



UAS and SmallSat Weekly News

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Dedrone Funding: Oversubscribed \$30 Million Series C Round for Airspace Security Miriam McNabb July 14, 2022 by Ian M Crosby

The round was led by public safety technology company [Axon](#), with participation from Aqton



Partners, Menlo Ventures, Felicis Ventures, Target Partners and individual Silicon Valley entrepreneurs. This latest round of funding follows this past December's Series C round, which brought in \$30.5 million. Dedrone will leverage the funding to further expand its team globally, establishing a second office in California as well as advancing its multi-sensor fusion airspace security solution.

Dedrone provides a Command and Control solution for all Counter-Uncrewed Aircraft Systems able to detect, analyze and mitigate almost 300 varieties of drone through over 65 manufacturers. Able to operate cloud-based or on-prem/air-gapped, this solution features comprehensive AI/ML-based detection capabilities, fusion tracker software, sensors, mitigation functionality and advanced analytics. The company recently launched [DedroneRapidResponse](#), a mobile solution able to be deployed in less than 30 minutes to protect a five-kilometer radius of airspace for outdoor events. <https://dronelife.com/2022/07/14/dedrone-funding-oversubscribed-30-million-series-c-round-for-airspace-security/>

Drone Threats to Border, Airports Ramp Up Pressure on Congress July 14, 2022

Ellen M. Gilmer

Bloomberg Government

DHS saw 8,000 illegal cross-border drone flights last year

Bipartisan duo to introduce legislation with new authorities

Illegal drone flights risk catastrophic harm to US airports and border security, a threat that will worsen if Congress doesn't act quickly to extend and expand federal authorities to combat the devices, administration officials told lawmakers.

Officials from the Department of Homeland Security, Justice Department, and Federal Aviation Administration, appearing before the Senate Homeland Security and Governmental Affairs Committee Thursday, stressed the urgency of taking up the Biden administration's proposed



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legislation on countering unmanned aerial systems. Current federal authorities expire in October.

Committee Chairman Gary Peters (D-Mich.) said he plans to introduce a bill with Sen. Ron Johnson (R-Wis.). “A malicious actor could deploy UAS to cause a catastrophic incident at any time, and we cannot and must not wait for that incident to occur,” Peters said.

<https://about.bgov.com/news/drone-threats-to-border-airports-ramp-up-pressure-on-congress/>

AIR eVTOL Completes First Hover Tests Kate O'Connor July 14, 2022



Advanced air mobility company AIR announced on Tuesday that its AIR ONE electric vertical takeoff and landing (eVTOL) prototype has successfully completed its first series of hover tests. AIR says it plans to expand to full flight envelope testing later this year.

“We’ve been on this upward journey for nearly five years and cannot wait for the public to join us on this ride,” said AIR co-founder and CEO Rani Plaut.

According to **Israel-based** AIR, its two-seat AIR ONE eVTOL design will have a top speed of 155 MPH and 110-mile range and be capable of carrying a 441-pound payload. The company estimates that the aircraft, which it is marketing to individual owners rather than for commercial air taxi use, will have a 0 to 100 percent charge time of one hour. AIR is aiming to begin AIR ONE deliveries in 2024. https://www.avweb.com/recent-updates/evtols-urban-mobility/air-evtol-completes-first-hover-tests/?MailingID=996&utm_source=ActiveCampaign&utm_medium=email&utm_content=FAA%3A+No+Discernible+Progress+On+Approving+G100UL+Avgas%2C+Oklahoma+Earns+Top+Rank+For+High+Schools+Teaching+AOPA+Curriculum&utm_campaign=FAA%3A+No+Discernible+Progress+On+Approving+G100UL+Avgas%2C+Oklahoma+Earns+Top+Rank+For+High+Schools+Teaching+AOPA+Curriculum+-+Friday%2C+July+15%2C+2022

Drones Set to Deliver Medical Products in Washington State in 2024 Stephen Shankland July 14, 2022



Drones will begin ferrying medical supplies to addresses in Tacoma, Washington, starting in 2024, two companies behind the project said Thursday. Startup drone maker [Zipline](https://www.zipline.com/) and health care

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provider [MultiCare](#) said the service will whisk lab samples, medicines and test kits among Multicare's local facilities.

The Tacoma project still requires regulatory approval for details of the flight operations, including whether Zipline drones will fly autonomously, as they do in the company's other operations.

Drones are already in limited operations in the US. Wing, operated by Google parent Alphabet, has [begun deliveries in the Dallas-Fort Worth area](#) from Maggiano's Little Italy to homes. [Amazon Prime Air plans to test drone deliveries](#) south of Sacramento, California.

South San Francisco-based [Zipline](#) has made nearly **345,000 deliveries to date**, mostly with national-scale programs in Rwanda and Ghana and on average delivers a package every two minutes. It began a US expansion last year, shipping packages for retail giant Walmart in Pea Ridge, Arkansas. In June, it began delivering medical supplies from a distribution center in Kannapolis, North Carolina for Novant Health, Magellan Rx Management and Cardinal Health.

In June, Zipline cleared one US regulatory hurdle, winning a Federal Aviation Administration certification that [permits flights up to 26 miles](https://www.cnet.com/tech/computing/drones-set-to-deliver-medical-products-in-washington-state-in-2024/). <https://www.cnet.com/tech/computing/drones-set-to-deliver-medical-products-in-washington-state-in-2024/>

BRINC launches Global Rescue Network for emergency response use Bruce Crumley - Jul. 15th 2022



Specialized security and tactical [drone manufacturer](#) [BRINC](#) has launched its Global Rescue Network which will assist and support humanitarian efforts and disaster response wherever they arise around the world.

BRINC says the Global Rescue Network is headed by about two dozen public safety professionals, military veterans, and current or former drone racing league pros. That group remains at the ready to support local first responders, non-governmental organizations, and government agencies during [natural disasters](#) and humanitarian crises. The company says the team boasts 10,000 combined hours of flight experience, and activity in more than **55 countries**.

BRINC [founder](#) Blake Reznick says the Global Rescue Network initiative is a direct result of the company's work flying drones in search of trapped victims in Miami's Surfside Condo collapse



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last year. More recently, the company has been involved providing its LEMUR UAVs and [training to Ukraine forces](#) tending to people injured in offensives by invading Russian troops.

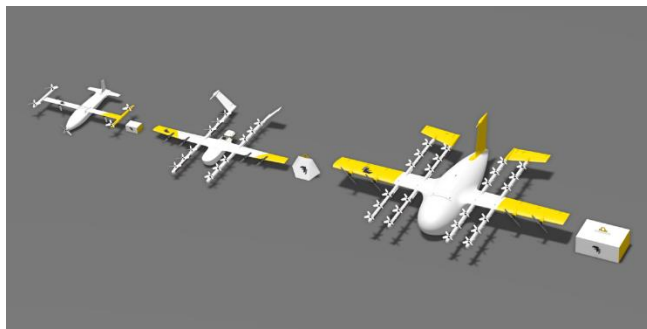
BRINC's Global Rescue Network will operate drones in activities ranging from [emergency response](#), personnel recovery, route clearance, downed utilities inspection, and rescue in GPS-denied and subterranean environments. Pilots will also fly reconnaissance missions of debilitated or structurally unsound buildings, in HAZMAT scenarios, search and rescue operations, and any other situation authorities and public safety workers need help with.

The company has made partnerships with first responder, emergency, and law enforcement organizations a major activity within its drone manufacturing business. Central to that is the [LEMUR UAV](#), which is capable of subterranean flights in zero-light, rubble-filled environments like those encountered in Miami.

Its experience in those cooperative operations inspired BRINC to create the Global Rescue Network as a standing, at-ready operation that can streamline delivery of donated drones and speed deployment of equipment, staffing, and expertise to humanitarian efforts. <https://dronedj.com/2022/07/15/brinc-global-rescue-network/#more-83667>

Tiny planes, big planes – Wing unveils new drones for different delivery markets

Ishveena Singh - Jul. 15th 2022



Alphabet subsidiary Wing is pulling the curtain back on how it plans to cater to different industries that may come knocking on its door looking for on-demand drone delivery.

“We can have tiny planes for pharmaceutical delivery, big planes for

shipping fulfillment, long-range aircraft for logistic flights, and dedicated hovering platforms for delivery in cities,” Adam Woodworth, Wing’s new CEO, explained in a [blog post](#) that talks about how the drone delivery company is building an “aircraft library.”

The key criteria for Wing’s aircraft remain the same: **cargo should be about 25 percent of the plane’s mass**. Moving away from that ratio means more cost, more energy, and more materials being expended to deliver a product.



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The basics are already in place. Wing has developed a core set of hardware and software components that can be used to create a variety of different vehicles tailored for specific use cases. <https://dronedj.com/2022/07/15/wing-drone-delivery-design/#more-83665>

Officials echo White House call to broaden US anti-drone powers Bruce Crumley - Jul. 15th 2022



In hearings by the House Department of Homeland Security Commission Thursday, a host of US administration officials and legislators voiced their support for adopting laws to widen anti-drone capacities. Those were initially outlined in April in the White House's [Domestic Counter-Unmanned Aircraft Systems National Action Plan](#). Joining that chorus were the National Football League, Major League Baseball, NCAA, and NASCAR, which in a joint letter urged moves to enlarge counter-UAV capacities to keep step with the rising number of craft in the skies – and potential threats those pose.

In 2018 Congress increased the anti-drone powers of the US Justice Department and the Department of Homeland Security to identify, intercept, or destroy [UAVs operating illegally](#), posing threats, or seeking to do harm.

With those measures **expiring in October**, the Biden administration has called not only for legislators to renew them. It also wants [Congress to expand](#) their authority to “the Departments of... Defense (and) State, as well as the Central Intelligence Agency and NASA in limited situations.” The proposal would also free the hands of local officials to act against suspicious UAVs, including Transportation Security Administration and police.

<https://dronedj.com/2022/07/15/officials-echo-white-house-call-to-broaden-us-anti-drone-powers/#more-83671>

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Memo: Mosquito's End Opens New Chapter for UK Loyal Wingman Plans Tony Osborne July 17, 2022

FARNBOROUGH—Industry is beating a path to the Royal Air Force's door after Air Chief Marshal Sir Mike Wigston laid out plans for the air force to acquire what he called “**scalable uncrewed systems.**”



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The RAF had apparently learnt what it could from the £30 million (\$36 million) Mosquito technology demonstration program phase of the Lightweight Affordable Novel Combat Aircraft technology demonstration program, which the RAF announced it was closing out suddenly at the end of June.

These future platforms will be of the “loyal wingman, autonomous combat air vehicle, but with specific use cases,” he told journalists at the Global Air & Space Chiefs' Conference 2022 in London on July 14.

Wigston has charged the RAF's Rapid Capabilities Office to launch a series of competitions in the fall for these scalable systems, aiming for a fly-off to choose a final winner.

<https://aviationweek.com/shownews/farnborough-airshow/memo-mosquitos-end-opens-new-chapter-uk-loyal-wingman-plans>

Zipline Continues to Expand US Medical Drone Delivery Services: Washington

State Miriam McNabb July 17, 2022 by DRONELIFE Staff Writer Ian M Crosby



Zipline is rapidly expanding its commercial drone delivery services in the U.S., partnering with healthcare organizations. Their newest partnership will bring medical drone delivery to the state of Washington.

Instant logistics leader [Zipline](#) announced a partnership with [MultiCare Health System](#), a not-for-profit healthcare organization in Washington, to initiate the first commercial drone deliveries in the state. There, Zipline's electric aircraft will **autonomously** deliver a variety of medical products throughout MultiCare's network of facilities.

With an intended start date of 2024, MultiCare will begin utilizing Zipline's instant delivery solution to serve facilities in the Tacoma area, delivering a wide range of medical supplies such as lab samples, medications, and test kits. With the goal of establishing a faster, on-demand delivery model and improved patient experience, the partnership will serve Pacific Northwest constituents over the next two years.

Zipline's electric solution provides a sustainable means of increasing access to healthcare access, while at the same time lowering street congestion and **reducing emissions by upwards**



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of 96% in comparison to traditional transportation methods.

<https://dronelife.com/2022/07/17/zipline-continues-to-expand-us-medical-drone-delivery-services-washington-state/>

American Airlines to pre-pay for 50 air taxis from Vertical Aerospace July 15, 2022



July 15 (Reuters) - Air taxi maker Vertical Aerospace ([M00.F](#)) said on Friday that American Airlines Group Inc ([AAL.O](#)) has agreed to make pre-delivery payments for 50 electric vertical takeoff and landing (eVTOL) aircraft, **lifting its shares as much as 71%**. Last year, American Airlines had agreed to pre-order up to 250 of UK-based Vertical's eVTOL aircraft in a \$1 billion deal, with an option to buy a 100 more.

Vertical's VA-X4 aircraft can carry four passengers and a pilot. It can fly at speeds of more than 200 mph over a range of above 100 miles.

Vertical Aerospace had last year reported pre-orders for up to 1,350 aircraft worth \$5 billion from customers including American Airlines and Virgin Atlantic. **U.S.-listed shares of Vertical were last up 52% at \$4.43 in afternoon trade.** <https://www.reuters.com/business/aerospace-defense/american-airlines-pre-pay-50-air-taxis-vertical-aerospace-2022-07-15/>

Drone industry worth \$8.5 billion today, \$19.4 billion in 2026 July 12, 2022 Philip Butterworth-Hayes



Industry forecasters are continuing to offer widely different views of the scale and predicted growth rate of the commercial UAV sector, according to the latest forecast of forecasts, prepared by *Unmanned Airspace*. The small UAS market, based on an average of the latest forecast-of-forecasts, is predicted to grow at an average of 23.23%

compound annual growth rate over the next few years. However, perhaps more importantly from a UAS traffic management market viewpoint, the beyond visual line of sight market for drones will grow at a rate of **71.1% compound annual growth rate globally**, according to **Drone Industry Insights**.



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As each forecast measures slightly different aspects of the market over different timescales it is difficult to reach any firm conclusions about the value the drone industry today and in the near future. Taking a conservative view of the forecast of forecasts, industry forecasters suggest that, on average, the 2022 market commercial drones and services is around \$8.5 billion and will rise to \$19.4 billion in 2026. <https://www.unmannedairspace.info/news-first/drone-industry-worth-usd8-5-billion-today-usd19-4-billion-in-2026-forecast-of-forecasters/>

Farnborough Airshow: Blaze Unveils the Spider VTOL July 14, 2022 News



IMCO Group's Blaze, a provider of multi-mission unmanned/remotely controlled solutions for air, land, and naval applications, will participate at the Farnborough International Airshow and unveil the Spider VTOL: A Mini electrical fixed-wing VTOL UAV utilizing a single motor and a single propeller.

Unlike traditional fixed-wing VTOL UAVs that have dedicated motors, propellers and structural parts for performing takeoff and landing, the Spider VTOL utilizes a single nose-mounted electrical motor and propeller for both vertical takeoff and landing as well as horizontal flight. These capabilities enable the Spider VTOL to perform point takeoffs and landings in small areas with scarce space, such as a forest clearing or a small ship, and to operate in harsh wind and weather conditions without compromising performance.

The Spider VTOL's full operational cycle, from deployment, through launch and mission execution, to recovery and packing, can be performed by a single operator. Its flying wing design and belly-mounted payload configuration contribute to its performance, assuring high operational availability of up to **3 hours**, high survivability, and fast redeployment. It can be equipped with various payloads, providing day/night Intelligence for scenarios such as military, law enforcement, low-intensity conflict, security, peacekeeping, search and rescue, disaster management and civil applications. https://uasweekly.com/2022/07/14/farnborough-airshow-blaze-unveils-the-spider-vtol/?utm_source=rss&utm_medium=rss&utm_campaign=farnborough-airshow-blaze-unveils-the-spider-vtol&utm_term=2022-07-18



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Bristow and Elroy Air Sign Letter of Intent for 100 Chaparral VTOL Aircraft July 14, 2022 News



The Chaparral will be the **first of its kind** vertical take-off and landing aircraft **dedicated to cargo movement** to be introduced into Bristow's aircraft fleet. Bristow plans to use the Chaparral to serve logistics, healthcare, and energy applications. Additionally, the Chaparral provides a solution to challenges helicopter operators are facing across the world, including reducing emissions by introducing hybrid-electric powertrain and helping offset the pilot shortage by introducing autonomous aircraft for cargo operations.

The first production version of the Chaparral will carry **300–500 pounds** of cargo over a **300-mile range** with its hybrid-electric powertrain and vertical and forward-flight propulsors. Goods are loaded into an underslung pod that latches to the fuselage and can autonomously be picked up and dropped off in a **50-foot landing square**.

The Chaparral is the flying part of an integrated, autonomous aerial logistics system. The vehicle can land, deposit cargo, pick up another load, and take-off again, all in just a few minutes and without operator interaction. Although **operated autonomously**, the Chaparral can also be remotely piloted to comply with civil aviation authorities and airspace integration policy.

https://uasweekly.com/2022/07/14/bristow-and-elroy-air-sign-letter-of-intent-for-100-chaparral-vtol-aircraft/?utm_source=rss&utm_medium=rss&utm_campaign=bristow-and-elroy-air-sign-letter-of-intent-for-100-chaparral-vtol-aircraft&utm_term=2022-07-18

Amazon to launch drone delivery service in College Station, Texas Bruce Crumley - Jul. 16th 2022



Just a month after it was announced that Amazon will **[begin aerial deliveries](#)** to people in Lockeford, California, meta-marketplace Amazon **[revealed](#)** Friday that it will roll out similar drone services in College Station, Texas.

Amazon will be getting different kinds of experience from the two towns – a mix that may be put to use when it scales the aerial transport service to urban environments of all sizes across the US in the future.



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Indeed, through a press release, Amazon said the company is particularly attracted to “the small-town feel, and the sense of community” in College Station; the city will provide interesting contrasts to the even smaller, semirural Lockeford, with a population of 3,521. Amazon’s new Texas site of drone deliveries, by contrast, is a city of over 123,000 residents and plays home to a major university – [Texas A&M](#).

As it does in College Station, [Amazon](#) said it plans to partner with Texas A&M researchers to benefit from “some of the great work they’ve been doing in the area [of] drone technology.”

University officials cheered Amazon’s decision to develop its [drone delivery](#) activities in the town as well as the decision to tap local resources to scale and perfect it. ([I am a graduate of Texas A&M – BS Civil Engineering.](#)) <https://dronedj.com/2022/07/16/amazon-drone-deliveries/#more-83718>

Joby officially applies for UK certification of its eVTOL air taxis Bruce Crumley - Jul. 18th 2022



Santa Cruz-based [Joby revealed](#) the move ahead of the opening of the Farnborough International Airshow, where next-generation aviation companies and tech are generating more interest than ever. Part of the reason for that excitement is [nearing air taxi](#) and other eVTOL services around the world – including an eventual UK launch – and [Joby’s](#) formal certification bid brings that much closer.

The company began its efforts to [seek US certification](#) from [the Federal Aviation Administration last June](#) and has made remarkable progress in that exacting process since. By May, it announced it had received its Part 135 Air Carrier Certificate, nearly a half year ahead of schedule, allowing it operate traditional aircraft to prepare the [launch of next-generation](#) services by 2024. In filing its paperwork with Civil Aviation Authority, Joby is looking to make the UK the second market in which it will operate eVTOL [air taxi flights](#). <https://dronedj.com/2022/07/18/joby-air-taxis-evtol/#more-83730>



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UK government approves 165-mile drone superhighway project Bruce Crumley - Jul. 18th 2022



The Skyway proposal to create a drone superhighway was initially [tabled last March](#) by a consortium headed by UK [uncrewed traffic management specialist](#), Altitude Angel. It is joined by telecom company BT, which will provide connectivity through its mobile network, and several other startups whose activities can support the future UAV transport zone. According to reports, the plan will receive **\$14.2 million in government funding**, from a total of \$125 earmarked for integrating new aerial technology into the national airspace.

The objective of the drone superhighway effort is to create a [dedicated corridor](#) whose automated technology can take over the [heavy-lifting of piloting](#) UAVs – and in doing so, remove the risks of individual operators crashing into one another, thus increasing the security, fluidity, and ease so that a far greater number of UK businesses will use the craft. Once assembled in about two years' time, Skyway will connect the airspaces above Reading, Oxford, Milton Keynes, Cambridge, Coventry, and Rugby, and **usher in beyond visual line of sight operation as the rule.**

How will it work? Rather than myriad individual drones using onboard sensors to detect and avoid other crafts – an every-vehicle-for-itself safety system whose fallibility can be witnessed on roadways – Skyway will use a [series of high-powered](#), ground-based sensors that will interface to [centrally direct](#) all overhead traffic. That will not only radically reduce the risk of collisions on the superhighway, but it will also allow UK drone operators to forgo equipping craft with navigational sensors and permit them to maximize the payload, range, and efficiency of their UAVs. <https://dronedj.com/2022/07/18/uk-drone-superhighway/#more-83745>

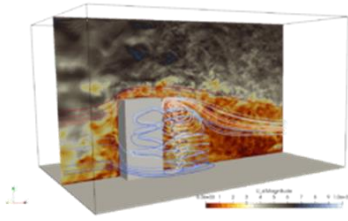
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Building a Drone that Resists the Wind as Well as a Bird Miriam McNabb July 18, 2022
DRONELIFE Staff Writer Ian M. Crosby

Animal Dynamics Partners with University of Manchester for Advanced Virtual Wind Simulation



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Bio-inspired autonomous systems developer [Animal Dynamics](#) has announced a collaboration with the University of Manchester for the improvement of its simulated environment to advance the commercial production of its Stork STM Uncrewed Aircraft System.

Wind simulation within a virtual environment allows for the exposure of Uncrewed Aircraft Systems to a variety of wind scenarios that would be too challenging or costly to recreate in the real world. The simulation software supplied by the Mechanical, Aerospace, and Civil Engineering Division at the University of Manchester allows Animal Dynamics to perform more accurate simulations with simulated wind data, providing a means of testing flight control strategies for take-off and landing under challenging wind conditions.

The introduction of this software is enabling Animal Dynamics to establish a flight control system capable of responding to local wind conditions in mere seconds, increasing the tolerance of UAS to extreme wind conditions and resulting in a safer airspace.

<https://dronelife.com/2022/07/18/building-a-drone-that-resists-the-wind-as-well-as-a-bird-can-animal-dynamics/>

Skyborg Flight Series Completed by XQ-58A Valkyrie Tactical UAV Sarah Simpson / 19 Jul 2022



The recent completion of a successful series of flights with two production XQ-58A Valkyrie aircraft for the Skyborg Program, has been announced by Kratos Defense & Security Solutions, Inc.

The Skyborg Program team includes:

- The U.S. Air Force Fighters and Advanced Aircraft Directorate

- Air Force Research Laboratory
- USAF 40th Flight Test Squadron
- Kratos
- The USAF 46th Test Squadron

XQ-58A Valkyrie was initially developed in cooperation with AFRL on the Low Cost Attributable Strike Demonstrator Program with multiple follow-on programs and projects for several customers and applications.



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Multiple program applications continue with the Skyborg Program, as well as several others related to production, specific mission applications, and operational development of the XQ-58A family of affordable, high speed, tactical UAVs.

[https://www.unmannedsystemstechnology.com/2022/07/skyborg-flight-series-completed-by-xq-58a-Valkyrie-tactical-uav/?utm_source=UST+eBrief&utm_campaign=ab8dad33eb-ust-ebrief_2022-jul-19&utm_medium=email&utm_term=0_6fc3c01e8d-ab8dad33eb-119747501&mc_cid=ab8dad33eb&mc_eid=0d642a9d48](https://www.unmannedsystemstechnology.com/2022/07/skyborg-flight-series-completed-by-xq-58a- Valkyrie-tactical-uav/?utm_source=UST+eBrief&utm_campaign=ab8dad33eb-ust-ebrief_2022-jul-19&utm_medium=email&utm_term=0_6fc3c01e8d-ab8dad33eb-119747501&mc_cid=ab8dad33eb&mc_eid=0d642a9d48)

XAG Drone Supports Cacao Farm to Fight Diseases during Rainy Spells July 18, 2022



As more plantations struggle to improve efficiency and remain profitable, farmers are now seeking better solutions to combat plant diseases that can flourish with rainy spells. XAG's drone technology steps into Ecuador's cacao gardens to spray after rains, protecting cacao fruit from yield loss.

As the world's leading exporter of cacao, Ecuador is the top spot of high-quality cacao beans, the major ingredient of single-origin chocolates. Small farm owners account for over 90% of the cacao producers.

This season, Ecuadorian farmers are opening their arms to embrace drone technology for fruit tree spraying. XAG's local partner, Megadrone, dispatched an agricultural service team to manage a 180-hectare cacao farm in Guayaquil, the second largest city of Ecuador. Drones were used as an alternative spraying tool to cope with increasing labor costs.

The cacao farm is located on mountains and the sloped, undulating terrain makes it hard to reach by large ground machinery. Over the previous years, spraying crops and spreading fertilizers were mostly conducted by hired workers manually. It took at least a month to cover the whole fields even with sufficient labor.

Due to the powerful downdraft under propellers, chemical droplets can be easily carried to the whole plant and attach to the leaves uniformly. Two sets of XAG agricultural drones were able to serve the entire 180-hectare cacao fruits in 3 to 4 days.

https://uasweekly.com/2022/07/18/xag-drone-supports-cacao-farm-to-fight-diseases-during-rainy-spells/?utm_source=rss&utm_medium=rss&utm_campaign=xag-drone-supports-cacao-farm-to-fight-diseases-during-rainy-spells&utm_term=2022-07-19



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The World's Largest Drone Superhighway: UK's Project Skyway Miriam McNabb July 19, 2022 DRONELIFE Staff Writer Ian M. Crosby



The drone superhighway will connect cities and towns across the country, enabled by a consortium led by Unified Traffic Management provider [Altitude Angel](#), alongside [BT](#), EE, and various UK

tech start-ups. Over the course of the next two years, this group will develop **165 miles** of drone superhighways linking airspace above Reading, Oxford, Milton Keynes, Cambridge, Coventry, and Rugby.

Proposed as part of the Department for Business, Energy & Strategy InnovateUK programme, the Skyway superhighway network will leverage the potential of unmanned aerial vehicles for the advancement of the urban air mobility industry.

Skyway partners will put in place a ground-based, networked solution building on existing infrastructure where possible, connected to Altitude Angel's global Unmanned Traffic Management system, which brings together data from multiple sources in real-time to form a moving map of the low-altitude sky. This will enable organizations within the towns and cities along the superhighways to access automated drone services with the push of a button, safely operated alongside other aircraft. <https://dronelife.com/2022/07/19/the-worlds-largest-drone-superhighway-uks-project-skyway/>

ALOFT MARKS RECORD-BREAKING HALF MILLION LAANC AUTHORIZATIONS July 19, 2022 Sally French



A data dump from drone software company Aloft Technologies suggests that not only is the drone industry getting pretty huge, but Aloft itself has a huge hand in it.

The company this week released a few milestone numbers around its applications and UTM (**Unmanned aircraft system traffic management**) platforms. Among some of the standouts:

- Aloft recorded half a million LAANC authorizations.



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- Commercial airspace authorizations grew 102% year-over-year.
- Total authorizations grew 58% year-over-year.
- 20 million all-time airspace searches in its B4UFLy app.
- One million monthly airspace events on Aloft's UTM data network.
- 300% quarter-over-quarter commercial revenue growth.

Aloft is a drone startup working on building airspace management software. **LAANC is short for Low Altitude Authorization and Notification Capability.** It's critical because without it, drones cannot fly in controlled airspace (such as near airports) without permission. Also in June, the company crossed a milestone when its UTM data network surpassed one million monthly airspace events.

And more market share means more money. Aloft didn't disclose exact dollar figures, but the company said it saw 300% quarter-over-quarter commercial revenue growth, marking the largest expansion of the platform in company history.

<https://www.thedronegirl.com/2022/07/20/aloft-marks-record-breaking-half-million-laanc-authorizations/>

Nordic Unmanned first drone operator with four BVLOS deployments in Europe

July 19, 2022 News



Nordic Unmanned is under contract to the European Maritime Safety Agency to assist the Spanish Ministry of Transport, Mobility and Urban Agenda with conducting multipurpose maritime surveillance in the Strait of Gibraltar. The campaign will include the monitoring of sulphur oxide and nitric oxide emissions and assisting in Search & Rescue

operations for the Spanish Maritime Safety Agency as needed.

The drone operation registers potential violations of IMO (International Maritime Organization) regulations. The onboard sniffer samples a plume from the exhaust of the vessel in transit and measures if the sulphur content is higher than the allowed concentration of 0.5%. Indications of non-compliance made by this emission control service may trigger an inspection at the next port of call to verify whether an infringement has taken place. From 1 January 2025 the Mediterranean Sea will become a Sulphur Emission Control Area, limiting the allowed sulphur content in marine fuels to 0.1%. <https://uasweekly.com/2022/07/19/nordic-unmanned-becomes-the-first-drone-operator-to-have-four-simultaneous-bvlos-deployments-in->



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[europe/?utm_source=rss&utm_medium=rss&utm_campaign=nordic-unmanned-becomes-the-first-drone-operator-to-have-four-simultaneous-bvlos-deployments-in-europe&utm_term=2022-07-20](#)

Qatar ropes in US drone hunters to secure FIFA World Cup Ishveena Singh - Jul. 20th 2022



The Qatari Ministry of Interior and Safety and Security Operations Committee for the 2022 FIFA World Cup has decided to hire a US counter-drone specialist to secure the upcoming games. Utah-based Fortem Technologies will be present in the Arab nation this November to provide real-time airspace awareness and detect and defeat dangerous drones.

Many countries and organizations have announced plans to assist Qatar in securing the 2022 FIFA World Cup. But given the growing [threat of rogue drones](#), these preparations wouldn't be complete without counter-drone technology present at major venues and events throughout the region.

Fortem has several counter-drone technologies up its sleeve. There's the SkyDome system that detects rogue drones, classifies threats, and mitigates them autonomously with an interceptor drone called DroneHunter. And at the heart of this system is TrueView radar, a compact, AI-enabled, networkable radar designed to perform in urban environments and crowded, public places including sports arenas and airports.

Joining forces with Fortem on the ground (and in the sky) will be its distribution partner Smart Communication Systems. <https://dronedj.com/2022/07/20/counter-drone-fifa-world-cup/#more-83935>

Embraer's Eve air taxi unit racks up UAM deals at Farnborough airshow Bruce Crumley - Jul. 20th 2022



Aircraft manufacturing group Embraer's air taxi unit, [Eve](#), has announced a pair of deals related to future [urban air mobility](#) (UAM) activities, including supplying its [air traffic management](#) software to aerial travel services provider Halo Aviation.



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The company joined the [growing list](#) of next [generation aircraft developers](#) and potential clients pairing up against the backdrop of the Farnborough International Airshow. In its communique, Eve Mobility said it had signed accords under which Halo will help with the development and later integrate Eve's UAM and [air taxi](#) traffic management system into its own operations. Shortly after, Eve said it had also signed a non-binding agreement with UK aerospace and defense specialist BAE to acquire to **150** electric vertical take-off and landing aircraft (eVTOL) for possible [use in security missions](#).

The moves involve Eve taking [existing relationships](#) it had with both companies further and deepening potential use of its craft by defense clients as well as UAM and air taxi service providers. <https://dronedj.com/2022/07/20/eve-uam-air-taxi/#more-83898>

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7-Eleven begins drone delivery trials in South Korean resort town Ishveena Singh - Jul. 19th



Convenience store chain 7-Eleven is trialing 3-minute drone delivery services in Gapyeong, a quaint resort town in South Korea that has gained popularity because of its easy accessibility from Seoul. During the pilot program, which will run until the end of this year, there is no minimum order amount requirement, and delivery through drones is also being offered free of charge. South Korean 7-Eleven customers can order convenience store items for drone delivery through the Allivery (All+Delivery) mobile app.

Joining 7-Eleven in this quest is drone solutions provider Pablo Air, which is also **the first Korean company to participate in US drone delivery trials**.

When an order is received, items are packed and transported by a winch to a drone station located on the store's rooftop. Once these items are loaded into the drone's delivery box, a ground control system operator sends the aircraft off on an autonomous flight to its destination. During the pilot program, this destination is going to be a dedicated drone delivery station located in Gapyeong and not someone's backyard.

The drone, which is 990 x 990 x 750 mm in size, has a maximum payload capacity of 5 kg and a maximum flight time of 25 minutes. It flies at an average speed of 10 m/s or 36 km/h. And since



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the delivery station is located only 1 km from the convenience store, the drone can reach it in less than 3 minutes. <https://dronedj.com/2022/07/19/korea-7-eleven-drone-delivery/>

BAE unveils new compact, military-grade drones with XXL capacities Bruce Crumley - Jul. 20th 2022



The effective deployment of consumer UAVs on [military missions in Ukraine](#) has begun to blur the lines between larger craft [built specifically for armed forces](#) and smaller vehicles whose tech was intended for enterprise and leisure operation. Now, [aerospace and defense specialist BAE](#) is entering that overlapping space with compact, potentially expendable drones boasting super-sized capacities for military clients.

Though [the craft](#) is clearly being developed for defense purposes, the limited tech specs BAE has revealed will get consumer pilots fantasizing about putting the UAVs through the motions. The pair of [compact drones](#) are designed to operate military surveillance and intelligence missions, yet can also tote some pretty heavy and potentially destructive payloads. In contrast to the average store-bought quadcopter, meanwhile, they'll reach speeds Mach 0.5 and 0.75 respectively. Try pushing the sticks on your current remote that fast.

Concept 1 is a twin-tailed, rail-launched, probably jet-propelled plane that will fly altitudes of up to **30,000 feet**. It's capable of **four-hour flight carrying a 40 kg.** payload of various sensors – or, perhaps, munitions – and can operate alone or in swarms as what BAE calls an “expendable but recoverable” asset. <https://dronedj.com/2022/07/20/compact-military-drone/>

Lilium signs a pair of eVTOL deals covering two European regions Bruce Crumley - Jul. 21st 2022



German developer of electric takeoff and landing aircraft (eVTOL) [Lilium](#) says it has signed a pair of deals to deliver vehicles to operators of future transport services in Scandinavia and the Benelux countries.

The two transactions cover a total of **46 Lilium eVTOL jets**, as well as [construction of vertiports](#). The first accord [announced](#) was with AAP



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Aviation Group, which intends to launch advanced air mobility operations across Scandinavia, beginning with [Norway](#). Revealed just hours later, the second contract was inked with the ASL Group to facilitate its plans to [operate eVTOL](#) flights in Belgium and the Netherlands.

The partnership with AAP calls for Lilium to supply **40 eVTOL aircraft**, and assist in the identification and facility construction of [appropriate landing sites](#) for future AAM services. The deal with ASL covers six of the next generation aircraft, and similar planning and creation of [vertiport networks](#) in [Belgium](#), the Netherlands, Luxembourg, and even the west of [Germany](#).

Lilium is developing a range of eVTOLs that will transport between three and six passengers, and fly up to 124 miles on a single battery charge at top speeds of 109 mph. The company believes it will secure regulator approval in **2024** and begin [delivering the aircraft](#) shortly thereafter. <https://dronedj.com/2022/07/21/lilium-evtol/#more-83960>

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Air taxi companies acknowledge lack of infrastructure will restrict rollout PAUL BRINKMANN | JULY 18, 2022



FARNBOROUGH AIRSHOW, Farnborough, U.K. — Limited numbers of aircraft and a lack of suitable vertiports, charging stations and airspace accommodations will restrict the initial rollout of air taxi services to mostly affluent communities, predicted the leaders of several advanced air mobility companies during a discussion today.

Air taxis, which include electric vertical takeoff and landing aircraft, will be relatively expensive at first, much like mobile phones, computers and automobiles were, said Mike Whitaker, chief commercial officer at Washington, D.C.-based Supernal.

But he said Supernal's relationship with Hyundai, its parent company, will help it scale up production.

"If you can bring the automotive perspective and scale to manufacturing, then you can really bring the price down," Whitaker said <https://aerospaceamerica.aiaa.org/air-taxi-companies-acknowledge-lack-of-infrastructure-will-restrict-rollout/>