the UK and on order for Belgium. The MQ-9B maritime surveillance configuration (SeaGuardian®) recently [began operations in support of the Japan Coast Guard](https://uasweekly.com/2022/12/06/mq-9a-leased-to-india-by-ga-asi-complete-10000-flight-hours-in-2-years/?utm_source=rss&utm_medium=rss&utm_campaign=mq-9a-leased-to-india-by-ga-asi-complete-10000-flight-hours-in-2-years&utm_term=2022-12-07).

https://uasweekly.com/2022/12/06/mq-9a-leased-to-india-by-ga-asi-complete-10000-flight-hours-in-2-years/?utm_source=rss&utm_medium=rss&utm_campaign=mq-9a-leased-to-india-by-ga-asi-complete-10000-flight-hours-in-2-years&utm_term=2022-12-07

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Skydio Dock and Dock Lite: Small, Lightweight Solutions for Remote Drone Ops

Miriam McNabb December 07, 2022



US-based drone manufacturer [Skydio](#) introduces [Skydio Dock and Dock Lite](#), powered by Skydio's new Remote Ops software.

Docking systems, or "drone-in-a-box" solutions, are the way of the future for remote drone operations. A docking station that can monitor internal and external conditions and recharge drone batteries combined with software for remote operations enables operators to execute drone missions **from miles away** – or from a central operations hub.

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That's a holy grail for many industries, the point at which already valuable drone technology and drone data increases its ROI exponentially. As the FAA allows more missions beyond visual line of sight (BVLOS) – and the drone industry awaits a final rule on BVLOS operations – remote drone ops have become a near term option for many industries. <https://dronelife.com/2022/12/07/skydio-introduces-skydio-dock-and-dock-lite-small-lightweight-solutions-for-remote-drone-ops/>

Elbit Systems to Deliver Upgraded Skylark Drones to Australia JOE SABALLA DECEMBER 8, 2022



The Australian Army has awarded Elbit Systems a contract to supply Skylark I LEX unmanned aerial systems. The drones will be equipped with electro-optical and automatic dependent surveillance–broadcast (ADS-B) systems to support various missions. The ADS-B system enables the Skylark to be integrated into more classes of airspace.

Elbit Systems' [Skylark](#) is a fully-autonomous, electric-propelled UAS that features a mission-oriented and intuitive man-machine interface.

It has a 40-kilometer (25-mile) line-of-sight communication range, making it effective for surveillance, reconnaissance, and force protection.

Additionally, the drone has advanced image processing capabilities and can deliver high-quality video day or night. <https://www.thedefensepost.com/2022/12/08/elbit-skylark-drones-australia/>

Recent Drone Cybersecurity Developments Could Lead to Fewer Attacks in 2023

Angela Myers | December 8, 2022



As companies and state governments establish their 2023 priorities, cybercrime should be a top concern, especially in the drone space. Cybercrime has increased dramatically over the past decade with no sign of slowing down in 2023. Drones are a key target for these attacks, but recent drone cybersecurity developments could help protect the information they store.



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If cybercrime was a country, it would have the third largest economy after China and the U.S., according to forecasts from [Cybercrime Magazine](#). That same forecast predicted that cybercrime will cost the world \$8 trillion next year.

Drones are predicted to be a significant target of these attacks for two reasons: they are often used to collect valuable information, and drones often lack the security that other aircraft have.

At the federal level, drones are used to collect critical defense information, such as the location of enemy groups and the terrain and weather across the globe. States and local governments use drones for environmental and disaster management, infrastructure updates, and other critical urban planning tasks. Any data from drones used by the federal or state governments, as well as geographical data from drones owned by private companies, could be a valuable target for cyberattacks.

Luckily, companies like SkyGrid are exploring new ways to protect drones against cybersecurity attacks. The use of artificial intelligence has helped SkyGrid and other companies detect, prevent, and combat cyberattacks against drones.

https://www.aviationtoday.com/2022/12/08/recent-drone-cybersecurity-developments-lead-fewer-attacks-2023/?oly_enc_id=7021F0632090D7B

Near Earth Autonomy wins Innovator of the Year award by Pittsburgh

Technology Council December 8, 2022 News



The Pittsburgh Technology Council (PTC) has chosen Near Earth Autonomy (Near Earth) as the 2022 AI/ML/Robotics – Innovator of the Year.

Near Earth's technology enables uncrewed aircraft to autonomously take off, fly, and land safely, with or without GPS improving efficiency, performance, and safety for aircraft ranging from small drones to full-size helicopters. Near Earth is expanding and hiring for a wide variety of roles.

Near Earth recently partnered with aerospace company Kaman (KAMN) and raised over **\$10 million** in funding. Near Earth also integrated with Kaman's K-Max Titan helicopter to enable autonomous aerial logistics.

Each year, the Pittsburgh Technology Council celebrates the most successful and innovative companies in Southwestern PA at their Tech 50 Awards event. Winners were announced at the PTC's 26th annual event with nearly **600 attendees** to honor the leading technology companies



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in the Pittsburgh region. https://uasweekly.com/2022/12/08/near-earth-autonomy-wins-innovator-of-the-year-award-by-pittsburgh-technology-council/?utm_source=rss&utm_medium=rss&utm_campaign=near-earth-autonomy-wins-innovator-of-the-year-award-by-pittsburgh-technology-council&utm_term=2022-12-08

VPorts Announces Creation of First International Electric AAM Corridor Jessica

Reed | December 8, 2022



VPorts announced the creation of a corridor for advanced air mobility, or AAM, last week. It connects Syracuse Hancock International Airport and Mirabel, Québec, Canada. VPorts has a vertiport—essentially a heliport designed for AAM vehicles—located in Mirabel. The company claims that this is **the first** international electric AAM corridor.

In a recent interview with *Avionics International*, Dr. Fethi Chebil, President and Founder of VPorts, explained, “The corridor is an identified airspace where we will do a safety risk assessment to demonstrate to regulators that flying an eVTOL within this corridor is safe.”

“We are working with NUAIR, which already has a 50-mile corridor for drones,” he added. “We work together in building this corridor between Syracuse and Mirabel.” In addition to NUAIR, other international organizations such as Aéro Montréal, Innovitech, the Unmanned Aerial System Centre of Excellence (Alma), and operator Helijet International all signed a Memorandum of Understanding with VPorts to establish **international corridors for AAM** that connect the U.S. and Québec.

“We considered the obstacles between these two vertiports, the weather, and characteristics of eVTOLs for testing the corridor,” said Dr. Chebil. VPorts chose to focus initially on transportation of cargo.

VPorts also plans to deploy an operational control center to assist with eVTOL operations. This includes flight plans and integrating weather data in addition to information about the airspace configuration. The control center will then be able to provide clearance or instructions.

https://www.aviationtoday.com/2022/12/08/vports-announces-creation-first-international-electric-aam-corridor/?oly_enc_id=7021F0632090D7B



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LIFT Trains US Air Force to Operate HEXA eVTOL Aircraft Miriam McNabbon: December 08, 2022 by DRONELIFE Staff Writer Ian M. Crosby



On November 16th, the [Lift](#) HEXA electric vertical takeoff and landing aircraft lifted off at Duke Field for its flight piloted by Airmen, who **remotely controlled** the aircraft in a series of take offs, flights, and landings.

The flight was conducted as an early step in establishing a training program to incorporate Airmen into the aircraft's flight operations, both to validate the HEXA's training program

through operation within a controlled test environment and to serve as a proof of concept for the development of responsive training for government operators on **uncrewed EVTOL aircraft**.

Each of the three participating Airmen, an officer and a senior NCO from the 413th Flight Test Squadron and a senior NCO from Air Education and Training Command's Detachment 62, possess experience with rotary wing aircraft. <https://dronelife.com/2022/12/08/lift-trains-us-air-force-to-operate-hexa-evtol-aircraft/>