



## UAS and SmallSat Weekly News

### Contents

- 2 FAA Grants American Robotics Part 107 Waiver for Expanded Automated BVLOS Operations
- 2 DJI Unveils DJI Avata, The Ultimate Immersive Drone Experience
- 3 AirMatrix Enables First Beyond Visual Line Of Sight Drone Operations Over Populated Areas
- 4 Cybersecurity Standards for Drones: AUVSI and Fortress Information Security Partner
- 4 Helping Drones Land on Steep Rooftops: Check Out This Video
- 5 Planting Trees with Drones: AirSeed Delivers Seed Pods for Drone Reforestation Initiative
- 6 DARPA TO BRIEF POTENTIAL PROPOSERS ON 'INFRASTRUCTURE-LESS' SUAS DEVELOPMENT
- 6 AUVSI and Fortress to develop cybersecurity risk-based framework for uncrewed vehicles
- 7 Inspired Flight to Integrate Remote ID for Commercial UAS
- 8 RigiTech gets first French waiver for BVLOS medical drone flights
- 8 Volocopter shares video update showing its eVTOL air taxi is closer than ever to reality
- 9 Drones are reshaping how rice is farmed in Vietnam
- 10 Volatus gets special Transport Canada BVLOS drone certification
- 10 Astra to sell electric thrusters to Airbus OneWeb Satellites
- 11 JOUAV CW-25H Drone Wins CES 2022 Innovation Award
- 12 AeroVironment's Multi-Sensor Imaging Payload Delivers Superior Surveillance Performance
- 12 Schiebel partnership with NGO Earthrace for global environmental and wildlife protection
- 13 MintAir taps Jaunt eVTOLs for South Korean AAM development
- 14 Skyportz Reveals Stunning Design for Australia's First Electric Air Taxi Vertiport
- 14 DarkPulse, Inc. Enters Agreements to Increase Equity Stake to 100% of Drone A.I. Companies
- 15 SiLC Achieves Industry's Longest Detection Range with Its Eyeonic Vision Sensor
- 16 Steadicopter and Viking Drone Packaging launch new capability for transporting equipment
- 17 Ukraine's Army of Drones expands pilot training as UAV fleets grow
- 18 Drone services group PAU passes 13,000 BVLOS inspection flights
- 18 FAA UTM FIELD TEST PROJECT LAUNCHES IN NEW YORK, WITH BIG PLANS FOR SPRING 2023
- 19 Draganfly's New Products Bring Added Value to Drone Operations
- 20 DRONEII's Drone Industry Barometer 2022 is Out: Why Most Companies Use Drones



## UAS and SmallSat Weekly News

27Aug22

### FAA Grants American Robotics Part 107 Waiver for Expanded Automated BVLOS Operations August 26, 2022 News



[Ondas Holdings Inc.](#), a provider of private wireless data, drone, and automated data solutions through its wholly owned subsidiaries, Ondas Networks Inc. and American Robotics, Inc., today announced that the FAA has granted [American Robotics](#) a Part 107 Waiver for expanded Automated Beyond-Visual-Line-of-Sight (BVLOS) operations.

This approval is an amendment to American Robotics' original FAA waiver granted in 2021, which made American Robotics **the first company** authorized to operate its autonomous drone technology **BVLOS** with no pilots or visual observers on-site. With greater operating authority granted to the Scout System, customers will have the ability to collect high resolution data over larger areas of assets.

For the past six years, American Robotics has been testing advanced autonomy and BVLOS-related technologies, working closely with regulators to reach goals and milestones. After being granted this new waiver from the FAA, the American Robotics Scout System can operate autonomously at ranges up to **10 miles**, unlocking inspections over large industrial sites and linear assets such as pipelines, railways, and electrical transmission lines. [https://uasweekly.com/2022/08/26/faa-grants-american-robotics-part-107-waiver-for-expanded-automated-bvlos-operations/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=faa-grants-american-robotics-part-107-waiver-for-expanded-automated-bvlos-operations&utm\\_term=2022-08-26](https://uasweekly.com/2022/08/26/faa-grants-american-robotics-part-107-waiver-for-expanded-automated-bvlos-operations/?utm_source=rss&utm_medium=rss&utm_campaign=faa-grants-american-robotics-part-107-waiver-for-expanded-automated-bvlos-operations&utm_term=2022-08-26)

### DJI Unveils DJI Avata, The Ultimate Immersive Drone Experience August 25, 2022 News



DJI, the world's leader in civilian drones and creative camera technology, today introduces DJI Avata, a transformational new drone that offers an unparalleled experience of immersive flight. DJI Avata creates a new paradigm for first-person view (FPV) drone flight, allowing every pilot to race through the skies



## UAS and SmallSat Weekly News

and feel its astonishing performance, agility, and easy control. Coupled with the new DJI Goggles 2 and the intuitive DJI Motion Controller, DJI Avata delivers a flight experience that was unimaginable until now.

DJI Avata opens new creative directions for beginners and professionals alike. Its unique and compact design strips down the chassis of a traditional drone into a body built for speed and agility, weighing only 410 grams while still integrating aerodynamic propeller guards for added safety. Its powerful stabilized camera, featuring a 1/1.7" CMOS sensor with 48 million effective pixels, delivers premium imaging features like 4K/60fps and 2.7K/50/60/100/120fps<sup>2</sup> video, giving creators a scorching new tool for smoothly capturing premium video content. And with a flight time of up to **18 minutes**, it can deliver a thrill ride full of power on every flight.

[https://uasweekly.com/2022/08/25/dji-unveils-dji-avata-the-ultimate-immersive-drone-experience/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=dji-unveils-dji-avata-the-ultimate-immersive-drone-experience&utm\\_term=2022-08-26](https://uasweekly.com/2022/08/25/dji-unveils-dji-avata-the-ultimate-immersive-drone-experience/?utm_source=rss&utm_medium=rss&utm_campaign=dji-unveils-dji-avata-the-ultimate-immersive-drone-experience&utm_term=2022-08-26)

## AirMatrix Enables First Beyond Visual Line Of Sight Drone Operations Over Populated Areas August 26, 2022 News



IN-FLIGHT Data, in partnership with remote traffic management software leader [AirMatrix](#), successfully conducted one of Earth's first "SAIL 4" urban drone operations, while beyond the line of sight of the pilot and over urban neighborhood populations.

"SAIL" refers to the combined complexity of a drone mission, from 1 (lowest) to 6 (highest). Only two other projects of this level are known to have been completed in the world to-date, both in Europe.

Since March 2022, IN-FLIGHT Data has been testing, training and preparing to conduct advanced aerial surveys within the city of Calgary through The City of Calgary's Living Labs Program. In July and August 2022, the flight missions covered an operational area of about 9,000 hectares (or about 22,000 acres), entirely inside the city of Calgary with a population of about 1.2 million people. T

The flight crew was able to see all Calgary air traffic users for more than 30 km in all directions. The purpose of the aerial intelligence gathering was to measure and assess the quality and performance of the entire communications network above an urban center including geolocation, cellular, and radio. These advancements include technical achievements like medical deliveries – such as human organs, medications, or devices. This mapping also supports

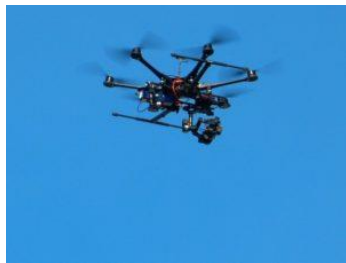


## UAS and SmallSat Weekly News

the development and growth of advanced aerial mobility, including flying taxi services in urban environments. [https://uasweekly.com/2022/08/26/airmatrix-enables-first-beyond-visual-line-of-sight-drone-operations-over-urban-and-densely-populated-areas-in-north-america/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=airmatrix-enables-first-beyond-visual-line-of-sight-drone-operations-over-urban-and-densely-populated-areas-in-north-america&utm\\_term=2022-08-27](https://uasweekly.com/2022/08/26/airmatrix-enables-first-beyond-visual-line-of-sight-drone-operations-over-urban-and-densely-populated-areas-in-north-america/?utm_source=rss&utm_medium=rss&utm_campaign=airmatrix-enables-first-beyond-visual-line-of-sight-drone-operations-over-urban-and-densely-populated-areas-in-north-america&utm_term=2022-08-27)

### Cybersecurity Standards for Drones: AUVSI and Fortress Information Security

**Partner** Miriam McNabb August 24, 2022 by DRONELIFE Staff Writer Ian M Crosby



The [Association for Uncrewed Vehicle Systems International](#) (AUVSI) and [Fortress Information Security](#) announced the launch of an industry-wide partnership concentrated on establishing an enterprise cybersecurity model and a set of voluntary standards meant to safeguard uncrewed systems and robotics against cyber risks. Leveraging Fortress's experience in establishing voluntary risk-based standards, AUVSI will lead an effort to achieve a consensus, set standards and promote cybersecurity policies and actions among uncrewed systems manufacturers and suppliers.

AUVSI's Executive VP of Government & Public Affairs, Michael Robbins said, "A cyber-secure foundation built on universal industry standards among industry stakeholders and suppliers will help to ensure the economic and operational potential of uncrewed vehicles is reached."

AUVSI is also forming an industry Working Group to clarify the value of its efforts to the industry and to guarantee that its cyber risk mitigation tools are intuitive. This group is to be made up of experts from AUVSI member organizations who will collaborate with Fortress on the development of the cybersecurity framework, which they intend to complete in under a year. <https://dronelife.com/2022/08/24/cybersecurity-for-drones-auvsi-and-fortress-information-security/>

**29Aug22**

### Helping Drones Land on Steep Rooftops: Check Out This Video Miriam

McNabb August 26, 2022

The shock absorbing landing gear means that the quad can land safely without flipping over, damaging the legs, or sliding off. Researchers point out that the gear allows homeowners to



## UAS and SmallSat Weekly News

utilize drones for security and surveillance or means that commercial drones could execute emergency landings on rooftops – a safer option than a ground landing in an urban or cluttered environment.



In a paper published in [IEEE Robotics and Automation Letters, July 2022](#) – J.Bass, I. Tunny and A.L. Desbiens, “Adaptive Friction Shock Absorbers and Reverse Thrust for Fast Multirotor Landing on Inclined Surfaces,” researchers explain that lightweight friction shock absorbers, combined with rapid thrust reversal, can dramatically increase the landing envelope of a quadrotor. “The friction shock absorbers serve to dissipate the drone’s kinetic energy and the reverse thrust increases the maximum slope inclination at which it can land,” says the paper’s abstract.



Researchers developed landing gear prototype for a DJI F450, and tested the gear in real life, outdoor conditions. “The overall system enables drones to safely land on surfaces of up to 60° and at vertical speeds of up to 2.75 m/s, thus increasing the landing envelope by a factor of 8, compared to traditional multirotors,” says the paper. <https://dronelife.com/2022/08/26/landing-drone-on-steep-rooftops-check-out-this-video/>

## Planting Trees with Drones: AirSeed Delivers Seed Pods for Drone Reforestation Initiative

Miriam McNabb August 26, 2022 by DRONELIFE Staff Writer Ian M Crosby



Smart tech and engineering firm [CAL International](#) has formed a partnership with Australian green tech company [AirSeed Technologies](#) for a major climate change project that will employ aerial platform technology with the goal of planting **100 million trees by 2024**. Utilizing artificial and data intelligence, the AirSeed drone is a payload and delivery system that determines target areas using GPS coordinates before launching carbon pods at the ground at a rate of **two-per-second**.

These pods are then identified on the mapping system in accordance with the flight path, considering wind conditions at the date of planting, allowing the drone to return via the same route to record tree growth.



## UAS and SmallSat Weekly News

Each pod carries a gram of carbon gathered from rotting and dying vegetation, with the seed kept insulated from outside elements. The pod is activated during the rain, with rainwater absorbed by the carbon and allowing the seed to germinate. With a two-person team, one AirSeed drone is intended to plant **40,000 pods in just one day**.

<https://dronelife.com/2022/08/26/planting-trees-with-drones-airseed-delivers-seed-pods-for-drone-reforestation-initiative/>

## **DARPA TO BRIEF POTENTIAL PROPOSERS ON 'INFRASTRUCTURE-LESS' SUAS DEVELOPMENT** August 28, 2022



The Defense Advanced Research Projects Agency intends to meet with interested contractors next month to discuss a new program aimed at building a small, unmanned air system that would deploy and recover from a vessel's flight deck or an austere ground site without requiring additional equipment.

DARPA's Tactical Technology Office will sponsor the meeting with potential proposers on Sept. 20 to provide details of the forthcoming Advanced Aircraft Infrastructure-less Launch and Recovery project.

The program aims to develop and flight demonstrate an X-plane with the critical technologies required for a leap-ahead in long endurance, vertical takeoff and landing unmanned air system (UAS) performance. The UAS would be able to launch and recover from ship flight decks and small austere land locations in adverse weather without additional infrastructure equipment, thus enabling expeditionary deployments. Unlike large VTOL systems, the small UAS size would allow many aircraft to be stored and operated from one ship creating a tactical beyond-line-of-site multi-intelligence sensor network capability.

DARPA is requiring participation in an in-person-only expo-style event on the same day after its Proposers Day that will take place at a Strategic Analysis facility in Arlington, Virginia and will be broadcasted via Microsoft Teams for Government for remote participants. <https://unmanned-network.com/darpa-to-brief-potential-proposers-on-infrastructure-less-suas-development-program/>

## **AUVSI and Fortress to develop cybersecurity risk-based framework for uncrewed vehicles** August 24, 2022 Jenny Beechener

The Association for Uncrewed Vehicle Systems International (AUVSI) and Fortress Information Security (Fortress) have initiated an industry-wide collaboration focused on developing an





## UAS and SmallSat Weekly News

enterprise cybersecurity model and a suite of voluntary standards to address cyber risks specific to uncrewed systems and robotics.



Using previous Fortress work that led to the development of voluntary risk-based standards for the utilities industry as a blueprint, AUVSI will spearhead an effort to build consensus, establish standards and facilitate proactive cybersecurity policies and actions among uncrewed systems manufacturers and suppliers.

AUVSI is creating a collaborative industry Working Group to ensure the value proposition to the industry of this effort is clear and the cyber risk mitigation tools make sense. The Working Group will consist of AUVSI member organizations with subject-matter expertise that work together with Fortress to begin the development of the cybersecurity framework.

<https://www.unmannedairspace.info/counter-uas-systems-and-policies/auvsi-and-fortress-team-to-develop-cybersecurity-risk-based-framework-for-uncrewed-vehicles/>

## Inspired Flight to Integrate Remote ID for Commercial UAS Sarah Simpson / 24 Aug 2022



On August 11th, the FAA issued a ruling affirming that Remote ID will be mandatory for all commercially purposed UAS produced for use in the United States after **September 15, 2022**. They also released an ASTM Means of Compliance which defined how manufacturers may comply with this requirement. This rule applies to nearly every commercial

UAS in the United States. There are exceptions for the US government as well as for home built and very small UAVs.

Complying with this ruling is complex and challenging. Full compliance is not simply a matter of installing transmitters on the aircraft and ground control station. A commercial grade, fully compliant system must be tamper resistant, FCC compliant, reliable, and robustly integrated into the flight control software, aircraft and ground control station. This FAA rule requires that the aircraft not be able to take off without Remote ID in operation, and if the system stops transmitting in flight, the flight control software must alert the operator, and instruct the operator to land the aircraft as soon as possible.

[https://www.unmannedsystemstechnology.com/2022/08/inspired-flight-to-integrate-remote-id-for-commercial-uas/?utm\\_campaign=InnovateEnergy%20Content&utm\\_medium=email&\\_hsmi=224278425&\\_hsenc=p2](https://www.unmannedsystemstechnology.com/2022/08/inspired-flight-to-integrate-remote-id-for-commercial-uas/?utm_campaign=InnovateEnergy%20Content&utm_medium=email&_hsmi=224278425&_hsenc=p2)



## UAS and SmallSat Weekly News

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**30Aug22**

**RigiTech gets first French waiver for BVLOS medical drone flights** Bruce Crumley -  
Aug. 29th 2022



[Switzerland](#)'s specialized [medical drone transport](#) company RigiTech is breaking new ground in France, where it has received the first-ever approval to fly regular [beyond visual line of sight](#) (BVLOS) flights of patient samples and other materials between two French laboratories.

[RigiTech received](#) the waiver from French air regulator Direction Générale de l'Aviation Civile, which joined with the company and several regional and local administrations in overseeing trials of the proposed [BVLOS drone flights](#) of lab tests and other medical deliveries. RigiTech's open-ended approval for regular medical drone flights is the **first** [BVLOS waiver](#) of its kind in France, and **one of only a few across the European Union**.

Similar plans are afoot in the UK to fly lab samples between several hospitals located [around Morcambe Bay](#). An even wider project is being mounted in Scotland to create [a nation-wide drone delivery](#) network to transport lab tests and medical supplies.

In work for Biogroup, RigiTech medical drones will initially fly the 17.6 km between the company's two main facilities in the greater Lyon region, cutting the time required for road transport in half with 15-minute flights. The time gained is intended to speed sample analyses, and thereby permit doctors to prescribe any treatments necessary to patients all the faster. <https://dronedj.com/2022/08/29/rigitech-gets-first-french-waiver-for-bvlos-medical-drone-flights/>

**Volocopter shares video update showing its eVTOL air taxi is closer than ever to reality** Scooter Doll - Aug. 29th 2022

Volocopter is a German urban air mobility (UAM) developer that functions as an aircraft manufacturer, airport, and aerial system developer all in one.





## UAS and SmallSat Weekly News

Volocopter began researching the plausibility of UAM in the US last year, [starting with Los Angeles](#), and is planning public test flights [in Japan in 2023](#). Not to be outdone, Volocopter is also working to [operate air taxis in Paris](#) during the 2024 Olympic Games.



Volocopter shared its latest progress update of the VoloCity in [video form](#), updating over three-minutes of footage to YouTube outlining the testing campaign process while sharing brief snippets of the eVTOL air taxi taking off and landing.

Either way, Volocopter continues to make strides in testing the VoloCity air taxi, with hopes to eventually transport humans around urban landscapes in the next **two years**.

<https://electrek.co/2022/08/29/volocopter-video-update-evtol-air-taxi/#more-85912>

## Drones are reshaping how rice is farmed in Vietnam Ishveena Singh - Aug. 29th 2022



Vietnam is the world's second-largest rice exporter, and XAG says its agricultural drones have become the "new favorite" of farmers that grow the crop.

The drone manufacturer, which has been actively pushing out its products in the Southeast Asian nation since the start of the [monsoon](#), said drones have found takers even among those farmers who have been growing rice in the traditional way for over 40 years.

Lê Thành Nguyên, at 62 years old, is one of the early adopters. "The drone eases the burden and greatly improves the efficiency," Nguyên said. "In the past, I had to pay four workers to carry and spread one ton of fertilizers on my field from 6 a.m. to 2 p.m., and they were exhausted. The drone has the benefits of large-volume, uniform distribution, and high spray penetration, which can help me with better pest control and nutrition management."

The agriculturist also points out that when feeding nutrients to the rice seeds sown, 100% absorption is achieved by drone spraying, whereas only six or seven seeds out of 10 were able to take in the nutrition when sprayed manually.

Meanwhile, according to XAG's local distributor DigiDrone, agricultural drones can spray crops **four times faster than manual labor while improving yield by 14%** compared to traditional farming. <https://dronedj.com/2022/08/29/agriculture-drone-vietnam-rice-farming/#more-85903>



## UAS and SmallSat Weekly News

### **Volatus gets special Transport Canada BVLOS drone certification** Bruce Crumley - Aug. 29th 2022



Drone services, hardware, and training company [Volatus Aerospace](#) has been granted a special certificate by regulator [Transport Canada](#) to operate beyond visual line of sight (BVLOS) missions without a flight observer.

In the process of obtaining the Special Flight Operations Certificate for [BVLOS missions](#) – **the first of its kind in Canada**, according to the company – [Volatus integrated](#) autonomous drone operating system tech by FlightOps Ltd. That remote navigation OS, combined with use of [Iris Automation](#)'s ground-based CASIA G Optical Detect and Avoid system, allows Volatus to pilot UAV missions which, under the terms of the certificate, won't require human observers.

Volatus has considerable experience conducting BVLOS flights across Canada, but the special operations certificate will provide it the additional flexibility to begin scaling those activities. The FlightOps OS assists in that by providing high levels of autonomy coupled with cloud connectivity – capabilities Volatus will use in the commercialization of its [Aerieport nesting](#) station as part of its broadened BVLOS services.

[Volatus](#) says the enlarged capacities will allow it to scale both its visually observed and [BVLOS activities](#). It will also enable deployment of multiple drones in a shared airspace.  
<https://dronedj.com/2022/08/29/volatus-bvlos-certificate/>

### **Astra to sell electric thrusters to Airbus OneWeb Satellites** Jeff Foust — August 30, 2022



TITUSVILLE, Fla. — Astra Space announced Aug. 29 it won a contract from Airbus OneWeb Satellites to provide electric propulsion systems for the Arrow line of **small satellites**.

The Astra Spacecraft Engine is an electric thruster that uses xenon or krypton as propellants. Astra offers two versions of the thruster, one that requires 400 watts of power and produces up to 300 kilonewton-seconds of total impulse and another that uses 1,450 watts of power and produces up to 1.5 meganewton-seconds of total impulse.



## UAS and SmallSat Weekly News

The thruster was originally developed by a startup, Apollo Fusion. Astra, which started as a launch vehicle developer, [acquired Apollo Fusion in 2021](#) as part of an effort to obtain technologies it needed for its vision of a company that could produce spacecraft as well as rockets.

Astra, in a quarterly earnings call Aug. 4, said it had received **more than 100 “committed” orders** for the Astra Spacecraft Engine through the end of the second quarter and announced it was leasing a new 5,575-square-meter facility that will be devoted to production of the engine.

Chris Kemp, chief executive of Astra, said customers of the Astra Spacecraft Engine are attracted by features such as a higher specific impulse, a measure of engine efficiency, as well as experience having operated “hundreds of times” in space to date.

<https://spacenews.com/astra-to-sell-electric-thrusters-to-airbus-oneweb-satellites/>

## JOUAV CW-25H Drone Wins CES 2022 Innovation Award August 29, 2022 News



The International Consumer Electronics Show Innovation Awards are known as the “Nobel Prize” of the consumer technology industry. The awards are judged annually on three main criteria: engineering and functionality, aesthetics and design, and product uniqueness and innovation. It is designed to honor the most outstanding design and engineering in 27

categories of consumer electronics. The award of CES 2022 Innovation Award for the JOUAV CW-25H is a recognition of the engineering, design, and innovation of the entire system.

Jointly developed by JOUAV and Doosan Innovation, the JOUAV CW-25H **hydrogen-powered** VTOL (vertical takeoff and landing) has zero emissions, no noise, low vibration, and low maintenance costs. It has a maximum **flight time of 330 minutes, a maximum payload of 4 kg, and a maximum range of 500 km.** [https://uasweekly.com/2022/08/29/jouav-cw-25h-drone-wins-ces-2022-innovation-award/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=jouav-cw-25h-drone-wins-ces-2022-innovation-award&utm\\_term=2022-08-29](https://uasweekly.com/2022/08/29/jouav-cw-25h-drone-wins-ces-2022-innovation-award/?utm_source=rss&utm_medium=rss&utm_campaign=jouav-cw-25h-drone-wins-ces-2022-innovation-award&utm_term=2022-08-29)



## UAS and SmallSat Weekly News

### AeroVironment's Multi-Sensor Imaging Payload Delivers Superior Surveillance Performance August 30, 2022 Military | News



[AeroVironment, Inc.](#) today introduced [Mantis™ i23 D](#), a multi-sensor daytime imaging payload compatible with the [Raven® B](#) small unmanned aircraft system. An enhanced daylight variant of its predecessor, the Mantis i23, Mantis i23 D maintains its ruggedized design and utilizes the same modular interface to allow for quick and simple swapping between payloads with no software updates required to the avionics or ground control systems.

At 13.4 ounces (380 grams), the ultralight imaging system features dual 18 MP electro-optical sensors and class-leading 24X digital zoom, providing four times improved target detection over the current Mantis i23 payload during daytime missions. Through its suite of sensors, extended zoom capability, onboard processing and digital imaging stabilization, it allows operators to increase aircraft standoff distance without compromising image quality.

Charles Dean, AeroVironment vice president of global business development, sales and marketing, said, "Customers can now operate their Raven systems at a greater standoff distance than before, **enabling eyes-on-target from several kilometers away** and reducing the risk of the target detecting or hearing the SUAS overhead."

[https://uasweekly.com/2022/08/30/aerovironments-new-mantis-i23-d-multi-sensor-imaging-payload-delivers-superior-daytime-surveillance-performance/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=aerovironments-new-mantis-i23-d-multi-sensor-imaging-payload-delivers-superior-daytime-surveillance-performance&utm\\_term=2022-08-30](https://uasweekly.com/2022/08/30/aerovironments-new-mantis-i23-d-multi-sensor-imaging-payload-delivers-superior-daytime-surveillance-performance/?utm_source=rss&utm_medium=rss&utm_campaign=aerovironments-new-mantis-i23-d-multi-sensor-imaging-payload-delivers-superior-daytime-surveillance-performance&utm_term=2022-08-30)

### Schiebel partnership with NGO Earthrace for global environmental and wildlife protection August 30, 2022 News



Schiebel is supporting global environment and wildlife protection activities through a partnership with Earthrace Conservation, a non-profit organization, providing its CAMCOPTER® S-100 Unmanned Air System for maritime deployment.

Deployed onboard the Earthrace vessel M/Y MODOC, the system



## UAS and SmallSat Weekly News

is currently supporting the NGO operations in South America. The main tasks involve finding and monitoring illegal fishing, identifying wildlife smuggling, hunting poachers, locating illegal gold miners, as well as rescuing illegally held animals.

In one of its recent operations, the ship monitored a Chinese squid fleet in international waters west of the Galapagos Islands. The ships have been accused of various illegal activities in recent years, including fishing illegally in Ecuadorian and Argentinian waters, spoofing Automatic Identification System (AIS) by transmitting fake GPS data, and human rights violations.

Earthrace founder Captain Pete Bethune said: “The Chinese squid fleet is one of the largest on the planet, with an estimated **500 vessels**. [https://uasweekly.com/2022/08/30/schiebel-partnership-with-ngo-earthrace-delivers-results-in-the-fight-for-global-environmental-and-wildlife-protection/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=schiebel-partnership-with-ngo-earthrace-delivers-results-in-the-fight-for-global-environmental-and-wildlife-protection&utm\\_term=2022-08-30](https://uasweekly.com/2022/08/30/schiebel-partnership-with-ngo-earthrace-delivers-results-in-the-fight-for-global-environmental-and-wildlife-protection/?utm_source=rss&utm_medium=rss&utm_campaign=schiebel-partnership-with-ngo-earthrace-delivers-results-in-the-fight-for-global-environmental-and-wildlife-protection&utm_term=2022-08-30)

**MintAir taps Jaunt eVTOLs for South Korean AAM development** Bruce Crumley - Aug. 30th 2022



South Korean startup [MintAir](#) is partnering with Dallas-based [electric takeoff and landing](#) (eVTOL) aircraft company Jaunt Air Mobility to develop [advanced air mobility](#) (AAM) services across the Southeast Asian nation. As part of the partnership, MintAir agreed [to order](#) up to **40** of Jaunt’s Journey eVTOL copters in their joint effort to plan, prepare, and eventually launch [AAM services](#) in markets across South Korea.

Founded in 2014 specializing in super heat conductors, Mint pivoted its interests in 2020 to the development of [next generation urban air mobility](#) with a particular focus on environmental, social, and governance management. Since then, it has been working on bringing [AAM transport to South Korea](#), most recently as a part of the Ministry of Land, Infrastructure and Transport’s K-UAM Grand Challenge. That program pursues all aspects of next generation air activity, including operation, traffic management, and vertiport construction.

Under their partnership, Mint will rely on Jaunt [eVTOL craft](#) as the aerial hardware in its [future AAM networks](#). Jaunt is advancing work on the design and certification of its Journey eVTOL with Slowed Rotor Compound technologies and use of a single main blade – like a helicopter.





## UAS and SmallSat Weekly News

The partners say that configuration provides enhanced safety through autorotation, energy-saving efficiency, and lower operating costs. <https://dronedj.com/2022/08/30/mintair-jaunt-evtol-aam/#more-85982>

31Aug22

### Skyportz Reveals Stunning Design for Australia's First Electric Air Taxi Vertiport

Miriam McNabb August 30, 2022 by DRONELIFE Staff Writer Ian M Crosby

At the AAUS annual Advanced Air Mobility summit in Melbourne, [Skyportz](#) showcased the design of its first vertiport in Australia. Located at [Caribbean Park](#) in Victoria, the fastest growing business precinct outside of the Melbourne CBD, the vertiport will serve Australia's emerging electric air taxi industry. Skyportz and Caribbean Park have collaborated with [Contreras Earl Architects](#), [to70 aviation](#), [ARUP](#) and [Microflite](#) to develop a design that meets the operational requirements to serve as a vertiport for Advanced Air Mobility.



"We are strategically and ideally placed to host the first Skyportz in Australia, and we hope that in time, a variety of new and emerging businesses take advantage of this leading infrastructure," said Caribbean Park Managing Director Ben Spooner.

"Caribbean Park is the largest and fastest growing business precinct outside the Melbourne CBD and we are focused on

building a model, suburban workplace of the future."

Skyportz is currently looking for investment partners to support the funding of the Caribbean Park vertiport's construction, set to be the first in a stable of vertiports throughout Australia. <https://dronelife.com/2022/08/30/skyportz-reveals-stunning-design-for-australias-first-electric-air-taxi-vertiport/>

### DarkPulse, Inc. Enters Agreements to Increase Equity Stake to 100% of Drone

A.I. Companies August 31, 2022 News



DarkPulse, Inc., a technology company focused on laser sensing systems based on its patented technology which provides a data stream of metrics for assessing the health and security of

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infrastructure, today announced it has entered into agreements to increase its equity ownership to 100% in both Remote Intelligence, Limited Liability Company and Wildlife Specialists. Together, both companies offer fully integrated, drone-based, geo-rectified, **3D modeled mapping** for industrial applications specializing in the energy and environmental survey service. Initially specializing in the Oil & Gas industry, the companies will expand offerings into the **home drone delivery** markets.

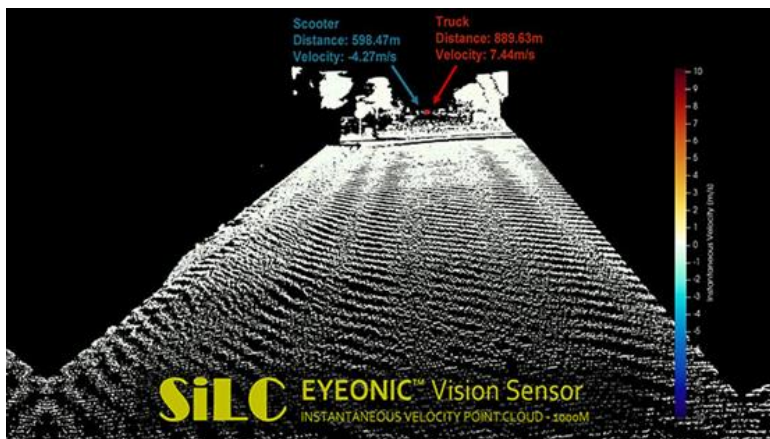
Remote Intelligence provides unmanned aerial services as part of their intelligence consultation and solutions. Remote's focus is aerial drone systems offering site mapping and aerial inspection services. They specialize in integrated, geo-rectified, 3D-modeled mapping for industrial applications in the energy and environmental industries. Remote also provides aerial survey, video inspection services, emergency support services, wildlife and habitat surveys, and system design, training, and sales for both commercial and private sectors. Remote Intelligence is globally connected with a base of operations in Pennsylvania.

"We are excited to work more closely with both Remote and Wildlife as wholly owned subsidiaries of DarkPulse as the Company begins the launch of DarkPulse Aero Services through a new website "DarkPulse.Aero",," said DarkPulse CEO, Dennis O'Leary.

[https://uasweekly.com/2022/08/31/darkpulse-inc-enters-into-agreements-to-increase-equity-stake-to-100-of-drone-based-a-i-companies/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=darkpulse-inc-enters-into-agreements-to-increase-equity-stake-to-100-of-drone-based-a-i-companies&utm\\_term=2022-08-31](https://uasweekly.com/2022/08/31/darkpulse-inc-enters-into-agreements-to-increase-equity-stake-to-100-of-drone-based-a-i-companies/?utm_source=rss&utm_medium=rss&utm_campaign=darkpulse-inc-enters-into-agreements-to-increase-equity-stake-to-100-of-drone-based-a-i-companies&utm_term=2022-08-31)

## SiLC Achieves Industry's Longest Detection Range with Its Eyeonic Vision Sensor

August 31, 022 News



Furthering its mission to change the state of machine vision, silicon photonics innovator [SiLC Technologies, Inc.](#) (SiLC) has announced that its Eyeonic Vision Sensor has demonstrated the ability to perceive, identify, and avoid objects at a range of **more than 1 kilometer**—a feat that no other company can claim.



## UAS and SmallSat Weekly News

Ultra-long-range visibility is a requirement in many industries that utilize machine vision, including automotive, metrology, construction, **drones**, and more. Specific scenarios include providing enough time for a vehicle to evade an obstacle at highway speeds, **enabling a drone to avoid others in the sky**, and controlling deforestation by making precision mapping and surveying of forests possible.

Next-gen vision sensors that incorporate millimeter-level accuracy, depth, and instantaneous velocity are key to true autonomous driving and other machine vision applications – and FMCW LiDAR is the optimal technology to make this a reality.

First announced in December of 2021, SiLC's Eyeonic Vision Sensor is a first-of-its-kind FMCW LiDAR transceiver. The heart of the Eyeonic Vision Sensor is SiLC's silicon photonic chip which integrates FMCW LiDAR functionality into a single, tiny chip. Representing decades of silicon photonics innovation, this chip is the only readily integratable solution for manufacturers building the next generation of autonomous vehicles, security solutions, and industrial robots. [https://uasweekly.com/2022/08/31/silc-achieves-industrys-longest-detection-range-with-its-eyeonic-vision-sensor/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=silc-achieves-industrys-longest-detection-range-with-its-eyeonic-vision-sensor&utm\\_term=2022-08-31](https://uasweekly.com/2022/08/31/silc-achieves-industrys-longest-detection-range-with-its-eyeonic-vision-sensor/?utm_source=rss&utm_medium=rss&utm_campaign=silc-achieves-industrys-longest-detection-range-with-its-eyeonic-vision-sensor&utm_term=2022-08-31)

## Steadicopter and Viking Drone Packaging launch new capability for transporting equipment August 31, 2022 News



Steadicopter – a leader in the Rotary Unmanned Aerial Systems industry – has announced its collaboration with UK-based Viking Drone Packaging – leading experts in the fields of packaging, UAS operations and the transport of dangerous goods – with the launch of a **new capability** for transporting critical equipment, **including hazardous materials**, by air. The multi-

function payload container will be installed on the Black Eagle 50 E platform.

Utilizing the full potential of the Black Eagle Electric rotary UAS family of products, this new development will provide Steadicopter's customers with a cargo delivery option suitable for a wide spectrum of mission applications.

The Black Eagle's flight performance capabilities, coupled with Viking's industry-leading packaging solutions, enable a wide range of payload delivery options, at different ranges, with the utmost precision. <https://uasweekly.com/2022/08/31/steadicopter-and-viking-drone-packaging->



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[launch-new-capability-for-transporting-critical-equipment/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=steadicopter-and-viking-drone-packaging-launch-new-capability-for-transporting-critical-equipment&utm\\_term=2022-08-31](#)

### **Ukraine's Army of Drones expands pilot training as UAV fleets grow** Bruce Crumley - Aug. 31st 2022



According to news reports [from Ukraine](#), officials overseeing the Army of Drones drive have added ten new pilot training schools to the two they initially tapped when funds began flowing into the project. The move reflects the positive response from around that world that has thus far financed the purchase of around 500 UAVs of various kinds.

Officials say that while that early support is encouraging and considerable, the country still needs far more craft to push Russian forces back – as well as more operators capable of [effectively flying those assets](#).

To meet that demand, Ukraine authorities have recruited 10 more schools [to train pilots](#) for the enlarged drone fleet the fundraising campaign has already financed, as well as additional craft that will be bought to expand. The two organizations recruited earlier in the operation have produced 400 military-grade operators, with the extra 10 centers expected to instruct thousands more on techniques like camouflaging craft, military flight tasks, and effective navigation in both stable and [hostile environments](#).

Most of those newly minted Ukraine drone pilots were trained by Dronarium, which graduated an additional 150 operators for deployment at the end of July. Instructors at the school told the *Kyiv Independent* that fully 95% of craft crashes in earlier phases of the war were due to insufficient controller abilities by operators who'd been handed UAVs with little or no training. The organization – along with the 11 other schools that have joined [the Army of Drones campaign](#) – are looking to slash those losses to as close to zero as possible. <https://dronedj.com/2022/08/31/ukraine-drones-pilot-training/#more-86025>



## UAS and SmallSat Weekly News

**Drone services group PAU passes 13,000 BVLOS inspection flights** Bruce Crumley -  
Aug. 31st 2022



Diversified drone services company [Phoenix Air Unmanned](#) (PAU) surpassed the 13,000 mark for [beyond visual line of sight](#) (BVLOS) flights during another phase in its long-running aerial inspections of **Xcel Energy transmission infrastructure**.

PAU said it had cleared the 13,000 [BVLOS flight](#) count in late August after a series of [missions inspecting](#) Xcel Energy sites, work the company first began back in 2019. Those outings are carried out in annual spring and summer campaigns, inspecting infrastructure covering 18,000 miles and inspecting 5,300 miles of those assets in 2021 alone.

PAU's BVLOS operation without human monitors took place under a two-year [Federal Aviation Administration](#) waiver Xcel Energy obtained in 2019 and had extended an additional 24 months after the activity proved both effective and safe. <https://dronedj.com/2022/08/31/pau-xcel-drone-bvlos/#more-86037>

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## FAA UTM FIELD TEST PROJECT LAUNCHES IN NEW YORK, WITH BIG PLANS FOR SPRING

**2023** August 19, 2022 Sally French News



The UTM Field Test project is being done in coordination with the Federal Aviation Administration (FAA) and executed by the folks at NUAIR (Northeast UAS Airspace Integration Research Alliance, Inc.) which is a New York-based nonprofit studying drones. NUAIR is then made up of several private companies and public organizations. Participants include: ANRA Technologies, AX Enterprize, Cal Analytics, Oneida County Sheriff's Office, Oneida Indian Nation, and OneSky.

The project is happening New York's Oneida County, which is part of a 50-mile drone corridor running between Rome and Syracuse New York. That corridor has been the site of more than 4,000 different drone operations. It's also a key feature of NYUASTS, one of the [seven FAA-designated UAS Test Sites in the U.S.](#) NYUASTS stands out as the only test site located at a towered airport, Griffiss International.



## UAS and SmallSat Weekly News

“The need for drone operators to safely utilize low altitude airspace (below 400 feet above ground level) continues to grow with more business cases where drones operate both in visual line-of-sight and beyond visual line-of-sight,” according to a NUAIR statement. “The FAA recognizes the benefits of supporting these more complex drone operations at low altitudes and continues to collaborate with industry through projects like the UFT.”

The FAA UTM Field Test project started in July 2022, and stakeholders say they expect it to be complete by spring of 2023. Ultimately, the goal of the test is to help design standards needed to support beyond visual line-of-sight operations, which most experts agree is a critical element in unlocking widespread commercial drone operations.

<https://www.thedronegirl.com/2022/09/01/faa-utm-field-test-project/>

### **Draganfly's New Products Bring Added Value to Drone Operations** AUGUST 29, 2022

This year, drone industry leader [Draganfly](#) added **three new technologies** to its suite of products. The company's new Heavy Lift Drone, Commander 3 XL Drone, and Long-Range LiDAR are designed to help companies in industries such as package delivery, agriculture, public safety, mapping and surveying, and energy improve operations and increase ROI.



#### **Heavy Lift Drone**

Draganfly's Heavy Lift Drone is a multirotor UAV capable of carrying up to **67 pounds of payload and flying for up to 55 minutes**. The lifting capacity permits flexibility for carrying large high-end sensors like hyperspectral and bathymetric LiDAR to conduct large-area surveys.

The Heavy Lift Drone has been used by Revived Soldiers Ukraine, a non-profit organization helping people affected by the war, to deliver medical supplies and humanitarian aid.



#### **Commander 3 XL Drone**

Like the Heavy Lift Drone, Draganfly's Commander 3 XL Drone is a high-endurance, weather-resistant, multirotor UAV. However, the Commander 3 XL is designed for easy assembly and rapid deployment.



#### **Long Range LiDAR**

Draganfly's new Long Range LiDAR system is a sensor technology created to add value for various customer-driven applications, including mapping and surveying forests, cities, real estate, energy infrastructure, and telecommunications infrastructure. Draganfly's Long Range LiDAR system has been used during the conflict in





## UAS and SmallSat Weekly News

Ukraine providing de-mining teams with data that allows them to map anomalies discovered in the field. [https://www.commercialuavnews.com/draganfly-s-new-products-bring-added-value-to-drone-operations?mkt\\_tok=NzU2LUZXSi0wNjEAAAGGmUqJ0RQsyFZriYCCxk6xgAe3hwXna1bzxIX2LN2nYkIKt8u\\_zEmvkEv4\\_DILsRDB4p\\_iBYkZi-dZSMtwr9DahdZLiD1BsypD335sEr6TTGbfXw](https://www.commercialuavnews.com/draganfly-s-new-products-bring-added-value-to-drone-operations?mkt_tok=NzU2LUZXSi0wNjEAAAGGmUqJ0RQsyFZriYCCxk6xgAe3hwXna1bzxIX2LN2nYkIKt8u_zEmvkEv4_DILsRDB4p_iBYkZi-dZSMtwr9DahdZLiD1BsypD335sEr6TTGbfXw)

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### **DRONEII's Drone Industry Barometer 2022 is Out: Why Most Companies Use Drones** Miriam McNabb September 01, 2022



The [DRONEII Drone Industry Barometer 2022](https://dronelife.com/2022/09/01/droneiis-drone-industry-barometer-2022-is-out-why-most-companies-use-drones/) is out – and the results of the survey reveal what drone manufacturers, service providers, and users experienced in the last 12 months, and anticipate for next year.

The Drone Industry Barometer measures industry sentiment – comparing what companies surveyed expected over the last year, and how those expectations were met. The survey also reveals what most drone industry stakeholders feel is the major force driving the industry right now – and why most enterprise companies use drones in-house, or through service providers.

**The Top Commercial Application for Drones.** The top commercial application for drones remains photography and filming. Photography and filming are the main application for 48% of in-house drone programs, and 33% of drone services providers. Photography and Filming is closely followed by Mapping and Surveying, with Inspection at third.

**What's Driving the Industry Right Now?** While delivery, spraying, and other advanced applications may be in development, in many places those applications run up against heavy regulation. That may be why 45% of respondents said that rule-making authorities are a market-driving factor in the drone industry. Despite a lot of progress, clarity on regulatory issues like BVLOS flight, remote ID, and unmanned traffic management is still critical for industry growth. <https://dronelife.com/2022/09/01/droneiis-drone-industry-barometer-2022-is-out-why-most-companies-use-drones/>