



UAS and SmallSat Weekly News

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Ireland to host EU-backed project to create drone UTM system Bruce Crumley - Jul. 1st 2022



A drone platform based in Shannon, Ireland, will host a project to research and test a wide range of UAV business and public service applications within a project to develop a fully integrated [uncrewed traffic management](#) system (UTM).

The effort will be run from the Future Mobility Campus Ireland in the Shannon Free Zone, which was founded as a nonprofit endeavor to research, test, and develop next-generation mobility innovations. That will now include a project dubbed ÉALÚ-AER – “Escape-Air, Enhanced Automation for U-Space/ATM integration” for non-Irish speakers – involving a [consortium working under European Union](#) programs to create operational [drone UTM](#)s and ecosystems. Partners include the Shannon Group, the Irish Aviation Authority, Dublin-based Avtrain, Manna Drone Delivery, Italy’s Deepblue, and Collins Aerospace. One element of the effort will be to develop both existing and new drone applications for food and product deliveries, emergency response, agriculture uses, and even personal transportation like air taxi services.

The other aspect will be establishing a [UTM system](#) for drones – many of which in the trials will be operating in [beyond visual line of sight](#) missions – that can be integrated in Ireland’s wider airspace. The resulting “Digital Sky Demonstrator” may serve as a model for [EU cities](#) and regions seeking to establish similar UAV and smaller craft navigation networks.

<https://dronedj.com/2022/07/01/ireland-to-host-eu-backed-project-to-create-drone-utm-system/>

Ukraine startup makes anti-drone gun felling Russian UAVs two miles off Bruce Crumley - Jul. 1st 2022



A startup in Western Ukraine has developed an anti-drone gun it says can drop Russian craft over two miles away, making the locally produced device a potentially lifesaving defense asset for [troops battling](#) repurposed Russian consumer UAVs.

Kvertus Technology is the company behind



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the [Antidron KVS G-6](#) anti-drone system that company technology director Yaroslav Filimonov says has already been delivered to Ukraine forces fighting invading Russian soldiers. It relies on radio waves to jam UAVs' internal communications components, essentially stranding the craft until Ukraine troops can capture it.

In addition to both curtailing Russian [reconnaissance](#) and intelligence snooping and allowing Ukraine forces to discover what kind of data that had netted, the anti-drone gun may also save lives. Invading Russian units have been just as active in [using store bought craft](#) in the war as Ukraine has – often with [deadly results](#).

Filimonov says about 80 of the devices have been delivered to Ukraine forces since the war began, that flow possibly limited by the tech's relatively high \$12,000 cost.

<https://dronedj.com/2022/07/01/ukraine-startup-makes-anti-drone-gun-felling-russian-uavs-two-miles-off/>

Royal Thai Navy to sign UAV contract 2 JUL 2022 WASSANA NANUAM

Bangkok Post The Royal Thai Navy will sign a contract to procure seven Israeli-made unmanned aerial vehicles (UAVs) worth over 4 billion baht.

Vice Adm Pokkrong Monthatphalin, navy spokesman, revealed that the navy had chosen seven Hermes 900 UAVs from Elbit Systems, an international defense electronics firm based in Israel. The firm offered the non-tariff price of **US\$120 million** or approximately 4 billion baht.

The procurement contract will be drafted by a committee before being presented to the commander-in-chief Adm Somprasong Nilsamai. The navy, Elbit Systems Ltd and the National Anti-Corruption Commission will be the three signatories to the procurement contract, Vice Adm Pokkrong said.

The Hermes 900 UAV boasts a range of high-performance sensors, allowing it to detect ground or maritime targets over a wide spectral range. It can be operated for up to 36 hours and the service ceiling is 30,000 feet

The UAVs will be equipped with hardware and software defense technology which are applicable for prospective attack missions, said a navy source.

<https://www.bangkokpost.com/thailand/general/2338168/navy-to-sign-uav-contract>



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California County Cracks Down on Illegal Fireworks with Drones July 01, 2022 Ishani Desai, The Bakersfield Californian



Kern County Fire Chief Aaron Duncan demonstrated the department's new technology Thursday during a press conference attended by representatives of various county agencies and local hospitals, which also provided safety tips.

Duncan said the KCFD contracted the drone service through a company with former military professionals who will operate the **10-foot-long drone that has a 16-foot wingspan**, which is about the size of a small SUV. This group typically helps firefighters when battling conflagrations throughout the state, he added.

Duncan said his department and the Office of the State Fire Marshal already have **seized about 35,000 pounds of illegal** fireworks within Kern County this year. The crackdown will be aided by every available KCFD engine, firefighter, dispatch, and plainclothes arson investigator during firefighters' busiest day of the year, he added. <https://www.govtech.com/public-safety/california-county-cracks-down-on-illegal-fireworks-with-drones>

4July22

NASA partners with AIRT/Droneresponders to advance US automated air safety systems July 4, 2022 Jenny Beechener



NASA has announced a partnership with the Airborne International Response Team (AIRT) to research and develop automated safety processes and procedures to enable aviation response in the national airspace. The partnership supports the AIRT/Droneresponders non-profit program to unite emergency managers and search and rescue services.

AIRT/Droneresponders is a global network of specialized teams of subject matter experts in various disciplines including aviation, emergency management and public safety. These teams



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are trained to accomplish mission tasks across the preparedness, mitigation, response, and recovery phases of significant events, complex emergencies, and major disasters.

The agreement allows Droneresponders to share operational expertise and data obtained from a broad array of emergency response activities in the National Airspace System with NASA. NASA’s System-Wide Safety researchers, together with Droneresponders, will use this data to develop and implement a safety management system that enables automated flights for emergency response operations and to develop a demonstration of automated aerospace vehicle safety management systems that has applicability for aviation operations beyond emergency response. <https://www.unmannedairspace.info/latest-news-and-information/nasa-partners-with-air-droneresponders-to-advance-us-automated-air-safety-system/>

Leonardo, Aeroporti di Roma to launch UAM services by 2024 July 4, 2022 Philip Butterworth-Hayes Urban air mobility



At the recent World ATM Congress, Leonardo and Aeroporti di Roma (AdR) announced a partnership to equip vertiports with innovative technological solutions.

According to Ivan Bassato, Chief Aviation Officer of Aeroporti di Roma: “AdR is actively working on designing the ground facilities to facilitate the

operational start-up of this type of service in Rome with a challenging timeline to launch the first commercial operations between Fiumicino airport and the city of Rome in 2024 and to offer the option of flying taxis the same year. According to the plan, this maiden commercial route would be **among the world’s first** to take advantage of Urban Air Mobility.”

“With ‘UrbanV’, Aeroporti di Roma is engaged in designing and managing ground infrastructure for Advanced Air Mobility and is currently developing a network of vertiports for Rome, Venice, the Côte d’Azur and globally. <https://www.unmannedairspace.info/latest-news-and-information/watmc2022-leonardo-aeroporti-di-roma-link-to-launch-uam-services-in-rome-by-2024/>

EU announces EUR47.5 million for five U-space and UAM projects between now and 2025 June 29, 2022 Jenny Beechener UAS traffic management news, Urban air mobility



European Commissioner for Transport, Adina-Ioana Vălean, has announced EUR47.5 million funding for SESAR 3 JU Digital Sky

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Demonstrators from the Connecting Europe Facility between now and 2025. The research projects are detailed below. Made during the Connecting Europe Days, the announcement is part of a larger package of transport infrastructure funding adopted by the Commission.

The Digital Sky Demonstrators will take place in live operational environments and will put to the test (on a very large scale) the technological solutions necessary to deliver the Digital European Sky. The demonstrators are part of an innovation pipeline designed by the SESAR Joint Undertaking to bridge the gap between applied/industrial research and industrialisation, and to accelerate market uptake. Critical to their success will be the involvement of early movers, as well as a strong and close connection with relevant standardisation and regulatory activities and bodies. <https://www.unmannedairspace.info/latest-news-and-information/eu-announces-eur47-5-million-funding-for-5-u-space-and-uam-projects-between-now-and-2025/>

EASA Publishes Rules for Air Taxi Ops Kate O'Connor July 2, 2022



The European Union Aviation Safety Agency (EASA) announced Thursday that it has published proposed rules for air taxi operation in cities. Calling it “**the first comprehensive proposal for such regulations to be issued world-wide,**” the agency says the proposed regulatory framework was designed to address operational and mobility concepts such as **unmanned aircraft systems** and aircraft with vertical takeoff and landing capabilities. The new regulations cover airworthiness, air operations, flight crew licensing and rules of the air.

“With this, EASA becomes the first aviation regulator worldwide to release a comprehensive regulatory framework for operations of VTOL-capable aircraft which will offer air taxi and similar services,” said EASA Executive Director Patrick Ky. “We have done our best to address general societal concerns and the expectations of EU citizens with respect to safety, security, privacy, environment and noise.” https://www.avweb.com/recent-updates/evtols-urban-mobility/easa-publishes-rules-for-air-taxi-ops/?MailingID=980&utm_source=ActiveCampaign&utm_medium=email&utm_content=Weekend+Travel+Woes+Moderate%2C+Shockwave+Airshow+Crash&utm_campaign=Weekend+Travel+Woes+Moderate%2C+Shockwave+Airshow+Crash-Monday%2C+July+4%2C+2022



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N.Y. Beaches Step Up Shark Patrols, Adding Drones, Trackers and Tourniquets

Corey Kilgannon July 2, 2022



Cary Epstein, a veteran lifeguard at Jones Beach, is among those being trained to operate a fleet of drones for shark-spotting.

LIDO BEACH, N.Y. —

“It’s become part of our daily routine,” said a lifeguard supervisor, Justine Anderson, of the shark patrols her Town of Hempstead lifeguards have begun this summer. “We’ll patrol throughout the day and respond immediately if we get a report of a shark sighting.”



So far this summer, a 10-foot mako shark [washed up at Point Lookout](#) over Memorial Day weekend, prompting another round of shark headlines. And just this week, the authorities said a man swimming at Jones Beach [may have been bitten by a shark](#).

Numerous other departments across Long Island have also begun adopting new shark-monitoring strategies and expanded their lifesaving tools to include drones, Jet Skis and paddleboards, as well as online shark tracking.

At Jones Beach and Robert Moses State Park, nearly **20 lifeguards, park police and other beach staff members have recently been trained to operate a fleet of seven drones** as part of a new aerial shark-monitoring program. https://www.nytimes.com/2022/07/02/nyregion/sharks-ny-lifeguards.html?campaign_id=9&emc=edit_nn_20220704&instance_id=65755&nl=the-morning®i_id=76945057&segment_id=97569&te=1&user_id=f3d322e93016f7ce6835ec0bc3368a5c

FAA to hold on-line public meeting on July 26 to discuss final BVLOS ARC report

June 30, 2022 Philip Butterworth-Hayes Emerging regulations



The Federal Aviation Administration (FAA) has announced that a public meeting of the UAS Beyond Visual Line of Sight (BVLOS) Aviation Rulemaking Committee (ARC) to discuss the committee’s final report will be held on July 26, 2022, from 5:30 pm -7:30 pm Eastern Time, virtually. This document is scheduled to be published in the Federal Register on 07/01/2022. A copy of the full UAS BVLOS ARC charter and final report can be downloaded



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at: https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/committees/browse/committeeID/837”

The public meeting will give members of the public an opportunity to comment on the UAS BVLOS ARC Final Report. “Members of the public who wish to view the meeting can access the livestream on the following FAA social media platforms on the day of the event: <https://www.facebook.com/FAA> or <https://www.youtube.com/FAAnews>.

“Members of the public who wish to provide written comments and/or oral comments may do so by emailing 9-FAA-UAS-BVLOS@faa.gov. <https://www.unmannedairspace.info/emerging-regulations/faa-to-hold-on-line-public-meeting-on-july-26-to-discuss-final-bvlos-arc-report/>

DIY drone volunteers support Ukraine’s fight against Russian invaders Bruce Crumley - Jul. 4th 2022



A group of brainy volunteers in Kyiv producing drones for deployment by Ukraine’s army against Russian invaders have added **trashed e-cigarette batteries** to their mix of DIY materials being [used in support](#) the nation’s defense.

The group is led by engineering PhD candidate Maksym Sheremet, who set up the multi-functional UAV hub not long after the invasion began. Based in the facilities of the Ukrainian Women’s Veteran Movement, the lab gets input solicited directly from front-line units to repair and reconfigure consumer drones and build their own models from scratch, tailored to the ways they’re to be used against Russian forces. The latest innovation in that entirely volunteer, donation-fueled operation is collecting discarded e-cigarettes, whose lithium polymer batteries are recharged and integrated to power [release systems](#) mounted on the craft.

The production of payload release devices has particularly taken off amid increasingly higher demand. The units are manufactured by 3D printers and are used by Ukraine troops to drop anything from [medical supplies](#) for wounded comrades to a variety of munitions on [Russian enemies](#).

Sheremet says demand is such that about 30 of his 60 [volunteers](#) now focus on [creating the release devices](#), which cost about \$30 each to make. But while he’s been successful increasing producing rates to about 1,000 per month, Sheremet said the war’s [disruption of imports](#) has caused the prices of lithium batteries used to skyrocket in recent weeks.



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To work around that, he got the idea of placing designated e-cigarettes drop boxes around the Kyiv Polytechnic Institute where he teaches and recovering their internal rechargeable batteries for free. <https://dronedj.com/2022/07/04/diy-drone-volunteers-support-ukraines-fight-against-russian-invaders/>

5 July 22

How NASA flew a drone on Mars KEITH ZUBROW JULY 3, 2022



In April 2021, when a small helicopter named "Ingenuity" took off from the surface of Mars, it made history as the first aircraft to fly in the atmosphere of another planet. It may have also unlocked future possibilities for how NASA explores the surfaces of distant planets.

Sunday on 60 Minutes, [correspondent Anderson Cooper reported on the creation of Ingenuity](#), and the painstaking multi-year testing and planning process that allowed the drone to fly in the thin atmosphere of the red planet.

The drone initially landed on Mars inside the NASA rover "Perseverance" on February 18, 2021. The thin Martian atmosphere requires the drone's blades to spin at about 2,400 revolutions per minute, which is **six times faster** than its earthbound twin.

Ingenuity cost **\$85 million** to build and operate. NASA hopes its "Mars 2020" mission lasts at least one Martian year or about **687 days on earth** and is already planning for the next journey to the red planet. <https://www.cbsnews.com/news/nasa-drone-mars-60-minutes-2022-07-03/>

Everdrone Emergency Medical Drones Fly in Denmark Miriam McNabb July 01, 2022 by DRONELIFE Staff Writer Ian M. Crosby



[Everdrone](#) is expanding its life saving drone services to Denmark following its successful implementation within Sweden.

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Everdrone's emergency medical drones transport cardiac defibrillator equipment to the scene of cardiac emergencies. In the city of Aalborg, a hangar is currently in place with operations underway. "We're proud and happy to have Everdrone's first project outside of Sweden fully operational", said Daniel Blecher, Everdrone's Head of Customer Operations. "This marks the 7th active system to date and will allow us to reach a total of 340,000 people in both Sweden and Denmark."

Two years ago, Everdrone began exploring potential locations in collaboration with the Copenhagen Emergency Medical Services. After deciding on Aalborg, the project was developed and finalized alongside Region Nordjylland in order to serve the region's 110,000 inhabitants. <https://dronelife.com/2022/07/01/everdrone-emergency-medical-drones/>

New Drone Platform for Close-Up and Touch-Based Inspection Mike Ball / 30 Jun 2022

The drone's unique configuration allows a payload to be mounted on a long horizontal arm, using a cyclorotor for precise control.



Pitch Aeronautics has developed a new drone platform for touch-based and close-up applications, designed to reduce the need for human involvement in inspection tasks that traditionally require operators to make potentially deadly climbs. The developers of the Astria drone, named after the Greek goddess of precision, have recently received a **\$90,000 grant** from the State of Idaho to continue development of the platform, enabling development of additional technologies such as precise positioning and a crack-width measurement sensor.

The drone's unique configuration allows a 5-10lb payload to be mounted on a long horizontal arm, to keep it away from the rotors and allow it to interact with structures such as buildings, bridges, towers, wind turbines and powerlines. The aircraft is flown to the area using a first-person-view camera and goggles similar to virtual reality goggles. Astria overlays key flight and job information onto the goggles similar to the heads-up-display in fighter aircraft. Additional sensors and computers will allow future **autonomous** operations.

Astria positions the payload near the target by using a cyclorotor for lateral control. Cyclorotors are unique propellers that can near-instantaneously push the drone forward, backward, left, or right. This allows Astria to compensate for wind gusts and fly more precisely. It can create and



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change thrust five to ten times faster than traditional drones by pitching or rolling to move. https://www.unmannedsystemstechnology.com/2022/06/new-drone-platform-for-close-up-and-touch-based-inspection/?utm_source=UST+eBrief&utm_campaign=82aedd1be1-ust-ebrief_2022-jul-5&utm_medium=email&utm_term=0_6fc3c01e8d-82aedd1be1-119747501&mc_cid=82aedd1be1&mc_eid=0d642a9d48

Moose Cree First Nation Signs RPAS Training Agreement with Volatus Aerospace

July 1, 2022 News



Volatus Aerospace Corp is pleased to announce that it has signed an agreement on Monday, June 27, 2022, to provide ongoing Remotely Piloted Aircraft Systems (RPAS) technical skills training to Moose Cree First Nation members. The training activity will take place in the Moose Cree community (Ontario, Canada), and Volatus will mentor the nation in developing its

critical skills and infrastructure for a robust RPAS business servicing the community.

Rob Walker, Volatus COO, stated, “We envisage Moose Cree’s RPAS capability developing into future cargo delivery, hot spot fire mapping, ice flow surveillance, search and rescue activities, and infrastructure inspection capabilities.”

Moose Cree Director of Economic Development, Stan Kapashesit stated: “We chose to work with Volatus and Indigenous Aerospace because of their broad knowledge base in all things RPAS. Their demonstrated expertise in pilot training, regulatory obligations and safety systems will prove invaluable as we look at our future growth into cargo operations, mapping, inspections, and search and rescue missions..” https://uasweekly.com/2022/07/01/moose-cree-first-nation-signs-ground-breaking-rpas-technical-skills-training-agreement-with-volatus-aerospace/?utm_source=rss&utm_medium=rss&utm_campaign=moose-cree-first-nation-signs-ground-breaking-rpas-technical-skills-training-agreement-with-volatus-aerospace&utm_term=2022-07-05



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GrandSky Receives Global Hawks from Air Force's Divestment Plan July 5, 2022

News



Grand Sky Business and Aviation Park (GrandSky) will accept **20** Global Hawks from the United States Air Force's 319th Reconnaissance Wing as part of the divestment plan to restructure intelligence, surveillance, and reconnaissance to meet national defense priorities.

The aircraft will be outfitted with new sensor technology before beginning their new careers as part of the Test Resource Management Center's High Speed System Test department.

Tom Swoyer, President of GrandSky, said, "We are exceptionally excited to see all of these Global Hawks being brought to our ramp. These aircraft have so much life left, and they will be transformed to support a new mission soon. This is a big opportunity for GrandSky and North Dakota."

The Global Hawks performed a variety of intelligence, surveillance, and reconnaissance missions in various theaters around the world. These aircraft have significant useful life left and are going to be **repurposed for the SkyRange mission and be renamed Range Hawks**. SkyRange will likely spawn a new wave of investment in facilities, equipment, and infrastructure to support program growth. https://uasweekly.com/2022/07/05/grandsky-receives-global-hawks-from-air-forces-block-30-divestment-plan/?utm_source=rss&utm_medium=rss&utm_campaign=grandsky-receives-global-hawks-from-air-forces-block-30-divestment-plan&utm_term=2022-07-05

Teledyne Flir signs \$48 million Black Hornet drone deal with Norway Bruce

Crumley - Jul. 5th 2022



The move makes Norway the world's largest user of the small but powerful intelligence gathering UAVs, which it first began deploying in 2015.

Weighing in at just 33 grams and measuring only 168 millimeters, the Black Hornet is a pocket transported and nearly silent drone designed for deployment in hostile, even GPS-denied environments. [Teledyne Flir](#) says the onboard electro-optical and [infrared sensor](#)s provide the



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UAV with the same [detection capabilities](#) as ground options or larger craft. It transmits live [thermal video](#) and image feeds to operators during a maximum flight time of 25 minutes.

Teledyne Flir Defense – which, not incidentally, continues developing and producing the Black Hornet line in Norway – has thus far delivered more than **12,000** of the intelligence gathering drones to military and defense clients around the world.

<https://dronedj.com/2022/07/05/teledyne-flir-signs-48-million-black-hornet-drone-deal-with-norway/#more-83155>

6July22

NHS to Trial Drone Delivery for Medicines THE PRESS ASSOCIATION (Ella Pickover, PA Health Correspondent) July 4, 2022



The National Health Service (NHS) is to use drones to courier chemotherapy drugs in a bid to speed up the delivery of vital medicines.

The trial will see a drone deliver chemotherapy drugs from the pharmacy at Portsmouth Hospitals University NHS Trust to St Mary's Hospital on the Isle of Wight.

The drone will cut delivery times to the Isle of Wight **from four hours to 30 minutes**, as one flight will replace two car journeys and one hovercraft or ferry journey per delivery.

As well as saving time and money, the new delivery method, launched in partnership with tech company Apian, will offer a better option for cancer patients living on the island, many of whom must travel to the mainland for treatment, officials added. The drone program will be trialled initially in the Isle of Wight followed by Northumbria.

Amanda Pritchard, chief executive of NHS England, announced the pilot as the health service marked its 74th birthday on July 5. <https://www.bloomberg.com/news/articles/2022-07-04/nhs-to-trial-drone-delivery-for-chemotherapy-drugs>



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How to Invest in the Drone Industry Now: Diving into the UAV ETF Miriam

McNabb July 05, 2022



The [AdvisorShares Drone Technology ETF \(UAV\)](#) is one way to add drones to your portfolio.

An ETF, or exchange-traded fund, is similar to a mutual fund. When investors buy shares of an ETF, they are getting access to a basket of different of stocks. In the case of UAV, the ETF currently consists of 37 companies that are involved in the drone economy.

“The drone and eVTOL industries are in the early innings and there are a lot of companies jockeying for position,” said Luca Esposito of Coastline Investment Group LLC, one of the early UAV investors. “It is a very competitive environment. This has made it difficult for investors who want exposure to the space. The UAV ETF alleviates a lot of those problems by offering **thematic diversification and active portfolio management.**”

The portfolio includes companies like Red Cat Holdings (NASDAQ:RCAT), AgEagle Aerial Systems (NYSEAMERICAN:UAVS) and Draganfly (NASDAQ:DPRO), along with military drone manufacturer, AeroVironment (NASDAQ:AVAV). Draganfly and AeroVironment have been in the news lately as they provide drones to Ukraine.

In terms of portfolio composition, at least 25% of UAV will consist of the Aerospace & Defense industry. Another roughly 20% consists of Advanced Air Mobility and eVTOL (electric vertical take-off and landing) companies: i.e., Joby Aviation (NYSE:JOBY), Archer Aviation (NYSE:ACHR), Blade Air Mobility (NASDAQ:BLDE), Liliium (NASDAQ:LILM), EHang Holdings (NASDAQ:EH) and Vertical Aerospace (NYSE:EVTL). Morgan Stanley Research has said that accelerating tech advances and investment in autonomous urban aircraft could create a \$1.5 trillion market by 2040.

UAV is the only ETF that targets the drone tech and eVTOL ecosystems. For more information, visit the [AdvisorShares website](#) – and keep an eye out for the UAV tag line, to read more about the many players represented. <https://dronelife.com/2022/07/05/how-to-invest-in-the-drone-industry-now-diving-in-to-the-uav-etf/>



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The next frontier for drones: letting them fly out of sight MATT O'BRIEN and NATHAN ELLGREN an hour ago



REMINGTON, Va. (AP) — Some drones have recently gotten permission to soar out of their pilots' sight. They can now inspect high-voltage power lines across the forested Great Dismal Swamp in Virginia. They're tracking endangered sea turtles off Florida's coast and monitoring seaports in the Netherlands and railroads from New Jersey to the rural West.

Aviation authorities in the U.S. and elsewhere are preparing to relax some of the safeguards they imposed to regulate a boom in off-the-shelf consumer drones over the past decade. Businesses want simpler rules that could open your neighborhood's skies to new commercial applications of these low-flying machines, although privacy advocates and some airplane and balloon pilots remain wary.

For now, a small but growing group of power companies, railways and delivery services like Amazon are leading the way with special permission to fly drones "beyond visual line of sight." As of early July, the U.S. Federal Aviation Administration had approved **230** such waivers — one of them to Virginia-based Dominion Energy for inspecting its network of power plants and transmission lines.

The FAA said it is still reviewing how it will roll out routine operations enabling some drones to fly beyond visual line of sight, although it has signaled that the permissions will be reserved for commercial applications, not hobbyists. <https://apnews.com/article/technology-virginia-8821746f1318f7537fb564aa53c8820b>

See India conduct first flight of autonomous technology demonstrator

SWiFT Vivek Raghuvanshi Friday, Jul 1



NEW DELHI — The aircraft, launched by Bangalore-based Aeronautical Development Establishment under the purview of the state-run Defence Research and Development Organisation, is a scaled-down version of [the upcoming Ghatak combat drone](#). The flight took place at the aeronautical test range based at Chitradurga in the southern Indian state of Karnataka.

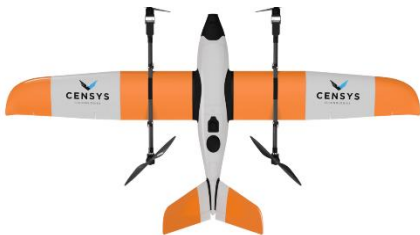


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The airframe, undercarriage, and entire flight control and avionics systems used for the aircraft were domestically developed, the Defence Ministry said in a statement. Defence Minister Rajnath Singh called the flight a major achievement toward autonomous aircraft that will pave the way for Aatmanirbhar Bharat — an economic initiative meant to make [India less dependent on foreign technology](#) — in terms of critical military systems.

A scientist with the Aeronautical Development Establishment told Defense News that the flight test of the aircraft — also referred to as the Stealth Wing Flying Testbed, or SWIFT — took place to demonstrate its ability to take off, climb, cruise, navigate to waypoints, descend, and land **autonomously**. He noted that the next step is to develop a proven autonomous combat surveillance platform. See the demo: https://www.defensenews.com/unmanned/2022/07/01/india-conducts-flight-of-autonomous-flying-wing-technology-demonstrator/?utm_source=sailthru&utm_medium=email&utm_campaign=dfn-dnr

Censys Technologies surpasses \$8 million Series A target Bruce Crumley - Jul. 6th 2022



UAV [sensor](#) specialist Censys Technologies has closed an over-subscribed Series A Funding round that generated \$8.3 million – capital the company will use to accelerate its transformation from a drone services company to a provider of what it calls airborne intelligence.

Daytona Beach, Florida-based [Censys](#) had set the fundraising bar at \$8 million, a target it overshot with the backing of three venture capital investors. CEO Trevor Perrott says the new infusion will finance Censys's shift from relying on its own [drones](#) and [sensors](#) to providing services to clients using an integrated package of data gathering and analysis that adds depth to the ways customers can use information gathered. To facilitate that, the company will triple its current staff of 48 people by April.

Founded by three [Embry-Riddle](#) Aeronautical University graduates in 2017, Censys has offered its sensor-packed Sentaero drones for [mapping, imaging](#), and data gathering missions to utility, engineering, public service, and agricultural clients. In addition to producing and supply those sensor-equipped craft – one for visual line of sight operation, the other for [flights beyond](#) that – Perrott says Censys will now use its capital injection to assemble a full range of software and hardware solutions that he believes will magnify the value of data collected and analyzed when customers put it to work.



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The new funding will also support Censys's push to obtain its [Federal Aviation Administration Type Certification](#) for its drones, permitting them to operate above structures and roads without previously obtaining waivers. <https://dronedj.com/2022/07/06/censys-technologies-surpasses-8-million-series-a-target/>

Dedrone Partners with South Carolina Law Enforcement to Secure Cooper River Bridge Run July 5, 2022 Counter UAS | News



[Dedrone](#) today announced it partnered with Threat Management Group to provide airspace security for South Carolina Law Enforcement Division (SLED) during the popular Cooper River Bridge Run. During the 2021/2022 events, three drones were intercepted, and SLED was able to quickly de-escalate the threat. Dedrone's technology helped ensure the safest and most secure events in the history of the 10K race, the third largest of its kind in the United States.

Drone detection is complex. Drones come in various shapes, sizes and control mechanisms, with fixed wings or a varying number of rotors. Radio frequencies also vary – many drones are controlled using common radio protocols, but others are controlled via Wi-Fi. Dedrone shines a light on the “blind spot” of suspicious drones, ensuring airspace is safe from unwanted aircraft and providing tools to help mitigate threats.

Dedrone works across 35 countries to deliver best-in-class detection, identification, tracking, and mitigation of drones. The company's technology is used by four of the G-7 nations, nine U.S. federal agencies, including the Department of Defense, and more than 70 critical infrastructure sites, 20 airports and 50 correctional facilities worldwide.

https://uasweekly.com/2022/07/05/dedrone-partners-with-south-carolina-law-enforcement-division-to-secure-popular-cooper-river-bridge-run-2/?utm_source=rss&utm_medium=rss&utm_campaign=dedrone-partners-with-south-carolina-law-enforcement-division-to-secure-popular-cooper-river-bridge-run-2&utm_term=2022-07-06



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American Robotics to Acquire Airobotics, Autonomous Drones Miriam McNabb July 06, 2022 by DRONELIFE Staff Writer Ian M Crosby



Ondas Holdings Inc., the parent company of [Ondas Networks](#) and [American Robotics](#), announced that it has signed a term sheet to acquire leading Israeli unmanned aircraft system developer [Airobotics](#).

Airobotics is the developer of the Optimus System, an autonomous drone-in-a-box UAS platform with applications in industrial, homeland security, and smart city services markets. The Optimus System consists of the Optimus Drone and the Optimus Airbase, which features robotic battery swapping and robotic payload swapping. These features enable the system to provide near-continuous flight time and multi-option imaging capabilities. The Optimus System also features the Insightful Data Platform, an automated data distribution and processing software, and provides customers an enterprise level automated data capture and analysis solution, including real time video, and can operate autonomously 24/7.

With an active customer base in the United States, Israel, Singapore, and the UAE, as well as the potential to expand into additional international markets, Airobotics is in the final stages of acquiring a first-of-its-kind Type Certificate from the FAA for its Optimus System. The FAA has published the system's safety criteria, which will allow Airobotics to complete its certification, enabling the automation of all phases of flight including swapping batteries and payloads and eventually permitting operation over cities and other populated areas.

<https://dronelife.com/2022/07/06/american-robotics-to-acquire-airobotics-autonomous-drones/>

China's EHang Secures Additional Financing Graham Warwick July 01, 2022



EHang has secured an RMB 1 billion (**\$149 million**) credit facility from a Chinese bank to support its operations.

The funding line will be provided by the Guangzhou branch of Agricultural Bank of China, ranked the third largest commercial bank in the world by S&P Global in 2021.

EHang's revenues have declined since the Chinese startup shifted its business model to being both the operator and manufacturer of its electric vertical



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takeoff and landing (eVTOL) vehicles. The Chinese autonomous air taxi developer had RMB 204 million of cash in hand at the end of the second quarter, down from RMB 247 million at the end of 2021 as it continues to invest in the development of its vehicles.

Guangzhou-based EHang was the **first of the eVTOL startups to go public**, in December 2019. It is developing the EH216S two-seat multicopter autonomous air taxi and selling **uncrewed** logistics and firefighting versions of the same vehicle.

Certification of the EH216S by the Civil Aviation Administration of China has been slowed by the COVID-19 pandemic, but EHang still hopes it can launch commercial operations in China this year. The company is conducting trial flights under its 100 Air Mobility Routes initiative.

<https://aviationweek.com/aerospace/advanced-air-mobility/chinas-ehang-secures-additional-financing>

WOULD YOU PAY FOR DRONE DELIVERY? SURVEY SHARES HOW MANY AMERICANS WOULD

June 21, 2022 Sally French News



So far in tests we've seen, customers must pay for drone delivery — making it financially viable for companies to offer (and perhaps also putting a cap on what otherwise might be mega demand).

But in the long term, will consumers be willing to pay for drone delivery? Nearly half of Americans — **48% to be exact — say they would pay** more money for drone delivery versus the cost to have it delivered via more traditional means given one caveat: it needs to mean **getting their products within an hour**. That's according to a survey conducted online by Propeller Insights that asked more than 1,000 U.S. adults about their thoughts on drone delivery in March 2022.

With drone delivery, it seems as though consumers are less interested in the novelty of it and aren't even particularly passionate about the technology but are most concerned about the practicality. And if drones can make deliveries especially practical by sending them faster than human couriers, then customers are ready to pay more for it.

<https://www.thedronegirl.com/2022/07/07/pay-for-drone-delivery/>



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A fleet of Ingenuity-like helicopters could come to Mars for sample return mission

Seth Kurkowski - Jul. 7th 2022



The success of NASA's Ingenuity demonstration mission cannot be understated. Originally expected to last only one month or up to five flights, it has been on the Martian surface for a year now and [just completed flight 29](#). Congress has seen this success and wants to move forward with more, primarily due

to the rising cost of the Mars Sample Return mission.

This rising cost of the mission is where the House Appropriations Committee is concerned. This is where the committee's idea of using what they call an "Ingenuity-class" helicopter for retrieving the samples Perseverance is already collecting. You have to give it to the bureaucrats this time to devise a possibly great idea. Ingenuity has shown that flight on Mars is capable while not breaking the bank.

The committee's idea would be to use "more than one Ingenuity-class Mars helicopters" to fly around to collect Perseverance's core samples. The current working plan is to do this with small rovers, but the committee believes using aircraft could build redundancy in case one or more of the retrieving helicopters fail. However, this would require the current design of Ingenuity to be changed to include a way to pick up and transport the samples.

<https://spaceexplored.com/2022/07/07/a-fleet-of-ingenuity-like-helicopters-could-come-to-mars-for-sample-return-mission/>

Dominion Energy gets BVLOS waiver for Skydio X2 drone inspections

Bruce Crumley - Jul. 7th 2022



Leading US power utility Dominion Energy has obtained a Federal Aviation Administration (FAA) waiver to operate open-ended beyond visual line of sight (BVLOS) inspections at over 40 plants using drones from [Skydio](#), whose regulatory team helped secure the approval.

Dominion obtained the waiver under the FAA's [BEYOND program](#), and will use it to deploy [Skydio x2](#) drones to conduct BVLOS inspections at facilities in Connecticut, Georgia, Indiana, North Carolina, South Carolina, Virginia, and West Virginia. The company, which



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provides power to 7 million customers in 13 states, has steadily expanded its deployment of UAVs since first introducing them in 2014.

The exemption will permit Dominion pilots to fly drones in BVLOS inspection missions relying on [Skydio X2's](#) artificial intelligence-based [autonomous flight](#) engine. That tech will ensure automatic 360-degree obstacle avoidance near often difficult-to-access power plant infrastructure.

Dominion plans to use the waiver at over 40 of its facilities. [BLVOS missions](#) will reduce the number of staffers involved in those inspection flights by eliminating the requirement of a spotter to assist, along with the risks of tradition manual intervention at assets being checked. <https://dronedj.com/2022/07/07/dominion-energy-gets-bvlos-waiver-for-skydio-x2-drone-inspections/>

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Iris Automation and Sagatech Avionics Combine Technology for Drone Collision Avoidance Jessica Reed | July 7, 2022



A pioneer of collision avoidance technology, Iris Automation has just announced a partnership with Sagatech Avionics that will offer uncrewed aircraft a comprehensive air risk mitigation solution. Sagatech specializes in developing avionics to enable situational awareness for crewed and uncrewed aircraft.

According to the company, drone customers using Casia's noncooperative detection ability have enhanced operational safety and have been able to secure approvals from the Federal Aviation Administration. Sagatech is contributing its Airborne Collision Avoidance System for smaller unmanned aerial vehicles that enables an aircraft to **autonomously avoid other aircraft** and obstacles in the airspace.

Through this new partnership, the TSO-approved MXS ADS-B transponder from Sagatech Avionics will be integrated with Casia via Sagatech's ACAS X sensor fusion and collision avoidance module. This integration results in **a complete air risk mitigation solution** for detection and avoidance. <https://www.aviationtoday.com/2022/07/07/iris-automation-and-sagatech-avionics-combine-technology-to-enable-collision-avoidance-for-drones/>