



## UAS and SmallSat Weekly News

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**US Navy issues Lot 1 LRIP contract for Stingrays** 29th September 2022 Shephard News Team



Boeing has obtained a **\$47.47 million** LRIP contract from Naval Air Systems Command to produce and deliver Lot 1 [MQ-25 Stingray aerial refuelling UAVs](#).

The DoD did not disclose how many Stingrays are covered by the advance acquisition contract when it announced the deal on 28 September.

Work will be performed at nine US and two Canadian locations, for completion by September 2026.

Primarily designed to extend the combat range of F/A-18E/F Super Hornet, EA-18G Growler and F-35C aircraft for the USN, the Stingray is also designed to undertake ISR missions as a secondary capability.

According to Shephard Defence Insight, the MQ-25 program will pioneer the integration of manned and unmanned operations, utilize mature and complex sea-based C4I technologies and hopefully pave the way for future multi-facilitated, multi-mission UASs to keep pace with emerging threats. [https://www.shephardmedia.com/news/air-warfare/us-navy-issues-lot-1-lrip-contract-for-stingrays/?vgo\\_ee=tqmiRmjQFqa0tbrE6hm2%2BxhF%2B0Ss7x5Pkn%2BPTGhayD8%3D](https://www.shephardmedia.com/news/air-warfare/us-navy-issues-lot-1-lrip-contract-for-stingrays/?vgo_ee=tqmiRmjQFqa0tbrE6hm2%2BxhF%2B0Ss7x5Pkn%2BPTGhayD8%3D)

**Elbit Systems to Supply Hermes 900 UAS To The Royal Thai Navy** Naval News Staff 28 Sep 2022



Elbit Systems announced today that it was awarded a contract valued at **\$120 million** to supply Hermes™ 900 Maritime Unmanned Aircraft Systems (UAS) and training capabilities to the Royal Thai Navy. The contract will be performed over a three-year period.

Under the contract, Elbit Systems will provide the Royal Thai Navy with Hermes 900 Maritime UAS featuring maritime radar, Electro Optic payload, Satellite Communication, droppable inflated life rafts and other capabilities. It is intended to enable the Royal Thai Navy to perform both blue water and littoral missions, dominate vast swathes of sea and long coastlines,



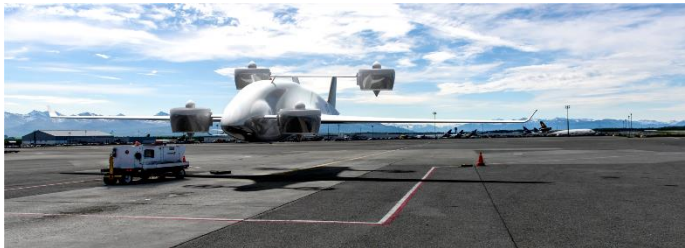
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communicate with operational vessels and carry out civilian missions such as maritime Search and Rescue and identification of suspicious activities and potential hazards.

UAS of the Hermes family have been selected to date by more than 20 customers including Israel, the UK, Switzerland, Canada, the United Nations, the European Union, Brazil, Chile, and Mexico attesting to their competitive edge combining technological sophistication, reliability, open architecture, and a solid growth path. <https://www.navalnews.com/naval-news/2022/09/elbit-systems-to-supply-hermes-900-uas-to-the-royal-thai-navy/>

### Sabrewing's Rhaegal Cargo UAV Shatters World Record Payload on First Flight

September 28, 2022 News



[Sabrewing Aircraft Company](#), Inc. announced today that its RH-1-A “Rhaegal” (pronounced “Rye-gull”) VTOL air cargo drone had achieved its first hover flight while lifting a record-setting payload. This pre-production air vehicle

was able to lift a record-breaking **829-pound** payload, shattering the previous world record for the “dead-lift” of any commercial, vertical takeoff, uncrewed air vehicle.

The Rhaegal “Alpha” aircraft is the world’s first autonomous cargo aircraft capable of both vertical and conventional take-off and is designed to take tons of cargo to any location on Earth, in almost any weather.

Improvements to the blades, ducts, and shape of the shroud of the aircraft’s ducted fans allowed each duct to produce 30% more thrust than originally designed. These improvements contributed to the aircraft’s ability to lift the record-shattering payload. The pre-production prototype aircraft weighed just over 2,700 pounds for the first flight and is capable of a maximum gross weight (with payload) of up to 3,100 pounds at altitudes up to 22,000 feet and 200 knots. When taking off conventionally, this aircraft has enough thrust to carry **over 2 tons** of cargo with the same range, altitude, speed, and efficiency.

The Rhaegal aircraft uses a turbo-electric drivetrain based on Safran’s Helicopter Engines turbine-based motor, the Ariel 2E. The Ariel can use 50% sustainable aviation fuel and turns an electric generator which produces nearly 1 megawatt of electric energy which in turn then powers electric motors in each of the four ducted fans. <https://uasweekly.com/2022/09/28/sabrewings-rhaegal-cargo-uav-shatters-world-record->



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[payload-on-first-flight/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=sabrewings-rhaegal-cargo-uav-shatters-world-record-payload-on-first-flight&utm\\_term=2022-09-29](https://www.axcelinnovation.com/news/payload-on-first-flight/?utm_source=rss&utm_medium=rss&utm_campaign=sabrewings-rhaegal-cargo-uav-shatters-world-record-payload-on-first-flight&utm_term=2022-09-29)

### **Ingenuity Mars helicopter notches 33rd Red Planet flight** Elizabeth Howell

29Sept22 Ingenuity has been busy lately.



NASA's *Ingenuity Mars Helicopter on the Martian surface.*

NASA's Ingenuity Mars helicopter has taken flight again, staying aloft for nearly a minute this past weekend on its 33rd extraterrestrial sortie.

[Ingenuity](#), which is a part of NASA's life-seeking [Perseverance rover](#) mission, took to the skies of [Mars](#) on Saturday (Sept. 24), achieving a flight of just over 55 seconds. The 4-pound rotorcraft soared roughly 33 feet in the air and moved about 365 ft before alighting in a new location, according to NASA's Jet Propulsion Laboratory in Southern California, which manages the missions of both Ingenuity and Perseverance. [https://www.space.com/ingenuity-mars-helicopter-33rd-flight-september-2022?utm\\_campaign=58E4DE65-C57F-4CD3-9A5A-609994E2C5A9](https://www.space.com/ingenuity-mars-helicopter-33rd-flight-september-2022?utm_campaign=58E4DE65-C57F-4CD3-9A5A-609994E2C5A9)

### **Wing delivery drone lands on electrical lines, cutting power in Aussie town** Bruce

Crumley - Sep. 30th 2022



A precautionary landing of a [Wing delivery drone](#) caused electricity to be cut to around 2,000 homes in an Australian town Thursday after the craft accidentally came to rest on power lines. The good news, according to one report, was utility workers arrived to find the food order payload still nice and hot.

The incident took place in the Queensland town of Browns Plains, a suburb of Logan that Wing last year hailed as the "[the drone delivery capital of the world](#)." The company bestowed the title after the area surpassed the [100,000<sup>th</sup> aerial delivery](#) mark last October. It was perhaps



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only logical, therefore, that if the company were to experience an operational hiccup somewhere within its booming Australian activity, it would be in or around Logan.

That nagging probability became reality Thursday afternoon when around 2,000 Browns Plains households lost power after a [Wing drone](#) came down on 11,000 volt electrical lines. Current was cut to about 2,000 local homes for 45 minutes, with 300 of those remaining offline for three hours as the network was fully inspected. [Wing](#) says it alerted the Energex utility that manages the grid as soon as it realized where the delivery drone had landed.

<https://dronedj.com/2022/09/30/wing-delivery-drone/#more-87177>

### **How drones are helping with Hurricane Ian response and recovery** Ishveena Singh - Sep. 30th 2022



Ian, which made landfall along the southwestern coast of Florida as a powerful Category 4 hurricane Wednesday, has left catastrophic damage in its wake. As rescue crews and disaster relief groups jump-start recovery in the region, drones have emerged as a critical force multiplier for damage assessment and search and rescue efforts.

Florida Power & Light Company (FPL), an electric utility that serves more than 12 million people in Florida, is using its new [FPL Air One](#) drone to assess the damage on the West Coast. Since this fixed-wing drone can fly in heavy winds, it can gather real-time information about the damage caused by Hurricane Ian. This is enabling FPL to get the right crews and the right equipment to the right place, speeding up the restoration efforts considerably.

Telecom company [AT&T](#) has dispatched drone operators to areas that are too risky to be accessed by its ground team. The pilots are flying their aircraft from a safe distance and providing wireless and wireline damage assessments to restoration workers.

[Verizon](#)'s drone teams have also mobilized from the safe zones where they were pre-staged before the storm to inspect cell tower damage. During previous disasters, operators have been able to determine the state of a flooded cell site's equipment using [drone footage](#). If the aerial video shows a site can be refueled safely, a boat crew can get to the generator and make the site operational in a matter of hours instead of days. <https://dronedj.com/2022/09/30/hurricane-ian-drone-response-recovery/>



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### Firefly's Alpha Rocket Launches Successfully in Second Attempt Loren

Grush, Bloomberg News Oct 1, 2022



(Bloomberg) -- Firefly Aerospace Inc. launched its first rocket into orbit, advancing the private space startup's bid to become a reliable partner for NASA.

The Alpha rocket took off from Vandenberg Space Force Base in California early Saturday and successfully put **three small payloads** into Earth orbit, including one for the US space agency. The launch follows years of engineering work, litigation and financial struggles for **Cedar Park, Texas**-based Firefly, one of several companies NASA selected to deliver science payloads to the moon as part of the agency's Commercial Lunar Payload Services program.

Alpha is designed to carry about 2,200 pounds of cargo to low-earth orbit and nearly 1,400 pounds to a 500-kilometer sun-synchronous orbit. That puts it in the market between the large rockets of Elon Musk's SpaceX and United Launch Alliance and the smaller-payload rockets built by several industry players, including Virgin Orbit and Rocket Lab USA Inc. Firefly has said it plans to launch Alpha twice monthly for commercial customers, charging **\$15 million per flight**.

Until recently, Firefly was partly owned by Ukrainian tech entrepreneur Max Polyakov. In November, the US government requested that Polyakov sell his stake in the company due to national security concerns. Polyakov agreed and sold his stake in Firefly in February to AE Industrial Partners. <https://www.bnnbloomberg.ca/firefly-s-alpha-rocket-launches-successfully-in-second-attempt-1.1826612>

### Drones for Hurricane Ian Recovery: Airborne Response Completes More than 500 Flights Miriam McNabb October 02, 2022



Overcoming immense logistical challenges associated with rising floodwaters and damage to critical infrastructure including closed roads and widespread power outages, Airborne Response teams are working with customers to restore electric service, telecommunications, and shelter to millions of Floridians affected by the storm.



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Immediately after the storm, Christopher Todd, Founder and President of Airborne Response, toured Charlotte, Collier, Lee, Manatee, and Sarasota counties to assess damage from the storm and how it will impact UAS flight operations. Airborne Response continues to work with its enterprise customers in property insurance as well as those responsible to managing critical infrastructure including utilities and telecommunications, to improvise and implement new tactics to provide flight services in the hardest hit areas.

Airborne specializes in deploying resources into the hardest-hit areas to collect, assess and disseminate aerial imagery of disruption or damage to critical infrastructure. [The Company was acquired by Safe Pro Group Inc. in September 2022.](https://dronelife.com/2022/10/02/drones-for-hurricane-ian-recovery-airborne-response-completes-more-than-500-flights/) <https://dronelife.com/2022/10/02/drones-for-hurricane-ian-recovery-airborne-response-completes-more-than-500-flights/>

**Drones at Montreal Marathon Identify Distressed Runner** Miriam McNabb September 30, 2022 by DRONELIFE Staff Writer Ian M. Crosby



Drones operated by [InDro Robotics](#) as part of a medical research project at the Montréal Marathon were able to assist in locating a runner in distress near the end of the course.

Data is currently undergoing analysis to determine if drones may be a useful tool for detecting athletes in need of assistance during major athletic events. While athletes in distress are typically reported by an emergency phone call, locating an individual in a crowded event can be time consuming. The aerial perspective granted by drones may allow for faster response times.

[Dr. Valérie Homier](#), an emergency physician with the McGill University Health Centre, was responsible for organizing the research project and “Medi-Drone” team. Dr. Homier worked previously with InDro Robotics to research the use of drones in locating swimmers in distress during an IRONMAN competition at Mont-Tremblant. She also has prior experience researching the effectiveness of drones in delivering simulated blood products to Montreal General Hospital, with results finding the drone delivery to be significantly faster than traditional ground transport. <https://dronelife.com/2022/09/30/drones-at-montreal-marathon-identify-distressed-runner/>



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### **FBI warns drones pose potential risk to critical infrastructure** Geneva Sands, CNN

September 30, 2022



Drones have been spotted flying over Louisiana chemical facilities and a pipeline over the past year and a half, prompting an FBI warning on Thursday about the potential for espionage and terrorism at critical infrastructure facilities, according to a report obtained by CNN.

“[O]verflights can be an effective means of surveilling critical infrastructure because facility security personnel and law enforcement officers have limited options to detect and respond to” this type of drone activity, the report says.

For instance, on July 29, observers saw multiple drones flying over a Louisiana chemical facility at night. The group of drones flew several feet above the facility before splitting in two directions, according to the report.

Additionally, on March 8, 2021, a drone was discovered flying near a Louisiana pipeline. A law enforcement officer located the drone operator and discovered they had taken pictures, the report says. It’s unclear what action, if any, was taken by law enforcement.

The FBI encourages facility operators to contact their local field office if industrial espionage, terrorism, or other criminal activity is suspected. <https://us.cnn.com/2022/09/30/politics/drones-risk-critical-infrastructure-spotted-louisiana-chemical-facilities/index.html>

### **Electra stratospheric airborne climate observatory drone makes first flight**

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



Electra.aero, Inc has announced that it has completed the first flight of a solar-battery hybrid electric research aircraft. This **90-foot wingspan** unmanned aircraft system (UAS) made its first flight from **Manassas Regional Airport, Virginia** on September 9, 2022, and is the first airplane to emerge from Electra’s

new development facility there.

“The new plane, named Dawn One, is part of the Stratospheric Airborne Climate Observatory System program,” said a company press release. “SACOS is being developed under the leadership of Professor James G. Anderson at Harvard University. The project is supported by a





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contract from the National Aeronautics and Space Administration and by the Weld Foundation for Scientific and Environmental Development.

“SACOS is designed to address a broad range of scientific missions and serve as a climate observing system in the quantitative dissection of the physics, chemistry and biology controlling critical climate systems. Following the lead of the new National Academy of Sciences report ‘Global Change Research Needs and Opportunities for 2022-2031’, SACOS promises to dramatically expand our national climate research capabilities,” said Professor Anderson.

<https://www.unmannedairspace.info/latest-news-and-information/electra-stratospheric-airborne-climate-observatory-drone-makes-first-flight/>

### **Drone Delivery Canada tests parachute designed to support drone flights over people** September 28, 2022 Jenny Beechener UAS traffic management news, Urban air mobility



Drone Delivery Canada has released further results concerning parachute testing and developed of the Canary drone. Since January 2022, the company has been testing its Canary drone with full autonomous missions and expanded flight envelope including the parachute validation testing.

The drone successfully passed the parachute safety system air-deployment test as well as the automated motor safety shut-off. Moreover, the team pushed the Canary up to 5,900ft ASL with full payload of 4.5kg to validate performance including the demonstration of its stability, fidelity, and reliability. Additionally, the team tested the drone for cold and hot weathers forcing it to perform at -35 degrees Celsius and +50 degrees Celsius. Finally, the team flew the drone at a maximum range of 21km to ensure the validity of the drone’s range and payload capabilities. DDC’s engineers have a drop test program to conduct and the completion of the parachute flight test program, following which DDC will submit its declaration to Transport Canada that will enable the Canary to fly over people.

<https://www.unmannedairspace.info/latest-news-and-information/drone-delivery-canada-tests-parachute-designed-to-support-drone-flights-over-people/>

### **German transport ministry invests 15 million euros in urban air mobility projects**

September 30, 2022 Jenny Beechener UAS traffic management news, Urban air mobility

Germany’s Federal Minister for Digital Affairs and Transport, Dr Volker Wissing, has issued certificates for a total funding volume of 4.3 million euros for seven innovative drone projects. The AMI-FlyingIN2Air project featuring Munich Airport is one of the beneficiaries. AMI-



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FlyingIN2Air is part of the Air Mobility Initiative funded by the Free State of Bavaria and the Federal Republic of Germany, which aims to promote the development of electric air transport.



The government grants are made within the framework of the “Innovative Air Mobility” funding guideline, for which the Federal Ministry for Transport and Digital Infrastructure will provide a total of 15 million euros until 2023.

The project deals with the development of an Advanced Air Mobility (AAM) airport of the future – an airport that is also designed for the traffic of **drones and air taxis**. To integrate AAM into the intermodal travel chain, the pilot of a Mobility-as-a-Service platform is being developed with information on flights, booking and time savings compared to other modes of transport. The results will be made available to potential interested parties as recommendations for the implementation of an AAM airport as well as a guideline for the integration of all necessary technologies and processes. <https://www.unmannedairspace.info/latest-news-and-information/german-transport-ministry-invests-15-million-euros-in-urban-air-mobility-projects/>

### **The Early Adopters** RENEE KNIGHT SEPTEMBER 12, 2022

The utility industry entered the commercial drone game early, enabling quicker expansion into more applications.



*Data collected from drones, ground crews and helicopters can be assessed using Cyberhawk’s cloud-based software, iHawk.*

In the nearly 10 years since Dominion Energy first began deploying drones, the team has built up more than 150 use cases—and Nate Robie, manager of the Unmanned Systems Group, expects that number will continue to grow.

Robie describes drones as a workforce multiplier, increasing safety and enhancing efficiencies for both inspections and operations. The technology is a key part of the industry-wide effort to make the bulk power system more reliable, with asset inspection a main focus.

Drones, typically carrying RGB, thermal or LiDAR payloads, are looking for defects in boiler tanks at power generation facilities, detecting radiation interference at substations, identifying anomalies on transmission poles and monitoring vegetation encroachment in right of ways, to name a few routine applications. Reports and repair orders are generated based on what’s



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discovered during the flights, helping utilities better maintain their equipment and ultimately prevent outages. [https://insideunmannedsystems.com/the-early-adopters/?utm\\_campaign=InnovateEnergy%20Content&utm\\_medium=email&\\_hsmi=228157519&\\_hsenc=p2ANqtz-9haeqD6G\\_2gH4CXxETnFkcbGwwkdTiOYxqLe7Zczv1GWVef4mecBzJXQJr3bfIRD1GF9zVRnlwHwQ6VRA8P3i-XFLtg&utm\\_content=228157519&utm\\_source=hs\\_email](https://insideunmannedsystems.com/the-early-adopters/?utm_campaign=InnovateEnergy%20Content&utm_medium=email&_hsmi=228157519&_hsenc=p2ANqtz-9haeqD6G_2gH4CXxETnFkcbGwwkdTiOYxqLe7Zczv1GWVef4mecBzJXQJr3bfIRD1GF9zVRnlwHwQ6VRA8P3i-XFLtg&utm_content=228157519&utm_source=hs_email)

### **Aerodyne Group Secures \$30 Million in Strategic Investment Bridging Round** By Press SEP 26, 2022



Aerodyne's long-time client PETRONAS, via its corporate venture capital arm PETRONAS Ventures, led the funding round which also included a follow-on investment by KWAP, who initially invested in the group back in 2020.

Founded in 2014, Aerodyne is a DT3 (Drone Tech, Data Tech, and Digital Transformation) drone-based enterprise solutions provider and a pioneer in the use of artificial intelligence as an enabling technology for large-scale data operations, analytics and process optimization with a presence in **35 countries**.

The funds will be used to support Aerodyne's further expansion into European, African, Latin American and South Asian territories as well as strategic investment into technology acquisition to further deepen Aerodyne's technology edge and launch Aerodyne's entry into the advanced air mobility space. [https://www.suasnews.com/2022/09/aerodyne-group-secures-usd30-million-in-strategic-investment-bridging-round-led-by-petronas-follow-on-by-kwap-on-conviction-of-growth/?utm\\_campaign=InnovateEnergy%20Content&utm\\_medium=email&\\_hsmi=228157519&\\_hsenc=p2ANqtz--YGtdR26lFqjlEDJ\\_-HdRMed4zIJW7ViCsS6BSGFycVCc9d2M9EUmGZSHQq6U1qM2J-MiiLL-R5KHoteYzXNbhSX2deQ&utm\\_content=228157519&utm\\_source=hs\\_email](https://www.suasnews.com/2022/09/aerodyne-group-secures-usd30-million-in-strategic-investment-bridging-round-led-by-petronas-follow-on-by-kwap-on-conviction-of-growth/?utm_campaign=InnovateEnergy%20Content&utm_medium=email&_hsmi=228157519&_hsenc=p2ANqtz--YGtdR26lFqjlEDJ_-HdRMed4zIJW7ViCsS6BSGFycVCc9d2M9EUmGZSHQq6U1qM2J-MiiLL-R5KHoteYzXNbhSX2deQ&utm_content=228157519&utm_source=hs_email)

**4Oct22**

### **Wisk reveals its production aircraft, Generation 6, with new tiltrotors** PAUL BRINKMANN | OCTOBER 3, 2022

Novel design furthers company plan for air taxi with remote pilot monitoring

The production aircraft that air taxi developer Wisk Aero unveiled today in a press conference at its Silicon Valley headquarters is notable for its larger size, at four seats, and a very different



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type of tilting rotors on the front of the wing, in comparison with previous Wisk developmental versions.



*Wisk Aero's four-seat production aircraft (left) has several apparent differences from the two-seat test aircraft the company has been flying.*

The 15-meter wingspan of the remotely piloted Generation 6 aircraft has six booms, each mounted with two propellers. The front six propellers are tilt rotors, while the back six are only for lift and are stowed in an aerodynamic position for forward flight.

The developmental version immediately preceding Generation 6, the Cora demonstrator, had 12 fan-like propellers with virtually flat, rounded blades for generating vertical lift and one large propeller at the tail that provided forward thrust. But images of Generation 6 show the front six rotors are tiltable with a curved, more traditional propeller blade design. And gone is the rear propeller that provided forward thrust on previous designs.

<https://aerospaceamerica.aiaa.org/wisk-reveals-its-production-aircraft-generation-6-with-new-tiltrotors/>

## UAVOS Completes Successful ApusDuo Solar HAPS Test Flight Phoebe Grinter / 28 Sep 2022



[UAVOS](#) has completed another successful test flight of the ApusDuo solar-powered High-Altitude Platform System at a Flight Center in Europe.

The test flight was conducted continuously for **11 hours, reaching altitudes of 15,000 meters**. The ApusDuo successfully achieved more than two dozen test points, including energy balance

validation, power and propulsion performance, and propellers Revolutions Per Minute evaluation.

“This was our consecutive successful test flight in which ApusDuo flew steadily across greater turbulence at higher altitudes. We achieved important program objectives and demonstrated UAVOS’ unique solar HAPS capabilities and experience,” said Aliaksei Stratsilatau, CEO at UAVOS.



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ApusDuo is a stratospheric Unmanned Aerial Vehicle running on solar power and is designed to provide persistent local satellite-like services. Built with carbon fiber composites, it can be landed, re-equipped with multitask payloads, and re-deployed. It is also capable of flying **autonomously** from takeoff to landing and can be remotely operated from its ground control station. [https://www.unmannedsystemstechnology.com/2022/09/uavos-completes-successful-apusduo-solar-haps-test-flight/?utm\\_source=UST+eBrief&utm\\_campaign=8c9c157b84-ust-ebrief\\_2022-oct-4&utm\\_medium=email&utm\\_term=0\\_6fc3c01e8d-8c9c157b84-119747501&mc\\_cid=8c9c157b84&mc\\_eid=0d642a9d48](https://www.unmannedsystemstechnology.com/2022/09/uavos-completes-successful-apusduo-solar-haps-test-flight/?utm_source=UST+eBrief&utm_campaign=8c9c157b84-ust-ebrief_2022-oct-4&utm_medium=email&utm_term=0_6fc3c01e8d-8c9c157b84-119747501&mc_cid=8c9c157b84&mc_eid=0d642a9d48)

**Austria Integrates Drones and Air Taxis in Urban Airspace** Miriam McNabb: October 03, 2022



**Project GOF 2.0** Integrated Urban Airspace is designed to demonstrate how drone traffic and air taxis can be successfully integrated with manned aircraft in Europe. A series of test flights in Austria last month marked a milestone for the project, highlighting the need for integration between drone traffic control systems and air traffic control.

The project involves **15 partners** from the research community and the drone and manned aviation industries, working to ensure interoperability and enable secure (data) communication between airborne and ground-based systems. “This creates a “system of systems” that combines classic air traffic management and new and improved drone-specific services,” says the press release. Estonian Air Navigation Services (EANS), Dimetor, Airbus Urban Mobility GmbH, Aviamaps, CAFA Tech, DroneRadar, EHang, Fintraffic ANS, Frequentis, PCSS Poznańskie Centrum Superkomputerowo-Sieciowe, Polish Air Navigation Services Agency, Robots.Expert, Thred Systems, Unmanned Life, and Vaisala are all collaborating on Project GOF 2.0. <https://dronelife.com/2022/10/03/austria-integrates-drones-and-air-taxis-in-urban-airspace-project-gof-2-0/>

**Ukraine swatting down Russia’s Iranian-supplied drones, despite their fearful reputation** Bruce Crumley - Oct. 3rd 2022

There seems to be disagreement on a new element in the war between Ukraine and the invading Russian army. While some media reports in recent weeks have sounded alarms about the punishing potential of [Iran’s drones](#) being deployed by [Russia](#) for strikes in Ukraine, US



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officials have shrugged off the craft as rather rinky-dink contraptions prone to dysfunction, and of only limited concern.



Given the conspicuous role of [perception-influencing](#) propaganda in the conflict, clashing views of how the reputedly formidable Iranian drones have been performing isn't surprising. [Solicited from Teheran](#) by Moscow over the summer as Russia's own [aerial assets began running short](#),

Iran-supplied Shadeed-136 drones initially worried US officials, who said what little was known about the UAVs suggested they might be capable of halting Ukraine's stunning counter-offensive that has recaptured huge swaths of territory in the east of the nation.

Echoes of that fretting were heard in a Bloomberg [story](#) over the weekend about the financial and military efficiency of Russia-flown drones from Iran battering Ukraine targets, particularly the Black Sea city of Odessa. That account, along with others, stoked worries about whether Ukraine's inspiring defense against much larger and better equipped Russian army might be facing new, serious trouble.

Probably not, said US officials addressing a meeting of the Ukraine Defense Contract Group in Brussels last week. [They described](#) the Iranian Shaheed-136 drones now being deployed by Russia against Ukraine as **vastly over-rated offensive craft hardly worthy of a hi-tech appellation**. <https://dronedj.com/2022/10/03/ukraine-russia-iran-drones/#more-87231>

## Zipline drone delivery of prescriptions, other medicines launches in Salt Lake City

Bruce Crumley - Oct. 4th 2022



Leading instant logistics company [Zipline](#) is launching [drone delivery of prescriptions](#) and other medicines to the households of Intermountain Healthcare patients across Salt Lake City – an anticipated rollout that will eventually be capable of serving over a million people in Utah.

Zipline [announced](#) its intention to introduce the service last year, initially expecting a debut this spring or during the summer and ultimately deciding to formalize the start of operations today.



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The partnership makes Intermountain Healthcare the first company in its sector west of the Mississippi to use Zipline’s automated drones for deliveries of prescriptions and over-the-counter medicines to its patients. The move follows Zipline’s introduction of similar aerial [medicine deliveries in North Carolina](#) last June.

The evolving operation will begin in Salt Lake and Utah counties with [drone deliveries](#) of medicine to local communities within a few miles of Zipline’s distribution center. Additional [logistics facilities](#) will be gradually added to [the system](#) that will eventually enlarge the potential households and community drop-off locations that can be served to cover over a million Intermountain Healthcare clients and 90% of all homes in the Salt Lake Valley area.

“This partnership allows us to reach patients faster than we ever thought possible, at a time that’s convenient for them,” said Gordon Slade, associate vice president of supply chain logistics at Intermountain Healthcare. “Combined with our telehealth services like Connect Care, it’s possible to virtually see a doctor and get medication you need delivered from Zipline, without having to travel to a clinic or the hospital.” <https://dronedj.com/2022/10/04/zipline-drone-delivery-medicine/>

5Oct22

## Verizon Launches Tethered Drone to Restore Communications to Sanibel Island

Miriam McNabb October 04, 2022



*In the aftermath of Hurricane Ian, the Response Team from [Verizon](#) is in Florida – with drones and other deployables to restore communications and provide first responders with critical aerial awareness.*

Just days after Hurricane Ian swept through Florida, causing major destruction and downing communications infrastructure, VerizonFrontline was there with drones, trucks and trailers – more than 100 deployables providing tools for recovery efforts.



Eric Durie, Verizon Public Sector, Communications Manager, was on the ground with the team when DRONELIFE reached out to discuss the use of Verizon’s tethered drone restoring communications over Sanibel Island. The barrier island was particularly hard hit by the storm. A portion of the



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causeway linking the island to the mainland has been destroyed, hindering rescue and recovery efforts.

Verizon has launched a tethered drone outfitted with a cellular node (a flying cell site) that is providing cellular coverage from the air to support search and rescue teams and first responders on the ground. The drone provides coverage for an approximate 5-7 mile radius and can fly for up to **1,000 hours**.

Drones have been deployed over Sanibel Island, Cape Coral and Fort Myers, Florida to provide temporary cell service, assess damages and expedite recovery efforts in the wake of Hurricane Ian. These required special clearance to deploy the drones, including FAA authorization and special government interest waivers.” <https://dronelife.com/2022/10/04/verizons-response-team-in-florida-launches-tethered-drone-to-restore-communications-to-sanibel-island/>

### Professional Drone with Thermal and Visible Camera Payload



SIRAS is an easy-to-fly, IP54-rated professional drone with an interchangeable payload system for industrial and utilities inspection, firefighting, law enforcement, and search and rescue missions. With front collision avoidance, hot swappable batteries, a 31-minute flight time, and no restrictive geofencing, professional UAV pilots can fly safely when and where the mission demands.

The quick-connect Vue® TV128 payload features patented MSX® technology, adding visible-light outlines to thermal imagery to provide critical information in real time. The 16MP visible camera delivers clear, pinpoint details with a 128x zoom. A 640x512-pixel, radiometric FLIR Boson® provides sharp thermal imagery, 5x digital zoom, accurate temperature-measurement, and compatibility with FLIR Thermal Studio™ analysis software.

Designed for data security, SIRAS stores imagery on an onboard microSD card and does not include cloud connection capability. To further protect data chain of custody, pilots are not required to create an online profile, increasing ease of use and reducing potential unintended online data access. SIRAS provides best-in-class imagery, mission flexibility, secure data, and compatibility with photogrammetry software enabling the pros to get the job done. **\$9,695.00**  
[https://www.flir.com/products/siras/?utm\\_source=cuav&utm\\_medium=dp-email&utm\\_campaign=americas.us.oem.uas.t.dp.dhx.siras-](https://www.flir.com/products/siras/?utm_source=cuav&utm_medium=dp-email&utm_campaign=americas.us.oem.uas.t.dp.dhx.siras-)





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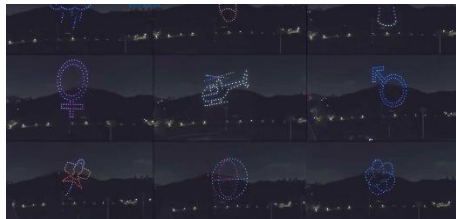
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### China’s GreatHigh drone show sets four different world records Bruce Crumley - Oct. 5th 2022



Chinese drone company [GreatHigh](#) says it has established four new Guinness Book of Record achievements during a recent aerial show, including the largest number of UAVs flying in the same [performance](#) with **5,164** craft working aloft at once.

Shenzhen-based HighGreat Innovation Technology Development revealed the four-in-one accomplishment this week. That demonstration was conceived to highlight HighGreat’s range of technical abilities in a single [drone show](#) format that created **88 different formations** – another of its four [records set](#).



The other two marks GreatHigh established were for the longest [drone show](#) at **26 minutes** and 26 seconds. Its feat of flying 5,164 UAVs in the same performance simultaneously topped the previous record set last year during an [aerial celebration](#) for the arrival of Hyundai’s luxury car brand Genesis in China.



During the September [drone show](#) designed and performed specifically for obtaining the new Guinness Word Record titles, GreatHigh craft created billboard-like mosaic screens, and formations that included a lion, multi-spanned bridge, and a giant twisting dragon.

<https://dronedj.com/2022/10/05/greathigh-drone-show/>

6Oct22

### Nominations Now Open for Women and Drones Global Awards! Miriam

McNabb October 05, 2022 by DRONELIFE Staff Writer Ian M. Crosby

[Women and Drones](#) has announced the launch of its sixth annual Global Awards, recognizing the women and companies that are driving change and advancing female participation in the



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uncrewed aviation industry. Today, the program began [accepting nominations for the program](#), which will be open until October 25th.



For the second year in a row, the awards will be held at [CES 2023](#), the world's premier technology event, in Las Vegas, Nevada. This year, the program has been rebranded the Women in Emerging Aviation Technologies Awards to reflect a shift in focus towards recognizing individuals and companies throughout the broader emerging aviation technologies system. Outside of drones and Uncrewed Aerial Systems, the field of emerging aviation also includes electric vertical take-off and landing vehicles and Advanced Air Mobility.

Individuals will be chosen from [ten different categories](#), including Leadership, Education, Geographic Information System, AI/Autonomy, Visual Arts, Entrepreneurship, Public Safety/Public Service, Engineering, Sustainable Aviation Propulsion Technology and Drone Sports. <https://dronelife.com/2022/10/05/nominations-open-for-women-and-drones-global-awards/>

## Public Safety Opportunity for FREE UAS Exercise & Vendor Demos in Northern Virginia



October 20, 2022 @ XELEVATE, in concert with DRONERESPONDERS 9am-5pm

Public Safety Drone Operations Day, with a Dronetoberfest Networking Endcap! UAS Industry Wide Showcase with Public Safety Emphasis.

<https://www.youtube.com/watch?v=Yu3fwhsKG9E> [2022 Public Safety Drone Operations Day With A Dronetoberfest Networking Endcap - Promo Video](#)

Live flight demonstrations & Tech Expo of must-see capabilities to support your most challenging missions. Come and see! Multi-agency scenario-based exercise with simulation including drone detection! A training and awareness opportunity! Fastest flight competition! Paper Airplane Contest! DRONETOBERFEST. [https://www.droneresponders.org/post/public-safety-opportunity-for-free-uas-exercise-vendor-demos-in-northern-virginiak?postId=0ad1f920-4e91-4ff3-90a0-9fe38ddba763&utm\\_campaign=ff070874-bad9-4071-90d9-df8280e611c0&utm\\_source=so&utm\\_medium=mail&utm\\_content=36920cda-34b3-4b8b-ba7e-83a88390eb1a&cid=379b88a3-c930-4818-99e9-32725bc0a945](https://www.droneresponders.org/post/public-safety-opportunity-for-free-uas-exercise-vendor-demos-in-northern-virginiak?postId=0ad1f920-4e91-4ff3-90a0-9fe38ddba763&utm_campaign=ff070874-bad9-4071-90d9-df8280e611c0&utm_source=so&utm_medium=mail&utm_content=36920cda-34b3-4b8b-ba7e-83a88390eb1a&cid=379b88a3-c930-4818-99e9-32725bc0a945)



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### Russia Uses Self-Destructing Drones from Iran in Strikes Near Kyiv Oct. 6, 2022

The move highlights Russia's growing reliance on the so-called kamikaze drones, which blow up on impact, Ukrainian officials said.



*The Russian military detonated self-destructing, Iran-supplied drones at Bila Tserkva, about 50 miles south of the Ukrainian capital, Kyiv.*

The Russian military flew a dozen self-destructing, Iranian-supplied drones at a town near Kyiv overnight on Wednesday in what appeared to be the **first time** such weapons have been used against a target near the Ukrainian capital, which lies hundreds of miles from the front lines.

The flurry of drone strikes highlighted Russia's growing reliance on so-called kamikaze drones supplied by Iran, which blow up on impact. At least six drones detonated in Bila Tserkva, a town about 50 miles south of Kyiv, Oleksiy Kuleba, head of the regional military administration, [said](#) in a post on Telegram. The Ukrainian military said it **shot down six others** in flight in southern Ukraine.

The Iranian drones first turned up in Ukraine in August in attacks on armored vehicles and artillery in the country's northeast. [In recent weeks](#), they have emerged as a growing menace on the battlefield after Tehran began supplying Moscow with the first batch of what is expected to be an order of hundreds of military drones.

[https://www.nytimes.com/live/2022/10/05/world/russia-ukraine-war-news?campaign\\_id=9&emc=edit\\_nn\\_20221006&instance\\_id=73852&nl=the-morning&regi\\_id=76945057&segment\\_id=109138&te=1&user\\_id=f3d322e93016f7ce6835ec0bc3368a5c#a-kyiv-suburb-was-hit-by-iranian-made-drones-a-local-official-says](https://www.nytimes.com/live/2022/10/05/world/russia-ukraine-war-news?campaign_id=9&emc=edit_nn_20221006&instance_id=73852&nl=the-morning&regi_id=76945057&segment_id=109138&te=1&user_id=f3d322e93016f7ce6835ec0bc3368a5c#a-kyiv-suburb-was-hit-by-iranian-made-drones-a-local-official-says)

### Ukraine's anti-drone gun brings down Russian DJI Mavic Pro UAV Ishveena Singh - Oct. 6th 2022



A new video has emerged on social media showing what is described as Ukraine using an anti-drone gun to force a surveilling Russian [DJI Mavic Pro](#) drone to execute an emergency landing.

The video has been shared by researcher Arslon Xudosi, who uses Twitter to post information about



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Russian losses in the 2022 Ukraine conflict. The footage shows Ukrainian forces aiming an EDM4S (Electronic Drone Mitigation 4 – System) gun at an alleged DJI surveillance aircraft. Within moments, the hapless drone descends gently and is hand-captured by a smiling Ukrainian soldier.

The hand-held, trigger-actuated device can identify and actively disrupt a small- to medium-sized drone's guidance, tracking, and navigation system using electromagnetic pulses. Depending on the complexity of the target, a drone "shot" by an EDM4S rifle will either straight-out fall from the sky, automatically change its course to return to the home point or conduct an emergency landing. <https://dronedj.com/2022/10/06/ukraine-anti-drone-gun-russia/>

7Oct22

### **TOFLIGHT'S PROSPERITY I AIR TAXI ACHIEVES PROOF OF CONCEPT TRANSITION TEST FLIGHT**



Here we would like to announce our first successful completion of the proof-of-concept, transition test flight for air taxi Prosperity I, in which the aircraft switches from a vertical take-off motion to the more energy-efficient, horizontal flight and back to vertical flight, before landing. The successful transition test flight was achieved in January 2022. The unmanned flight took place at Autoflight flight test area in JiangSu province, China with CEO Tian Yu, the R&D

team and 40 AutoFlight staff present, and Prosperity I rose to an altitude of 150 meters at speeds of up to 123 mph.

A 'transition' is when an aircraft moves from a vertical to horizontal motion and is one of the most challenging parts of an eVTOL flight. Vertical flight for the proof of concept for Prosperity I required eight rotors to lift the 3,307 pounds, including four-person, state-of-the-art electric aircraft into the air. Once the aircraft reached an altitude of 150 meters and the airspeed of 100-110mph the fixed wing part of the eVTOL generated lift.

At this point, Prosperity I entered the complex transition phase – the rotors on the top stopped spinning and locked in a streamlined position, while the propellers on the rear pushed the aircraft forward like a traditional fixed wing plane. As shown in the video, the transitions for the Prosperity I are seamless, safe, and smooth thanks to the quality of the engineering and the



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rigorous attention to detail in the complex aerodynamics.

<https://www.autoflight.com/en/news/autoflights-prosperity-i-air-taxi-achieves-proof-of-concept-transition/>