



## UAS and SmallSat Weekly News

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### HOW A ST. LOUIS DRONE COMPANY IS CREATING NEW DEFENSE CAPABILITIES

March 3, 2023 Sally French



*Michelle Madaras, Chief Customer Officer at St. Louis drone company WingXpand.*

Over the past couple weeks on The Drone Girl, you've been hearing from Michelle Madaras, Chief Customer Officer at St. Louis drone company WingXpand. She's been sharing [an inside look at her company's unique, telescoping drone design](#). WingXpand's drone is a **7-foot-wide** autonomous airplane, but it **fits into a backpack** through its patented, expanding wings. Then, she revealed that her company is on a big hiring spree (and offered tips on [how to get hired as a drone pilot](#)).

The WingXpand drone has caught the attention of all sorts of folks who dole out awards, people seeking better tech in their own fleets, and people with grant money to give to innovators. In 2022, WingXpand was one of 12 businesses competitively selected out of more than 600 international companies to participate in Techstars Los Angeles. That same year, the St. Louis drone company was chosen as a 2022 'St. Louis Arch Grants' recipient.

And it has also piqued the interest of the U.S. government, in part from its startup accelerator experience that was in partnership with the U.S. Space Force and NASA's Jet Propulsion Laboratory. WingXpand recently flight tested with U.S. government agencies and has received written support. And now, the St. Louis, Missouri-based drone company has a contract with the government to develop new software capabilities.

Madaras shares how her company got involved in working with the government and provides guidance into how other small businesses might be able to achieve similar contracts.

<https://www.thedronegirl.com/2023/03/03/st-louis-drone-company-wingxpand-sbir/>



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### The drone photo that won \$15K in prizes at DJI SkyPixel contest Ishveena Singh - Mar. 3rd 2023



SkyPixel, one of the world's most popular aerial photography communities established by tech giant DJI, has announced the winners of its annual drone photo and video contest. See all the top, prize-winning drone photographs here and find out how a Vietnamese photographer's delicate composition secured the distinction of Annual Best Work with over \$15,000 in prizes.

The SkyPixel 8th Annual Photo & Video Contest, co-organized by DJI, attracted over **65,000** submissions, which is a 120% increase from the previous year. The photo judging panel included renowned photographers and publication editors, and they chose Khánh Phan's photo *Floral Dress* as the winner of a [Hasselblad 907X Anniversary Edition Kit](#), a trophy, and an award certificate.

The photo is a bird's-eye portrait of two women wading in a pond as they collect a harvest of water lilies, whose white and magenta blooms create the illusion of a floating floral dress. Phan says she captured the photo in her hometown of Long An in southern Vietnam with a [DJI Mavic 3](#), which features a 4/3 CMOS Hasselblad camera.

Explaining that she wanted to share a time-honored tradition of her ancestors, Phan says, "They have worked as water lily pickers for many years, having learned the craft from their mothers and grandmothers. I believe these women are most beautiful when working because labor creates value and happiness." <https://dronedj.com/2023/03/03/dji-skipixel-2023-contest-winners/>

### Illinois utility expands drone inspection program with Skydio Dock Ishveena Singh - Mar. 3rd 2023 8



Electric utility ComEd says it is expanding its drone program to allow pilots to operate inspection drones **remotely**. The utility has secured all the necessary waivers required from the FAA to conduct operations in which the drone flies beyond the visual line of sight (BVLOS) of the operator. And it is currently training pilots to automate drone flights using the [Skydio Dock](#) docking and recharging station.

Electric utility ComEd says it is expanding its drone program to allow pilots to operate inspection drones **remotely**. The utility has secured all the necessary waivers required from the FAA to conduct operations in which the drone flies beyond the visual line of sight (BVLOS) of the operator. And it is currently training pilots to



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ComEd supplies power to more than 4 million customers across northern Illinois, which is about 70% of the state's population. The company says remote monitoring through drones will improve the overall grid performance because on-demand surveillance capabilities will increase ComEd's ability to rapidly inspect equipment throughout its service territory.

Using an autonomous drone docking and recharging station essentially means the company need not dispatch trucks of crews to perform in-person inspections. And with drones supporting routine equipment inspection, utility crews would be free to focus on priority grid repair and improvements. ComEd explains in a [press statement](#), "Remote, off-site flying capabilities will also maximize ComEd's drone pilots' efforts by limiting the time they are physically needed in the field." <https://dronedj.com/2023/03/03/utility-drone-inspection-skydio-dock/>

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### **Chinese start-up AutoFlight's 'flying car' claims new world record for distance flown** March 4, 2023



AutoFlight, a Chinese [start-up](#) founded in [Shanghai](#), has set a new world record for distance flown by an electric vertical take-off and landing (eVTOL) aircraft in a recent test flight of its autonomous "Prosperity I" air taxi, according to the company's founder.

The five-seater Prosperity I reached 250.3 kilometers (93.4 miles) during a test flight on February 23, which AutoFlight founder, chairman and chief executive Tian Yu claims as the longest flight of its kind in the world.

"Helicopters are very expensive and noisy," he said. "Operating a helicopter costs up to \$2,000 per hour, but operating an eVTOL would cost only about one-tenth or one-twentieth [by comparison], which would make it affordable." <https://www.yahoo.com/finance/news/chinese-start-autoflights-flying-car-093000169.html>



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### FAA issues special UAS waiver to Alaska to use airspace for certification

**purposes** March 6, 2023 Jenny Beechener UAS traffic management news, Urban air mobility



The Federal Aviation Administration (FAA) has granted permission for unmanned aircraft systems (UAS) to operate and test in Alaska with the aim of securing certification for national airspace flight. The waiver was requested by the Alaska Department of Transportation & Public

Facilities in late 2020. Alaska is **the only state** with the ability to allow UAS operations classified as research or development, including aircraft under 300 pounds, to be conducted in Alaska UAS test-site airspace.

The waiver enables UAS manufacturers to utilize Alaska's airspace for certification purposes, a move that will support new economic activity. The Alaska Center for UAS Integration (ACUASI) at the University of Alaska Fairbanks is the manager of Alaska's UAS test site. As part of the FAA's Beyond program, ACUASI has been granted the authority to oversee the waiver's implementation.

ACUASI will evaluate the safety of an operator's unmanned aircraft and related procedures using their internal processes to ascertain whether a UAS operation can be safely conducted. Previously, individuals who wanted to undertake such operations had to apply for a special airworthiness certificate and request exemption from several regulations which proved to be a resource-intensive and time-consuming process for both the applicant and the FAA.

<https://www.unmannedairspace.info/latest-news-and-information/faa-issues-special-uas-waiver-to-alaska-to-use-airspace-for-certification-purposes/>

### Emergency drones market forecast to grow at a CAGR of 13.1% between 2023-

**33** March 1, 2023 Jenny Beechener UAS traffic management news



Market research provider Fact.MR reports the global emergency drone market is estimated at \$4,885 million in 2023 and is expected to expand at CAGR of 13.1% during the forecast years of 2023-2033.

Drones were initially used to obtain accurate data and



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photographs to aid in decision-making for military and defense applications. However, drones are now used in many different industries and applications due to technical improvement.

Drones have become essential in critical situations. In addition, connectivity enhances their versatility and capacity to reach the most remote areas and act as an effective problem-solving aid. Drones play an important role in emergency and rescue work. Due to these increasing applications of emergency drones, market growth is up-surgin

<https://www.unmannedairspace.info/latest-news-and-information/emergency-drones-market-forecast-to-grow-at-a-cagr-of-13-1-between-2023-33-fact-mr-report/>

**InDro Robotics obtains FAA BVLOS waiver for solar farm inspections** March 6, 2023 Jenny Beechener UAS traffic management news



InDro Robotics has obtained a waiver from the Federal Aviation Administration (FAA) to conduct Beyond Visual Line of Sight flights in the US. InDro has done this at multiple facilities in Canada already, operating from hundreds of kilometers away. Receiving the FAA approval means the company can deploy the same solution in the United States.

The waiver allows InDro to expand its program of remotely piloted infrastructure inspections. Specifically, the FAA waiver permits InDro to remotely operate drone inspections of fenced solar farms in Class G airspace, 10 miles from airports. Operations can reach a maximum altitude of 400 ft AGL.

The waiver opens the skies for InDro to tap into a large market, remotely inspecting some of the 2,500+ solar farms in the United States. <https://www.unmannedairspace.info/latest-news-and-information/indro-robotics-obtains-faa-bvlos-waiver-for-solar-farm-inspections/>

**Virginia Tech tests instrument landing for integration of manned and unmanned systems** February 28, 2023 Jenny Beechener UAS traffic management news



Virginia Tech Mid-Atlantic Aviation Partnership test site is collaborating with Virginia-based companies NAVOS Air, UAV Pro, and Textron Systems, to design and flight test an instrument approach system for uncrewed aircraft systems (UAS). The project is one step toward integrating new types of aircraft smoothly alongside existing traffic by adapting strategies with a proven track record of ensuring airspace safety.



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NASA’s newest “research roadmap” for developing the technological infrastructure that will be required to manage larger uncrewed aircraft identified a need for tools that can be used by air traffic control to keep these aircraft separated from each other and transition safely between higher and lower altitudes. Flying safely in inclement weather also has been flagged as an area to address. That raises the question of whether traditional instrument procedures could be used by — or adapted for — **drones**.

Instrument procedures are typically tailored for a particular type of aircraft and airport. In this case, the team focused on approach procedures at the Allen C. Perkinson Blackstone Army Airfield in Blackstone, Virginia, using a Textron Systems fixed wing Aerosonde UAS. UAV Pro provided airport coordination and operations and safety management for the project flights. The research was funded by the Commonwealth of Virginia through a program designed to promote applied research in autonomous systems and commercialize existing research.

<https://www.unmannedairspace.info/latest-news-and-information/virginia-tech-site-tests-instrument-landing-to-assist-integration-of-manned-and-unmanned-system/>

### **The Winners of SkyPixel’s 8th Annual Aerial Photo and Video Contest!** Miriam

McNabb March 03, 2023 by DRONELIFE Staff Writer Ian M. Crosby

Today, [SkyPixel](#) announced the [winners of its 8th Annual Photo & Video Contest](#). This year’s contest, co-organized with [DJI](#), received over **65 thousand submissions** – a 120% increase from last year’s event. The theme of this year’s contest, “The Story Behind,” urged users to share what mattered to them most through both their submissions and the reflections shared on their submission page.



*Nominated Photo: Andrea Marongiu*

The 8th Annual Photo & Video Contest was assessed by a Judging Panel of industry professionals including Claudio Miranda (Academy Award-winning cinematographer), Anne Farrar (Assistant Managing Editor of Photography for National Geographic Magazine), Phil Pastuhov (Director of Cinematography for films such as The Lord of the Rings), Hasselblad Master Benjamin Everett, Air Pixels founder Tobias Hägg, photographer George Steinmetz, Director of Photography Toby Strong, cinematographer Jingping Yu, and photographer Wang Ning.

This year’s video judging panel chose Bashir Abu Shakra’s “[Why I Travel the World Alone](#),” an autobiographical short film four years in the making that combines sweeping mountaintop



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landscapes with Shakra's childhood family recordings to share his personal journey.

<https://dronelife.com/2023/03/03/the-winners-of-skypixels-8th-annual-aerial-photo-and-video-contest/>

### **THE BEST DRONE PHOTO OF 2023 (ACCORDING TO SKYPIXEL)** March 3, 2023 Sally French

At this point, drone photos aren't exactly a rarity. But truly breathtaking drone photos are. That's exactly why drone photo contests are such a pleasure. And now, we have what might be the best drone photo of 2023.

SkyPixel in March announced the winners of the 8th Annual Photo & Video Contest. The winners were selected across more than **65,000 submissions**, which is a 120% increase from the previous year. And across all the submissions, this was deemed the best drone photo of 2023:



*"Floral Dress" by Khánh Phan*

It's a bird's-eye portrait showing two women wading in a pond as they collect a harvest of water lilies whose white and magenta blooms create a floating floral dress.

"A near-perfect color scheme with lovely waves of flowers moving across the frame, this beautiful image is so well-composed and balanced, it brings a sense of beauty and calmness," said judge Anne Farrar.

Phan said her work of art shares the time-honored tradition of her ancestors, who worked as water lily pickers.

"I believe these women are most beautiful when working because labor creates value and happiness," Khan said.

<https://www.thedronegirl.com/2023/03/06/the-best-drone-photo-of-2023-according-to-skypixel/>

### **Drones Provide Aerial Perspective for More Efficient Clean Up Australia Day**

March 6, 2023 News

Australian drone technology startup [Aerologix](#) has partnered with [Clean Up Australia](#) to help communities reach pockets of rubbish hidden off the beaten track in waterways and nature reserves.



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For this weekend's cleanup, pilots will focus on taking aerial footage along the Northern Beaches coastline. Using image and video to geolocate rubbish then highlighting hotspots on a map so clean up groups can optimize their collecting efforts. Australia produces 2.5 million tons of plastic waste each year, equating to 100 kg per person. Of this, only 13% of plastic is recovered and 84% is sent to landfill.

Clean Up Australia is the nation's largest community-based environmental event, in operation for **33 years**. [https://uasweekly.com/2023/03/06/drones-provide-aerial-perspective-for-more-efficient-clean-up-australia-day-uncovering-hidden-trash/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=drones-provide-aerial-perspective-for-more-efficient-clean-up-australia-day-uncovering-hidden-trash&utm\\_term=2023-03-06](https://uasweekly.com/2023/03/06/drones-provide-aerial-perspective-for-more-efficient-clean-up-australia-day-uncovering-hidden-trash/?utm_source=rss&utm_medium=rss&utm_campaign=drones-provide-aerial-perspective-for-more-efficient-clean-up-australia-day-uncovering-hidden-trash&utm_term=2023-03-06)

## Plana looks to create Asia's first eVTOL corridor between South Korea and Japan

Bruce Crumley - Mar. 6th 2023



South Korean aircraft developer Plana doesn't plan to introduce its first [air taxi](#) for a few years yet, but it's already initiating work to create what it says will be **Asia's first international corridor** for [electric vertical takeoff and landing](#) (eVTOL) flights between its domestic market and Japan.

[Plana has signed](#) a Memorandum of Understanding with Osaka-based [vertiport](#) development and management company SkyScape Japan to prepare [eVTOL flights](#) between the archipelago and South Korea. In addition to what would be very long trips between cities in the two countries – 718-plus miles between their capitals, for starters – the accord also foresees developing a range of shorter-distance [advanced air mobility](#) services within both nations.

Though the partners say the resulting international corridor would be the first in Asia for [eVTOL](#) operation, the claim may be somewhat of a misnomer given the use of hydrogen power in Plana's six-passenger-and-pilot aircraft designs. Those currently involve a hybrid powertrain system to fuel the six-rotor craft to cruising speeds of 190 mph over a range of more than 310 miles. That distance is expected to expand to 500 miles through increased reliance on the greater flight capacities afforded by hydrogen compared to lithium batteries.



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Even that, however, would **come up short** to power Plana eVTOL (plus hydrogen) planes between [South Korea](#) and [Japan](#) – not to mention popular inland departure and arrival routes on both ends. Presumably, then, the company plans on amping craft capabilities even more than previously announced.

As Plana moves its aircraft through development and certification processes – starting with test flights expected to begin later this year – the two companies will begin work on the air corridor through a joint concept of operations project. That will detail operations between the two countries, measure potential impact routes would have on communities within principal target areas, and recruit appropriate stakeholders for the preparation phase.

<https://dronedj.com/2023/03/06/plana-looks-to-create-asias-first-evtol-corridor-between-south-korea-and-japan/#more-91447>

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### **AAM and Vertiports in Australia: Skyportz and Pelligra Partner** Miriam

McNabb March 06, 2023 DRONELIFE Staff Writer Ian M. Crosby



Air taxi infrastructure company [Skyportz](#) has announced a partnership with property developer [Pelligra](#) to explore the joint development of vertiport networks to attract air taxi and drone delivery services to Australia.

This new Agreement builds on a prior partnership between Skyportz and other property owners such as Secure Parking, an

owner of hundreds of inner-city car parking sites.

With a portfolio of more than **1200 projects** in Victoria, South Australia, New South Wales, Queensland and overseas, Pelligra owns the former Holden and Ford manufacturing plants in Victoria and South Australia with plans to develop high tech hubs.

<https://dronelife.com/2023/03/06/aam-and-vertiports-in-australia-skyportz-and-pelligra-partner/>



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### **ATHENA AI: ARTIFICIAL INTELLIGENCE IS ARRIVING IN MILITARY DRONES** March 4, 2023 Sally French



Artificial intelligence is one of the hottest trends in 2023. I caved last week when I gave you a story (well, song lyrics) [written by AI chatbot ChatGPT](#). That was a cheeky use of artificial intelligence

but many other forms of it are a lot more serious. That includes Athena AI — an artificial intelligence tech that is finding its way into drones.

Australia-based, AI-enabled military decision-support company Athena AI made its first export sale to the U.S. Department of Defense in January 2023 by way of Florida-based Tomahawk Robotics. And just a couple months later, its next biggest step is into drones.

Athena AI in March announced a partnership with Puerto Rico-based Red Cat. [Red Cat, which owns military drone company Teal Robotics](#), will integrate Athena’s machine learning and AI for high-speed tracking of objects through its Teal 2 drone. The Teal 2 drone is especially notable for its abilities to conduct successful nighttime operations (perhaps most notable, the Teal 2 is the first drone to be equipped with FLIR’s new [Hadron 640R](#) sensor, which is optimized for nighttime operations).

And with the new Athena-Red Cat partnership, Athena AI will license its proprietary computer vision architecture to Teal. <https://www.thedronegirl.com/2023/03/07/athena-ai-teal/>

### **Airo Group Commits to SPAC-backed Nasdaq Listing** Charles Alcock March 6, 2023



*Jaunt Air Mobility aims to certify its four-passenger Journey eVTOL aircraft in 2026.*

The Airo Group has agreed to merge with special purpose acquisition company (SPAC) Kernel Group Holdings to achieve a listing on the Nasdaq stock exchange in the third quarter. The group

includes eVTOL aircraft developer Jaunt Air Mobility, Aspen Avionics, and several drone operations businesses.



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Announced on Monday, the deal represents a shift in fundraising strategy for Airo Group, which since October 2021 has worked on plans for a direct initial public offering without the involvement of a SPAC. Many expected that to lead to a Wall Street listing in 2022 but softening investment sentiment for the advanced air mobility sector appears to have held up that and other funding rounds in the sector.

Upon closing of the merger, Airo and Kernel will become wholly owned subsidiaries of PubCo with its common stock and warrants expected to list on Nasdaq under the respective symbols AIRO and AIROW. <https://www.ainonline.com/aviation-news/business-aviation/2023-03-06/airo-group-commits-spac-backed-nasdaq-listing>

### DroneUp Partners with University of Arkansas' McMillon Innovation Studio

From [DroneUp](#)



Virginia Beach, Va., March 2, 2023 – [DroneUp, LLC](#), a leading autonomous drone delivery platform and drone services provider, today announced a partnership with the [McMillon Innovation Studio](#) to evaluate opportunities to expand its operations, including on college campuses.

The McMillon Innovation Studio, part of the University of Arkansas' Office of Entrepreneurship and Innovation, offers an opportunity for student Design and Product Teams to develop human-centered design solutions to problem statements that have social impacts.

DroneUp will collaborate with McMillon Innovation Studio for a design team project focused on campus safety and security. The design team will coordinate with key stakeholders on campus to discuss possibilities that could become innovative solutions to real-world problems, and they will also evaluate legal and policy aspects around privacy and safety.

“One of the areas we focus on at DroneUp is creating career pathways for a variety of individuals. It’s a clear fit for us to partner with McMillon Innovation Studio as we look to expand our operations and execute our workforce development strategy. We are very impressed with their work, and we’re eager to see the design team’s ideas to improve campus safety **using the latest UAS technology**,” said Ilya Tlumach, VP of Learning & Development at DroneUp. <https://www.startwheel.org/2023/03/03/droneup-partners-with-university-of-arkansas-mcmillon-innovation-studio-to-improve-campus-safety-and-security/>



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### **DroneUp takes off** FEBRUARY 27, 2023 VICTORIA BOURNE

#### **Aerial drone firm partners with Walmart, adds 650+ jobs**



*Tom Walker is CEO of Virginia Beach-based DroneUp, which last year announced plans for a \$27 million expansion and 655 new jobs.*

Virginia Beach's DroneUp LLC is riding the leading edge of the unmanned aerial vehicle industry wave. Founded in 2016, the company, which specializes in commercial drone delivery, flight services and software, has grown its ranks from three to **530 employees**. Retail giant Walmart Inc. is a new partner.

In an August 2022 news conference with Gov. Glenn Youngkin, DroneUp announced it was taking off in a big way, **adding 655 jobs** as part of an expansion that will include establishing a \$20 million drone testing, training and research and development center at Richard Bland College in Dinwiddie County. DroneUp plans to add 510 jobs in Virginia Beach and 145 positions at the Richard Bland center.

“Virginia is extremely fortunate that we have DroneUp here because they have really put the industry on the map as far as the drone technology goes and package delivery,” says Tracy Tynan, director of the Unmanned Systems Center at Virginia Innovation Partnership Corp.

[https://www.virginiabusiness.com/article/droneup-takes-off/?oly\\_enc\\_id=9130E4751801F0T](https://www.virginiabusiness.com/article/droneup-takes-off/?oly_enc_id=9130E4751801F0T)

### **Gyro-Stabilized Automatic Aviation Cannon Developed for Drones** Phoebe Grinter / 07 Mar 2023



UAVHE engineers have developed BADUGA, a gyro-stabilized automatic aviation cannon with an electro-mechanical bolt and feed system that includes a locking and firing mechanism known as the USM, or firing group.

Designed to be installed on drones and unmanned aircraft, BADUGA features a gyroscopic stabilizer that keeps the aiming line steady regardless of the carrier's orientation. It maintains the center of gravity in the same position, even with varying barrel inclination angles, aerodynamic resistance, and magazine capacity.

According to UAVHE, the servo drive's accuracy provides sub-MOA targeting resolution, and the fast slew rate is over 300 degrees per second. The use of wave reducers and backlash-free



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connections, along with automatic self-calibration, ensures excellent repeatability for every shot. [https://www.unmannedsystemstechnology.com/2023/03/gyro-stabilized-automatic-aviation-cannon-developed-for-drones/?utm\\_source=UST+eBrief&utm\\_campaign=95f957f97b-ust-ebrief\\_2023-mar-7&utm\\_medium=email&utm\\_term=0\\_6fc3c01e8d-95f957f97b-111778317&mc\\_cid=95f957f97b&mc\\_eid=acabe18a61](https://www.unmannedsystemstechnology.com/2023/03/gyro-stabilized-automatic-aviation-cannon-developed-for-drones/?utm_source=UST+eBrief&utm_campaign=95f957f97b-ust-ebrief_2023-mar-7&utm_medium=email&utm_term=0_6fc3c01e8d-95f957f97b-111778317&mc_cid=95f957f97b&mc_eid=acabe18a61)

### Welcome to Chula Vista, where police drones respond to 911 calls Patrick Sisson

February 27, 2023



In the skies above Chula Vista, California, where the police department runs a drone program 10 hours a day, seven days a week from four launch sites, it's not uncommon to see an unmanned aerial vehicle darting across the sky. For officers on the force, tapping into this aerial reconnaissance resource has gone from a rare occurrence to a routine one. An officer about to enter a

house where a potential suspect might ask "Is UAS available?" over the radio, and one of the department's [29 drones—or "unmanned aerial systems"](#)—could soon be hovering overhead. When the department needs to be slow and methodical, there's almost always a drone involved, flying between 200 and 400 feet above the action. Most people wouldn't realize it's there.

Chula Vista uses these drones to extend the power of its workforce in several ways. For example, if only one officer is available when two calls come in—one for an armed suspect and another for shoplifting—the officer will respond to the first one. But now, says Sergeant Anthony Molina, the Chula Vista Police Department's public information officer, dispatchers can send a drone to surreptitiously trail the suspected shoplifter.

"The drone is never in danger," he says. And neither is the officer controlling the drone, he adds. "They're in a room." [https://www.technologyreview.com/2023/02/27/1069141/welcome-to-chula-vista-where-police-drones-respond-to-911-calls/?truid=977e4b40a0e89e98c30e546072ebc452&utm\\_source=the\\_download&utm\\_medium=email&utm\\_campaign=the\\_download.unpaid.engagement&utm\\_term=Active%20Qualified&utm\\_content=02-27-2023&mc\\_cid=dea48683bc&mc\\_eid=852fbbfb43](https://www.technologyreview.com/2023/02/27/1069141/welcome-to-chula-vista-where-police-drones-respond-to-911-calls/?truid=977e4b40a0e89e98c30e546072ebc452&utm_source=the_download&utm_medium=email&utm_campaign=the_download.unpaid.engagement&utm_term=Active%20Qualified&utm_content=02-27-2023&mc_cid=dea48683bc&mc_eid=852fbbfb43)



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### How Fast is the Open Source Drone Ecosystem Growing? Dronocode Year in

**Review** Miriam McNabb March 01, 2023



As the drone industry grows and new manufacturers enter the market, is the use of open source drone platforms growing? [The Dronocode Foundation](#), the organizing force behind the PX4 open source drone ecosystem, has published their [Year in Review report for 2022](#): and the metrics tell an interesting story.



PX4 is an open-source drone ecosystem: a group of contributors committed to the transparency and philosophy of open-source technology systems. The Dronocode Year in Review report includes metrics on the contributors who write the code, and a transparent look into the funding sources and expenditures of the Dronocode Foundation. “The goal of the report is to act as a barometer for the open-source segment of the drone industry and illuminate the work of the individual contributors, academic institutions, and companies that make it run,” says the Foundation.

The [full report](#) is worth a look, answering questions about how the Dronocode Foundation works and providing links and descriptions to their projects: PX4 Autopilot, MAVLink, MAVSDK, QGroundControl, and Pixhawk. <https://dronelife.com/2023/03/01/dronocode-year-in-review-report/>

### RigiTech Leads the Way with Daily BVLOS Drone Delivery Service in France

March 6, 2023 News

RigiTech, a Swiss drone manufacturer, has achieved a major milestone in the field of drone delivery by becoming the first company to operate a full regular BVLOS (Beyond-Visual-Line-of-Sight) route in France. The company’s Eiger drone, which is specifically designed for cold-chain transportation of blood and biological samples, has been approved for daily flights between laboratories along the approved route linking Bourgoin-Jallieu to Tignieu-Jamezieu.



Thanks to its large payload bay and long-range capabilities, the Eiger drone is an efficient and sustainable delivery solution, capable of carrying a payload of up to 3 kg and medical boxes with up to 150 pre-conditioned blood vials. By utilizing this innovative technology, RigiTech can reduce delivery time by 50%, as the route between the two laboratories usually takes 30 minutes by car, but



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only 15 minutes by drone.

This breakthrough in drone delivery technology is already transforming access to healthcare services, enabling faster diagnosis and faster access to treatment for patients. RigiTech continues to develop new aerial logistics networks throughout Europe, with its latest success being the BVLOS drone delivery for laboratory logistics in Switzerland.

[https://uasweekly.com/2023/03/06/daily-bvlos-drone-delivery-france-rigitech/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=daily-bvlos-drone-delivery-france-rigitech&utm\\_term=2023-03-07](https://uasweekly.com/2023/03/06/daily-bvlos-drone-delivery-france-rigitech/?utm_source=rss&utm_medium=rss&utm_campaign=daily-bvlos-drone-delivery-france-rigitech&utm_term=2023-03-07)

### **Air Force Wants More Planes Faster—Plus a Thousand Drone Wingmen** AUDREY DECKER MARCH 7, 2023.



The U.S. Air Force wants to accelerate its purchases of existing aircraft—and wants **a thousand drones** to accompany its fighter pilots into combat, the service’s secretary said Tuesday. The request is expected to be sent to Congress in coming days.

Kendall also outlined the service’s plans for “collaborative combat aircraft” – drones that will fly alongside manned fighters. The service is planning to buy 1,000 CCAs: **300 F-35s will get two drones apiece**, as will 200 of the planned Next Generation Air Dominance, or NGAD, aircraft.

Kendall added that the drones are part of an effort to reduce the cost of the future force; he said that if the service only purchases current aircraft in production—such as the F-35, F-15EX, and NGAD— “we’ll have an unaffordable Air Force.”

<https://www.defenseone.com/policy/2023/03/air-force-wants-more-planes-fasterplus-thousand-drone-wingmen/383687/>

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### **Drone Based Roofing Inspections: Zeitview Expands Software Platform** Miriam McNabb March 07, 2023 by DRONELIFE Staff Writer Ian M. Crosby



Today, advanced inspection service provider [Zeitview](#) announced that its AI-enabled [Property Insights Platform](#) is being expanded. The company will now offer **thermal capabilities** for commercial properties, as well as AI/ML damage assessment capabilities for commercial, residential, and multi-family properties. The Property Insights Platform



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leverages high-resolution aerial imagery of the roof secured from drone flights to assess rooftop conditions, identify anomalies, and recommend optimized maintenance schedules.

Zeitview's solution eliminates the risks of error and injury posed by time-consuming manual inspections, offering fully transparent damage assessments within minutes. Deploying drones for inspection and analysis enables the identification of moisture under a roof membrane and potential areas of energy loss around the facade, allowing for the problem to be addressed proactively. The AI/ML technology identifies common rooftop anomalies needing attention with the AI vision highlighting areas not characteristic of the roof itself.

<https://dronelife.com/2023/03/07/drone-roofing-inspections-zeitview-expands-software-platform/>

### **US Air Force Special Operations Command to operate MQ-9B SkyGuardian** Greg Waldron

6 March 2023

The US Air Force Special Operations Command (AFSOC) has ordered **three** General Atomics Aeronautical Systems (GA-ASI) MQ-9B SkyGuardian unmanned air vehicles (UAVs), the **first sale of the variant in the USA.**



"MQ-9B is the ideal platform for inserting air-launched effects into potentially hostile environments. The MQ-9B's combination of range, endurance, reduced manpower footprint, and overall flexibility will make it a true centerpiece of AFSOC's future family of advanced UAS systems." Customers for the MQ-9B include the UK,

Belgium, and Japan.



**Separately**, GA-ASI says it will continue to support the US Defense Advanced Research Projects Agency's LongShot program which envisages **air-to-air** weapons being carried in an unmanned, air-launched air vehicle.

"It is envisioned that LongShot will increase the survivability of manned platforms by allowing them to be at standoff ranges far away from enemy threats, while an air-launched LongShot UAV efficiently "closes the gap" to take more effective missile shots."



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GA-ASI has participated in both the first and second phases of LongShot. A critical design review will complete phase two, which also involved a “multi-body wind tunnel” test, that explored air-to-air weapon separation. [https://www.flightglobal.com/military-uavs/us-air-force-special-operations-command-to-operate-mq-9b-skyguardian/152346.article?utm\\_campaign=FG-DEFENCE-A4E%20080323-JM&utm\\_medium=email&utm\\_source=newsletter&utm\\_content=FG-DEFENCE-A4E%20080323-JM](https://www.flightglobal.com/military-uavs/us-air-force-special-operations-command-to-operate-mq-9b-skyguardian/152346.article?utm_campaign=FG-DEFENCE-A4E%20080323-JM&utm_medium=email&utm_source=newsletter&utm_content=FG-DEFENCE-A4E%20080323-JM)

### **Draganfly drones integrate with SkyeBrowse for live 3D mapping** Ishveena Singh - Mar. 8th 2023



Joining forces with [SkyeBrowse](#) will enable Draganfly’s [public safety drones](#) to increase capabilities in areas such as accident reconstruction, tactical operations, SAR, disaster response, and firefighting.

SkyeBrowse has made a mark with public safety agencies around the world courtesy of its live 3D mapping software. Using a proprietary tech called videogrammetry that allows for 3D reconstruction with just one 90-second drone video, SkyeBrowse allows enhanced situational awareness during first responder emergencies and disasters.

The company’s software offers autonomous drone solutions achieving less than 1 cm accuracy in 3D models in under five minutes. Meaning, the tech can be used to document anything from crime scenes to [vehicular accidents](#) or even for planning active shooter mitigation.

Stressing how its aircraft come designed with custom payloads for various applications, Draganfly says its technology will be integrated into SkyeBrowse’s video-based 3D modeling platform to deliver critical situational data to first responders, including modeling, mapping, and monitoring. <https://dronedj.com/2023/03/08/draganfly-drone-skyebrowse-integration/>

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### **PHI, Kaman Team Up To Commercialize Kargo UAS** Tony Osborne March 08, 2023

ATLANTA—Helicopter operator PHI Aviation is teaming up with Kaman to support development of the OEM’s Kargo autonomous utility uncrewed air system (UAS).

PHI, which is best known for its support to the offshore oil-and-gas industry, has signed a non-binding agreement to purchase 50 of the air systems. Crucially, PHI will help Kaman explore the



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potential missions for the UAS, refine its design for the commercial market and achieve certification.



Development of the Rolls-Royce M250-powered multi-copter configuration Kargo has been underway by Kaman for two years. The UAS has already been selected for a U.S. Marine Corps logistics demonstration program, Medium Unmanned Logistics Systems – Air, that will see the Kargo undertake a Marine Corps Field User Capability Assessment trial.

The aircraft will be able to fly up to **500 nm**, depending on the payload, and has been developed to “complement manned or crewed aircraft operations,” Lane added.

<https://aviationweek.com/aerospace/aircraft-propulsion/phi-kaman-team-commercialize-kargo-uas>

## GA-ASI Advances to Phase 2 of DARPA LongShot Program to Develop UAV March 7, 2023 Military | News



General Atomics Aeronautical Systems, Inc. (GA-ASI) is pleased to continue supporting the Defense Advanced Research Projects Agency (DARPA) LongShot program. LongShot changes the paradigm of air combat operations by demonstrating an unmanned air-launched vehicle capable of employing **air-to-air weapons**.

LongShot will increase the survivability of manned platforms by allowing them to be at standoff ranges while an air-launched LongShot unmanned aerial vehicle (UAV) efficiently “closes the gap” to take more effective missile shots.

After a successful Preliminary Design Review in February 2022 at the end of Phase 1, GA-ASI was selected by DARPA to continue into Phase 2 in March 2022. During Phase 2, detailed designs are being completed and ground tests conducted to decrease program risk.

A key test event completed early in Phase 2 was multi-body wind tunnel test characterizing the LongShot air vehicle and air-to-air weapon separation. Critical Design Review for the program is planned for early 2023, which will complete the Phase 2 portion of the program. GA-ASI is currently generating a proposal response for the third phase of the program.

<https://uasweekly.com/2023/03/07/ga-asi-advances-to-phase-2-of-darpa-longshot-program-to->



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[develop-ualv/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=ga-asi-advances-to-phase-2-of-darpa-longshot-program-to-develop-ualv&utm\\_term=2023-03-09](https://www.axcelinnovation.com/develop-ualv/?utm_source=rss&utm_medium=rss&utm_campaign=ga-asi-advances-to-phase-2-of-darpa-longshot-program-to-develop-ualv&utm_term=2023-03-09)

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### **Wing Delivery Network frees drones from point-to-point operation for faster, flexible service** Bruce Crumley - Mar. 9th 2023



Google's corporate cousin [Wing Aviation](#) has repeatedly innovated its methods of organizing and operating UAV transport of ordered goods between retailers and customers. Now it's taking that to another level by devising reactive, pragmatic, and automated networks of [delivery drones](#) whose flexibility and increased

efficiencies are what the company thinks will be **key to massively scaling** the activity.

Today the company unveiled its Wing Delivery Network system, which completely re-thinks the way [drone transport services](#) have been structured up until now. Rather than continuing to operate those as point-to-point shuttles [between flight centers and customers' homes](#) – and back again – Wing will instead oversee a fluid approach that allows its [UAVs to act](#) more like taxis or cars in ride-sharing apps by responding and providing service to clients they are nearest to.

By enabling that kind of reactive roaming, recharging, and redeployment from whatever Wing hub receiving new orders happens to be the closest, the company believes it has created a plan for [faster response times](#), better service, and the kind of synergetic networking required to provide entire urban areas with [drone delivery coverage](#). <https://dronedj.com/2023/03/09/wing-delivery-network-frees-drones-from-point-to-point-operation-for-faster-flexible-service/>