## UAS and SmallSat Weekly News

## Contents

2 UK Royal Navy Planning Mojave Carrier Flight Trials
2 Wingcopter and Siemens Healthineers Collaborate on Lab Sample Deliveries in Africa
3 Volatus adds wildfire suppression support to its drone service menu
3 When bloodthirsty AI drone 'killed' its human operator during tests
4 AUTEL TITAN, AUTEL ALPHA DRONES SET FOR LAUNCH NEXT WEEK
5 DroneUp and ResilienX partner to integrate in-time aviation safety management system
5 FAA launches XTM traffic management and EU's U-space "ready this year"
6 US Congress introduces national drone and AAM research and development bill
6 Join the New Airspeeder Pilot Academy in Celeros
7 Quantum-Systems sending more drones, opens support centers, for Ukraine defense
7 Skyports aces medical drone delivery network trial in Thailand
8 DEDRONE LAUNCHES PORTABLE, COUNTERDRONE SECURITY FOR WARFIGHTERS
9 Percepto Receives BVLOS Waiver for Drone Operations in Shielded Airspace Nationwide
9 The Drone Infrastructure Inspection Grant Act of 2023
10 7th Annual Energy Drone \& Robotics Summit JUNE 12-14, 2023
10 LAW-TECH CONNECT LAUNCHES FREE LEGAL WEBINAR SERIES ON DRONE LAW AND POLICY
11 UAVOS Demonstrates Drones' Capabilities in Hydrocarbon Exploration
12 Skydio Secures Nationwide BVLOS Approval for Remote Drone Operations In Japan
13 Drone flies 77 miles nonstop in Texas, live-streaming video
13 MIT-founded drone company launches home delivery service in Norway
14 Intelligent Drone Swarms Could Mimic Bird Flocks: New Research from University of Houston
15 Wisk CEO: Shift to Boeing ownership brings advantages
15 A2Z Drone Delivery Launches RDSX Pelican Hybrid VTOL Commercial Delivery Drone
16 Quantum-Systems Inc. Chosen for United States Department of Defense APFIT Program
17 Inspired Flight unveils new 'Made in US' drone IF800 Tomcat

UAS and SmallSat Weekly News

## 3June23

## UK Royal Navy Planning Mojave Carrier Flight Trials Tony Osborne June 01, 2023



LONDON—General Atomics has secured a $£ 1.5$ million (\$1.9 million) contract that could lead to its Mojave short-take-off and landing uncrewed aircraft system (UAS) performing a flight from the UK's HMS Prince of Wales aircraft carrier.

The U.S. OEM secured the single-source Project Mojave contract from the UK defense ministry to "demonstrate a threshold capability for a Short Take off and Landing Uncrewed Air Vehicle."

Details of the contract emerged in a transparency notice issued by the department on May 20 to advise of the award's single-source nature.

The work is expected to involve flight trials of the Mojave platform, a derivative of the company's MQ-1C Gray Eagle platform designed for STOL operations from unprepared strips from the aircraft carrier later this year once repair work on the warship has been completed. https://aviationweek.com/defense-space/aircraft-propulsion/uk-royal-navy-planning-mojave-carrier-flight-trials

## Wingcopter and Siemens Healthineers Collaborate on Lab Sample Deliveries in

Africa June 1, 2023 News


Siemens Healthineers Middle East, Southern \& Eastern Africa and Wingcopter GmbH have signed a Memorandum of Understanding to develop and roll out an integrated drone delivery solution to transport various laboratory diagnostics materials as well as other medical supplies in Africa. The combination of Siemens Healthineers' Laboratory Diagnostics testing capabilities and Wingcopter's drone delivery services will provide improved diagnostics and faster treatment. The solution will adopt the latest in digital technology provided by Siemens Healthineers and Wingcopter from highly automated drone delivery to Laboratory Information Systems which will accurately track and report results directly to the patients.

The utilization of Wingcopter's delivery drones interconnected with Siemens Healthineers' laboratory diagnostics facilities will allow for quick and automated 2-way delivery of samples,

## UAS and SmallSat Weekly News

medicine, and other medical products. The battery-powered drones will be operated by Wingcopter, covering a range of 75 kilometers while always maintaining the cold chain. These sustainable and efficient drone delivery networks will allow for the centralization of sample testing and medical consumables distribution, resulting in improved access to diagnosis, faster turnaround time, increased efficiency, and reduction in costs. https://uasweekly.com/2023/06/01/wingcopter-and-siemens-healthineers-collaborate-on-lab-sample-deliveries-in-africa/?utm source=rss\&utm medium=rss\&utm campaign=wingcopter-and-siemens-healthineers-collaborate-on-lab-sample-deliveries-in-africa\&utm term=2023-06-02

## Volatus adds wildfire suppression support to its drone service menu Bruce

 Crumley | Jun 22023

Canadian drone hardware, service, and training company Volatus Aerospace has announced the addition of new specialized, certification-required activities to its broadening menu, notably the ability to provide aerial tech for use in battling the nation's proliferating wildfires.
. The most recent move came this week with the Toronto-based company saying it had obtained certification required to provide aerial sensor support to wildfire extinction efforts.

That Volatus qualification comes with its passages of the Hinton GRID Testing process, which the Wildfire Service unit in Alberta uses to vet prospective partners in battling blazes using infrared data feeds from drones.

Infared imaging provides essential information to firefighters on the ground for assessing critical areas, detecting hot spots, and ensuring fires are fully extinguished and no longer threats of reigniting. Hinton GRID Testing is designed to shift out drone operators whose skill, UAVs, and onboard infrared tech meet criteria on target sensitivity, accuracy, and data meeting the needs of units battling wildfires from those that don't. https://dronedj.com/2023/06/02/volatus-adds-wildfire-suppression-support-to-its-drone-service-menu/\#more-93732

## When bloodthirsty AI drone 'killed' its human operator during tests Ishveena

 Singh | Jun 22023The dangers of AI are making headlines once again. Earlier this week, leaders from OpenAI, Google DeepMind, and other artificial intelligence labs came out with a warning that future AI systems could be as deadly as pandemics and nuclear weapons. And now, we are hearing about

UAS and SmallSat Weekly News
a test simulated by the US Air Force where an AI-powered drone "killed" its human operator because it saw them as an obstacle to the mission.

During the virtual test, the drone was tasked to identify an enemy's
 surface-to-air missiles (SAM). The ultimate objective was to destroy these targets, but only after a human commander signed off on the strikes.

But when this Al drone saw that a "no-go" decision from the human operator was "interfering with its higher mission" of killing SAMs, it decided to attack its boss in the simulation instead.

According to Col Tucker "Cinco" Hamilton, who heads Al tests and operations at the US Air Force, the system used "highly unexpected strategies to achieve its goal." https://dronedj.com/2023/06/02/ai-military-drone-kill-operator/

## 5June23

AUTEL TITAN, AUTEL ALPHA DRONES SET FOR LAUNCH NEXT WEEK June 4,
2023 Sally French


Next week, Autel is set to publicly launch its Autel Titan, which is designed for transportation and delivery, and its Autel Alpha, a new enterprise drone. The new products are set to make their first public appearance at the 7th Annual Energy Drone \& Robotics Summit, which is one of the top drone events from 2023. The three-day event in Houston, Texas, is set to kick off on Monday, June 12 and will run through Wednesday, June 14.

Most of the most well-known delivery drone vehicles are made by the major service providers themselves including Zipline, Flytrex and Google-sibling Wing, which are proprietary drones made in-house (and not for sale to others). There are otherwise few options of ready-to-fly delivery drones. For now, the only really compelling option is the American-made drone RDSX Pelican, which comes from Los Angeles-based A2Z Drone Delivery and uses a hybrid VTOL design that can handle up to 5 kg payloads on up to 40 km routes. Prices start at $\$ 29,000$. https://www.thedronegirl.com/2023/06/05/autel-titan-alpha-launch/

UAS and SmallSat Weekly News

## DroneUp and ResilienX partner to integrate in-time aviation safety management

system June 2, 2023 Jenny Beechener UAS traffic management news, Urban air mobility


DroneUp will employ ResilienX's FRAIHMWORK technology to ensure resilient detect and avoid (DAA) capabilities for safe deliveries while it expands its footprint for drone delivery in the US.

FRAIHMWORK (Fault Recovery and Isolation, Health Monitoring frameWORK) is a software platform that monitors the health, integrity, and performance of DAA associated elements such as the infrastructure (communications, navigation, surveillance, weather sensors, and digital infrastructure) supporting DroneUp's drone operations.

The software solution performs data quality assurance of third-party data streams and provides maintenance tooling and metric tracking. These capabilities are crucial elements of robust safety cases for Beyond Visual Line Of Sight (BVLOS) operations which are increasingly reliant on associated elements like DAA for operational safety and efficiency. https://www.unmannedairspace.info/latest-news-and-information/droneup-and-resilienx-partner-to-integrate-in-time-aviation-safety-management-system/

## FAA launches XTM traffic management and EU's U-space "ready this year" June 3,

 2023 Philip Butterworth-Hayes By Jenny Beechener

The Federation Aviation Administration Concept of Operations (ConOps) anticipates three complementary service environments for unmanned operations to fly beyond visual line of sight (BVLOS), explains Steve Bradford, Chief Scientist for Architecture and NextGen Development, at the Drone Enable webinar, UTM as an Enabler for Collaborative Operating Environments hosted by ICAO on 30 May 2023. Currently, small Unmanned Aerial Systems can fly in US national airspace if they maintain visual line of sigh).

Upper Class E airspace typically begins at FL600 and includes high-altitude, long-endurance and supersonic aircraft with minimal traffic management requirements. Advanced Aerial Mobility and Unmanned Traffic Management meanwhile depend to a much greater extent on Air Traffic Services and require both cooperative separation management and cooperative flow management to operate safely at scale. The FAA collectively calls the three environments eXtensible Traffic Management (XTM). "XTM is analogous with ATM," says Steve Bradford.

Robert Rea | Axcel Innovation | Suffolk, VA robert.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com

## UAS and SmallSat Weekly News

European unmanned airspace users are also waiting for a regulated environment in which to operate, despite the introduction of U-space regulations by the European Aviation Safety Agency (EASA) in January 2023. https://www.unmannedairspace.info/news-first/drone-enable-2023-faa-launches-xtm-traffic-management-and-eus-u-space-ready-this-year/

## US Congress introduces national drone and AAM research and development bill

 May 30, 2023 Jenny Beechener

The US House of Representatives proposes a bill to provide for coordinated Federal efforts to accelerate civilian unmanned aircraft systems and advanced air mobility research and development for economic and national security, and for other purposes. Introduced by Mr Lucas on 22 May 2023, the H.R 3560 bill was referred to the Committee on Science, Space, and Technology, in addition to the Committees on Oversight and Accountability, Homeland Security, and Transportation and Infrastructure. https://www.unmannedairspace.info/emerging-regulations/us-congress-introduces-national-drone-and-aam-research-and-development-bill/

Join the New Airspeeder Pilot Academy in Celeros June 5, 2023 News


Celeros, the new mixed-reality racing metaverse by Saltwater Games has launched a new Pilot Academy. The Academy will educate racing fans about the new Airspeeder Mk4, which players will be able to race within an immersive gaming experience, AirspeederXR. It is the first racing series to be launched in Celeros, and the game will allow players to build and race their Airspeeders in a thrilling and competitive environment.

The Pilot Academy is the first of many Celeros Academy Programs and takes users on a journey through a preflight checklist to prepare them for becoming a pilot in the game. They will be able to explore all the facets of the vehicle to learn how the unique elements, such as the Collision Avoidance System, Motor, Battery and Propellers of the vehicle, will give them an edge against their competitors.

The more time players spend in Celeros, the greater an opportunity they will have to not only rise through the ranks of our gaming community but also to potentially join the Pilot Academy and one day actually race a real vehicle themselves. Check out and experience the Academy: https://academy.celeros.gg/

## UAS and SmallSat Weekly News

https://uasweekly.com/2023/06/05/join-the-new-airspeeder-pilot-academy-in-
celeros/?utm source=rss\&utm medium=rss\&utm campaign=join-the-new-airspeeder-pilot-academy-
in-celeros\&utm term=2023-06-05
Quantum-Systems sending more drones, opens support centers, for Ukraine defense Bruce Crumley | Jun 52023


German developer of strategic and military drones QuantumSystems has inaugurated multipurpose centers in Ukraine to strengthen its support of the nation's defense against Russia's seemingly endless invasion.

The move makes good on a pledge Quantum made in January as it announced it would provide 105 of its specialized data-gathering Vector drones to Ukraine, in tandem with Germany's official support of Kyiv as it battles Russian aggression. The new centers will offer assistance designed to maximize effective deployment of the company's defense UAVs.

The new centers are located in key areas across Ukraine and will provide service, repair, training, support, and logistics for Quantum's Vector drones used in the conflict. Those UAVs feature low-noise engines to avoid detection and encrypted IP connections securely transmitting video streams during reconnaissance and intelligence missions.

To date, Quantum has delivered a total of 138 Vector drones to Ukraine, with Kyiv having ordered an additional 300 in late May. https://dronedi.com/2023/06/05/quantum-systems-sending-more-drones-opens-support-centers-for-ukraine-defense/

Skyports aces medical drone delivery network trial in Thailand Bruce Crumley | Jun 5 2023


London-based Skyports carried out the drone tests in cooperation with several official agencies, including the Ministry of Public Health and Civil Aviation Authority of Thailand, which approved the delivery of medical payloads in beyond visual line of sight (BVLOS) operation. The demonstration was part of the nation's plans to deploy fast, affordable, and sustainable UAV technology to extend healthcare to remote or otherwise underserved communities around the country.

## UAS and SmallSat Weekly News

In what the company calls a "landmark" test run, Skyports drones flew medical samples from the hospital in Santun in the southwest of Thailand to a coastal health center 12 kilometers away. The company said the craft completed the delivery in seven minutes - well under the near hour the journey usually takes by car and boats used to cross waterways.

The successful testing fulfilled the immediate objectives Skyports set for the project, including proving the feasibility and benefits of BVLOS medical drone deliveries and the enhanced speed, connectivity, and safety aerial tech provides in bridging gaps to remote areas. https://dronedi.com/2023/06/05/skyports-aces-medical-drone-delivery-network-trial-in-thailand/\#more-93771

## 6June23

DEDRONE LAUNCHES PORTABLE, COUNTERDRONE SECURITY FOR WARFIGHTERS June 4, 2023 Sally French 0

U.S.-based airspace security company Dedrone today publicly launched a counterdrone product called DedroneTactical.

DedroneTactical merges Dedrone's relatively long (in drone years) history of drone-tracking and takedown artificial intelligence and sensor technology into a portable package designed specifically for federal customers and warfighters.

Drones have long been used in military operations, and their use is growing. In fact, this month Ukrainian forces are set to receive 200 long-range, high-speed FPV (first-person view) drones to support their battle against Russia..

All sensors are mounted on a single tactical mast and can be expanded to include additional remote DedroneSensors via wireless network links. The Extended Kit adds a second mast with radar and camera to enable both non-RF drone detection for autonomously navigated drones and as well as visual confirmation.

It was created in collaboration with federal agencies around the world. And Dedrone claims that its new solution has helped pave the way for year-over-year growth of more than 300\%, including an increase in U.S. government agency contracts. In fact, Dedrone says it has already sold more than 100 DedroneTactical kits to U.S. and global governments who work on the federal level. https://www.thedronegirl.com/2023/06/06/dedronetactical/

UAS and SmallSat Weekly News
Percepto Receives BVLOS Waiver for Drone Operations in Shielded Airspace
Nationwide June 05, 2023 FROM PERCEPTO


Percepto, an autonomous inspection and monitoring solutions provider, has earned a first-of-its-kind beyond visual line of sight (BVLOS) waiver from the Federal Aviation Administration. The significant approval allows the company to operate uncrewed aircraft systems (UAS) beyond visual line of sight (BVLOS) in shielded airspace, without humans onsite, and without expensive and cumbersome ground-based or airborne detect and avoid systems, for inspection and monitoring operations at critical and non-critical infrastructure sites nationwide.

Under the waiver, low risk "shielded" BVLOS operations are authorized 200 feet above and around assets located on critical infrastructure sites. At non-critical infrastructure sites, shielded BVLOS operations are permitted 50 feet higher than the tallest obstruction located within a half-mile of the site

This waiver is a big step as the industry seeks to scale true BVLOS UAS operations for inspection and monitoring, and is crucial for moving toward fully integrating UAS into the National Airspace System. https://innovateenergynow.com/resources/percepto-receives-bvlos-waiver-for-drone-operations-in-shielded-airspacenationwide?utm campaign=Energy\%20Drone\%20\%26\%20Robotics\%20Coalition\%20Content\&utm med ium=email\& hsmi=261326191\& hsenc=p2ANatz_pmYK7dEFO2dZ8LG5DKDMLiQAvdCoxvpujl460xpD71GeJmald23I3iXAK7BOM9p yAdL4BrVcX UiX-dhwj-XLLerA\&utm content=261326191\&utm source=hs email

The Drone Infrastructure Inspection Grant Act of 2023 Miriam McNabb: May 31, 2023


The U.S. Congress is again discussing a Drone Infrastructure Inspection Grant Act, which would offer funding for drone technology and training to support the president's infrastructure development package.
H.R. 3595, introduced by Rep Greg Stanton (D-AZ) and Garret Graves (R-LA), is a reprise of the 2021 H.R. 5315 , which passed in the House but did not progress in the Senate last year. The grant supports the drone industry in several ways, not least in the acknowledgement that drone

## UAS and SmallSat Weekly News

technology offers significant efficiencies for infrastructure inspection. The Act would provide funding for state, local, and tribal governments to purchase or contract for approved drone technology to "perform critical infrastructure inspection, maintenance, rehabilitation, or construction projects," says a Rep. Stanton press release on H.R. 5315.

Additionally, the DIIG Act would provide funding to institutions of higher education, including community colleges, to develop drone workforce training. This aligns with sections of the FAA Reauthorization Act of 2018, which tasked the FAA with creating the UAS Collegiate Training Initiative. https://dronelife.com/2023/05/31/the-drone-infrastructure-inspection-grant-diig-act-of2023/?utm campaign=Energy\%20Drone\%20\%26\%20Robotics\%20Coalition\%20Content\&utm medium= email\& hsmi $=261326191 \& ~ h s e n c=p 2 A N q t z-$

85Vatc9F7xulF2oooA8rJAdTVaMbsvKJmASnqrwg9xYRjxbH2N6saQWS5t blqub5fukvrxPlsFH4fZ5bQAia2Uf1Vg\&utm content=261326191\&utm source=hs email

7th Annual Energy Drone \& Robotics Summit JUNE 12-14, 2023 WOODLANDS WATERWAY MARRIOTT, HOUSTON, TX The World’s Largest Energy / Industrial Robotics \& Drone Event


Over the last 6 years, it has grown to be the most influential gathering of industrial, energy and engineering leaders from around the globe where the key challenges \& solutions are addressed for operating robotics, drones, satellites, and remote systems successfully and managing actionable data , from the stars to the sea floor.

Over three days, we connect 1500+ global energy \& industrial robotics, drone \& data leaders at a time of rapid growth for our sector. https://sfg.swoogo.com/edrs2023/

## 7June23

## LAW-TECH CONNECT LAUNCHES FREE LEGAL WEBINAR SERIES ON DRONE LAW AND POLICY June 5, 2023 Sally French

Here's a deal for anyone seeking information on drone law and policy, or any other professional development in the legal side of the drone industry. The same team that hosts Law-Tech Connect Workshops at major drone events around the country is making its information easily accessible to the public in a free legal webinar format.


Law-Tech Connect has historically been an inperson workshop held in tandem with some of the biggest drone conferences in the U.S., including two consecutive years at AUVSI XPONENTIAL and an upcoming energy-focused version being held next week at the 7th Annual Energy Drone \& Robotics Summit in Houston, Texas.

The Law-Tech Connect is sharing its trove of knowledge to the general public for free (well, or for simply just the low cost of handing over a tiny bit of personal information). The team taped all the panels that aired at AUVSI - and now they're free for you to listen to throughout the coming year.

That's all because Law-Tech Connect this week announced a new monthly legal webinar series focusing on various aspects of drone law and policy, such as counter drone tech, intellectual property and using commercial, off-the-shelf drones in the battlefield. https://www.thedronegirl.com/2023/06/07/free-legal-webinar-law-tech-connect-dawn-zoldi/

UAVOS Demonstrates Drones' Capabilities in Hydrocarbon Exploration June 6, 2023 News


UAVOS successfully deployed the drones in aerial photography and multilevel magnetic prospecting surveys to collect data for pipeline construction, having successfully deployed its advanced technology for the company in Northern Europe. Automated scanning and area surveying has been carried out by the UAVOS' Borey unmanned aircraft and the UVH-170 gasoline powered unmanned helicopter.

Used across an area of around 150 km , UAVOS' drones covered the area twenty times faster than would have been possible on the ground, as well as being three times cheaper than traditional methods involving ground teams. Herewith, the Gas \& Oil company has saved

## UAS and SmallSat Weekly News

around $\$ 400.000$ through gathered data accuracy. Moreover, this technology means geological prospecting can be undertaken at the most inaccessible areas, at any time of year.

The magnetic mapping using the UVH-170 unmanned helicopter has demonstrated efficiency of the drone-backed technology. Having been sufficiently maneuverable to fly at the required altitudes, ranging from 50 to 100 meters, the UVH-170 flew for up to 5 hours, covering 350 kilometers, at a speed of up to 75 kilometers per hour. Moreover, the unmanned helicopter can operate in a wide range of temperatures from -30 to $+40^{\circ} \mathrm{C}$ with windy conditions up to 14 mps. https://uasweekly.com/2023/06/06/uavos-demonstrates-drones-capabilities-in-hydrocarbonexploration/?utm source=rss\&utm medium=rss\&utm campaign=uavos-demonstrates-drones-capabilities-in-hydrocarbon-exploration\&utm term=2023-06-07

## Skydio Secures Nationwide BVLOS Approval for Remote Drone Operations In

Japan June 7, 2023 News


Skydio, the leading U.S. drone manufacturer and world leader in autonomous flight, today announced the Japan Civil Aviation Bureau (JCAB) has granted Skydio an unprecedented, nationwide approval to remotely fly drones beyond visual line of sight (BVLOS). Representing one of the most advanced regulatory approvals in the world, the approval enables streamlined BVLOS operations using Skydio Dock and Remote Ops. Whether a customer is monitoring complex infrastructure, inspecting a security perimeter, or assessing a site following a natural disaster - Skydio's AI and autonomous technology allows drones to safely fly missions near structures in a way that would be difficult or impossible with manual drones, even when operated remotely without a pilot on-site.

Under the JCAB approval, there is no requirement to use additional crew members (such as visual observers) or technology to detect crewed aircraft, eliminating some of the greatest challenges faced by drone operators. The approval is not location or time specific; it applies across Japan, with limited exceptions. Notification of the flight area is required prior to takeoff using JCAB's web portal. Operators can now remotely inspect critical infrastructure—buildings, roads, power plants and the scenes of natural disasters-safely and quickly without placing people at risk. https://uasweekly.com/2023/06/07/skydio-secures-nationwide-bvlos-approval-for-remote-drone-operations-in-japan/?utm source=rss\&utm medium=rss\&utm campaign=skydio-secures-nationwide-bvlos-approval-for-remote-drone-operations-in-japan\&utm term=2023-06-07

## UAS and SmallSat Weekly News

Drone flies 77 miles nonstop in Texas, live-streaming video Ishveena Singh | Jun 6 2023


A recent mission from Valmont is making headlines because it saw the company flying a gas-electric hybrid drone nonstop for 77 miles! The drone flew for almost three hours, from Childress to Aspermont in Texas, inspecting vital infrastructure like power lines, railroads, bridges, and more.

As DroneDJ reported recently, Valmont has received a Part 107 Beyond Visual Line of Sight (BVLOS) waiver from the Federal Aviation Administration (FAA) to fly its drones across the United States. The company leveraged a Harris Aerial H6E drone equipped with a Sony A7RM5 camera for the landmark mission.

According to Valmont, using a conventional inspection method such as helicopters would have taken thrice as long. Not only was the drone inspection significantly faster, but it was also more fuel efficient. The mission was completed using less than two gallons of fuel. And even though the route was pretty rural, T-Mobile 5G managed to provide live data transfer throughout the three-hour flight.

Valmont says it plans to offer drone-in-a-box services nationwide in 2024. It would provide anyone needing aerial inspection services with the ability to order a drone, unbox it, and watch it run its inspection while a Valmont pilot flies it remotely from virtually anywhere in the US. https://dronedj.com/2023/06/06/drone-texas-bvlos-longest-valmont/

## MIT-founded drone company launches home delivery service in Norway Ishveena

 Singh | Jun 52023

Drone logistics company Aviant has announced the launch of its home delivery service, Kyte. Drones will now deliver groceries, takeaway food, and non-prescription medicines to sparsely populated areas and vacation homes in Norway. In addition, Aviant has landed $\$ 1$ million in funding from Innovation Norway to autonomously deliver vital prescription medicines directly from pharmacies to people in remote and suburban areas.

Founded by Lars Erik Fagernæs, Herman $\emptyset$ ie Kolden, and Bernhard Paus Græsdal at the Massachusetts Institute of Technology (MIT) in 2020, Aviant has operated over 2,500

## UAS and SmallSat Weekly News

autonomous flights, covering more than $35,000 \mathrm{~km}$ in Norway and Sweden. During the pandemic, the company helped transport COVID-19 tests and blood samples between district hospitals and central hospitals in Norway. The company can offer its drone delivery services within a 30 km radius for return flights, compared to the 2-3 km offered by other providers such as Google Wing or Manna Drone Delivery. https://dronedj.com/2023/06/05/aviant-kyte-norway-drone-delivery/

## Intelligent Drone Swarms Could Mimic Bird Flocks: New Research from

University of Houston Miriam McNabb June 07, 2023 by DRONELIFE Staff Writer Ian M. Crosby


Aaron Becker, associate professor of electrical and computer engineering at the University of Houston, is working to refine algorithms enabling the coordinated control of drone swarms based on the behavior of flocks of birds and schools of fish. "These movements are not pre-programmed but are based on local decisions by individual birds or fish," said Becker, whose work is supported by the commitment of a $\$ 1.7$ million grant from Kostas Research Institute at Northeastern University, LLC.

Becker leads a team including David Jackson, professor of electrical and computer engineering; Julien Leclerc, assistant research professor of electrical and computer engineering; and Daniel Onofrei, associate professor of mathematics.

The technology will be studied during two initial application scenarios. In the first, the drones will conduct the aerial sensing of a forest fire, in which the swarm must both track the fire and relay communications to firefighters. In the second scenario, the aerial security coverage of a commercial facility and campus, the drones will escort vehicles entering and exiting the campus, while each drone possesses limited battery life and must recharge when batteries are depleted. https://dronelife.com/2023/06/07/intelligent-drone-swarms-could-mimic-bird-flocks-new-research-from-university-of-houston/

UAS and SmallSat Weekly News
Wisk CEO: Shift to Boeing ownership brings advantages PAUL brinkmann|JUNE 7, 2023


Air taxi developer Wisk is now a wholly owned subsidiary of Boeing, a development that could help the company's goal of starting passenger service this decade with its Gen 6 design, a mockup of which is shown here.

Wisk, the Silicon Valley air taxi developer that is unique in planning to inaugurate its service with fully autonomous aircraft, views the shift to being owned entirely by Boeing as a welcome turning point in its four-year history.

When might the first passengers fly on its aircraft? "It'll be this decade," Yutko says. The company had said as recently as April that receiving the required FAA certifications may take five years to a decade.

Wisk was a joint venture between Boeing and Kittyhawk, the Silicon Valley personal aircraft company that closed its doors and filed for bankruptcy in September. Boeing announced at a May 31 media event that it bought out Kittyhawk's share of Wisk, according to The Air Current news site, making Wisk a wholly owned subsidiary. https://aerospaceamerica.aiaa.org/wisk-ceo-shift-to-boeing-ownership-brings-advantages/

## A2Z Drone Delivery Launches RDSX Pelican Hybrid VTOL Commercial Delivery

Drone Commercial UAV News Staff JUNE 1, 2023


A2Z Drone Delivery, Inc, developer of commercial drone delivery solutions, has released its new flagship delivery drone, the RDSX Pelican. The new Pelican leverages a hybrid VTOL airframe with no control surfaces to combine the reliability and flight stability of a multirotor platform, with the extended range of a fixed-wing craft.

With no ailerons, elevator or rudder, the Pelican's durable-yet-simple design eliminates common points of failure and exponentially extends operational time between maintenance overhauls. Designed to meet the 55-pound takeoff weight limitation for FAA Part 107 compliance, the Pelican can carry payloads of 5 kilos on missions up to 40 kilometers roundtrip.

## UAS and SmallSat Weekly News

Available in multiple model variations, the Pelican can be optimized for extended range operations or to deliver payloads from altitude with the company's RDS2 drone delivery winch. A2Z Drone Delivery will first display the new RDSX Pelican at the upcoming AUVSI XPONENTIAL (May 9-11 in Denver, CO). Available in multiple configurations, the RDSX Pelican can be customized for an array of missions. https://www.commercialuavnews.com/drone-delivery/a2z-drone-delivery-launches-rdsx-pelican-hybrid-vtol-commercial-deliverydrone?mkt tok=NzU2LUZXSiOwNjEAAAGMOyTODvqZvmGTORvatmp39AFITbeunEBESOUL4iAU hfAVxLUUwW5k9My6ieRoYJD5avKWY AC62FKamkc-6NB8pbUht8Cd4KinqhBF5AVaS NI

Quantum-Systems Inc. Chosen for United States Department of Defense APFIT
Program June 7, 2023 Military


Quantum-Systems Inc., a leader in electric vertical take-off and landing (eVTOL) aerial intelligence solutions, today announced its inclusion in the second set of projects to receive funding for the United States Department of Defense (DOD) pilot program to Accelerate the Procurement and Fielding of Innovative Technologies (APFIT).

The announcement comes after the Office of the Under Secretary of Defense for Research and Engineering published an official release outlining the 11 DoD program offices that will receive FY23 APFIT funding, with U.S. Special Operations Command awarding Quantum-Systems Inc. \$20 million.

Established by Congress in the Fiscal Year 2022 National Defense Authorization Act, APFIT is a competitive, merit-based program with the goal of helping companies to expeditiously transition and field technologies. https://uasweekly.com/2023/06/07/quantum-systems-inc-chosen-for-united-states-department-of-defense-apfitprogram/?utm source=rss\&utm medium=rss\&utm campaign=quantum-systems-inc-chosen-for-united-states-department-of-defense-apfit-program\&utm term=2023-06-08

UAS and SmallSat Weekly News
Inspired Flight unveils new ‘Made in US' drone IF800 Tomcat Ishveena Singh | Jun 8 2023


US drone maker Inspired Flight Technologies has unveiled a new medium-lift drone that can carry up to 3 kg of payload and yet fly for more than 40 minutes. According to the California-based company, its IF800 Tomcat drone will start shipping to customers before the end of the year.

Inspired Flight says its upcoming product is the first NDAA-compliant industrial-grade drone that can deliver a flight time of more than 40 minutes while carrying some of the most popular high-resolution cameras and sensors out there. Moreover, it supports dual hot-swappable smart batteries, which allow operators to complete large missions without system resets.

The drone further features a 30-degree upward-angle shooting capability for gimbal-mounted cameras, which makes it easy to inspect wind turbines, bridges, and other critical infrastructure. At the same time, an integrated first-person view camera allows operators realtime visual feedback and precise control during flights.

Inspired Flight is quick to point out that the primary frame of the IF800 Tomcat is lightweight, compact, and foldable - making the drone's transportation and deployment in various environments quite convenient. https://dronedj.com/2023/06/08/inspired-flight-if800-tomcat-drone/\#more-93868

## 9June23

HAVE BVLOS OPINIONS? YOUR FEEDBACK ON DRONE FLIGHTS IS ACTUALLY WANTED June 8, 2023 Sally French


The Federal Aviation Administration (FAA) is seeking public input on the expansion of beyond visual line-of-sight (BVLOS) drone operations in a public comment period that's open between now and Wednesday, June 14. Specifically, it wants your thoughts on advances in technology, standards, and operational strategies to safely demonstrate whether UAS BVLOS operations can be applied without adversely affecting safety. Some factors on the FAA's mind include:

## UAS and SmallSat Weekly News

- Detect and Avoid (DAA) Systems Performance Standards: Whether a single standard should be created versus multiple definitions, whether a combination approach makes sense, or whether there are circumstances where no standards would provide an acceptable level of safety
- Declarations of Compliance for Detect and Avoid: Whether operators should be able to declare they are using DAA systems, or whether they should have to submit details of their DAA system for approval and validation prior to operation.
- DAA between drones: Whether drones should have to have some form of vehicle-tovehicle communications method
- Boundaries: Whether there should be boundaries and what they should actually be (some standards maintain a horizontal distance of 2,000 feet and a vertical distance of 250 feet between drones and crewed aircraft)
- Third Parties: Whether operators should be separated from UTM service providers in gaining exemptions

The public comment period could have specific implications for four companies in particular: Phoenix Air Unmanned, uAvionix, Zipline, and UPS Flight Forward. And the FAA says that data collected from these operations will inform the FAA's ongoing policy and rule-making activities, particularly around BVLOS drone operations at or below 400 feet.

The easiest way to share your feedback is online, through the U.S. government's regulations website. Simply visit this link and click "Comment in the top left."

The FAA is giving you up to 5,000 characters to leave a comment, though you can also attach up to 20 files up to 10 MB each on top of that.

Comments can be submitted via individuals or on behalf of a company, organization, or government agency. And yes, comments can be left anonymously.

If the Internet isn't your thing, you can also send your comments via snail mail, fax or you can even hand deliver them. Information for those methods is here.

As of this writing, there have been roughly 200 comments received. And in fact, since they're public, you can read them all here. https://www.thedronegirl.com/2023/06/09/have-bvlos-opinions-your-feedback-on-drone-flights-is-actually-wanted/
mscasser@umd.edu; ursula.s.powidzki@gmail.com; rkaese@tedco.md; darryl.r.mitchell@nasa.gov; kris.a.romig@nasa.gov; gary.evans@axcel.us; mike.hitch@nasa.gov; denise.a.lawless@nasa.gov; christina.d.moats-xavier@nasa.gov; thomas.e.johnson@nasa.gov; tony@teamalaris.com;

## UAS and SmallSat Weekly News

daniel.morris@nianet.org; myaz@hampton.gov; stanley@nianet.org; william.edmonson@nianet.org; heather.gramm1@maryland.gov; elizdietzmann@gmail.com; steven.bain@oncourse-Ilc.com; james@djmontgomery.com; rkwhite@vbgov.com; mburgess@airsightglobal.com; eleavitt@airsightglobal.com; $\underline{b}$.hanrahan@precisionhawk.com; danginobell@outlook.com; Tcheek503@yahoo.com; jeanhaskell415@gmail.com; jha@eservices.virginia.edu; ayoung5090@aol.com; icc7s@eservices.virginia.edu; cxcarter@odu.edu; msandy@odu.edu; robert.a.baker.ctr@navy.mil; rick@crtnsolutions.com; eupchurch@sitechma.com; sjohnson@adaptiveaero.com; dubtravis@hotmail.com; p.gelhausen@avidaerospace.com; pcushing@williamsmullen.com; steven.walk@nhgs.tec.va.us; tanner.loper@nhgs.tec.va.us; talberts@odu.edu; rdwyer@hrmffa.org; kenny.elliot@yorkcounty.gov; william.a.wrobel@nasa.gov harry@virginiauas.com; asubramani@avineon.com; icampbell@avineon.com; sean@hazonsolutions.com; scott@virginiauas.com; Bob@virginiauas.com; icronin@odu.edu; peter.bale@srsgrp.com; chris@hoistcam.com; ed@hazonsolutions.com; msatterlund@mwcllc.com; sadlerc@yorkcounty.gov; ariela@powerofavatar.com; dataariseconsulting@gmail.com; kim.lochrie@vaspace.org; dyoung@genedge.org; david@hazonsolutions.com; ralph@jeremycreekfarm.com; jeff.johnson@vtcrc.com; emcmillion@reinventhr.org; director@doav.virginia.gov; jspore@reinventhr.org; paulrobinson@atr-usa.com; vic.z.tumwa@nasa.gov; jacobw@us.ibm.com; dlandman@odu.edu; sherwood@nianet.org; peter.mchugh@nianet.org; marchuleta@edgeautonomy.io; jnoel@yorkcounty.gov; cmeredith@nnva.gov; cstuppard27@gmail.com; carl.conti@sisinc.org; Hughesfamily51@charter.net; tom.walker@webteks.com; zak@unrealworx.com; jack@generalaerocompany.com; bruce.holmes@airmarkets.aero; peter.mchugh@nianet.org; mpoplawski@nnva.gov; mark.flynn@doav.virginia.gov; jshaeffe@odu.edu; rclaud@odu.edu; pmengden@swiftengineering.com; astreett@swiftengineering.com; kielyw@msn.com; dcgrulke@cox.net; ;rea23@hotmail.com; mastaglio@hotmail.com; kenaijunkie@hotmail.com; murat@destecs.net; dlandman@odu.edu; robert.stolle@cit.org; jolson@ecpi.edu; wiedmanj@gmail.com; w1wnr@aol.com; alex.synnott@gmail.com; jkirby145@yahoo.com; Daniel@lingoconsulting.com; I.delaporte3@gmail.com; cyook@kslaw.com; allcvi@consolidatedventuresinc.com; jholman@hreda.com; savery@oihr.org; charity.gavaza@poquoson-va.gov; mjkaszub@odu.edu; twc4223@yahoo.com; boshier@verizon.net; dslindleyva@gmail.com; ilind@att.net; aaron@tidewaterglobal.net; jeffdye01@gmail.com; dtackels@dronedeploy.com; cwirt@nnva.gov; abece001@odu.edu; dtb7p@virginia.edu; kenneth.niederberger@gmail.com;

Ashley.rowe@yorkcounty.gov; juliewheatley@co.accomack.va.us; junnam@asm-usa.com; mohara@ball.com; robert.fleishauer@ssaihq.com; manning@stcnet.com; mkim@genexsystems.com; rwhite@vigyan.com; skyemciver@gmail.com; khoffler@adaptiveaero.com; jerylhill@cox.net; bwachter@bihrle.com; mproffitt@adaptiveaero.com; james.closs@nianet.org; djones@dslcc.edu; director@lakecountyedc.com; cshelton@startwheel.org; aradovic@dcnteam.com; cgeraghty@proenviro.com; jimmy@lyftedmedia.com; bheenan@morphtec.com; ed.albrigo@cit.org; joe.fuller@dartfleet.com; asynnott@telegraphoffice.com; jim@ust-media.com;

Robert Rea | Axcel Innovation | Suffolk, VA robert.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com

## UAS and SmallSat Weekly News

anthony.vittone@dartfleet.com; jairusmwenzel@gmail.com; john.robinson@srsgrp.com; jgill@tcc.edu; arthur@promediavideoservices.com; walt@fcg-co.com; david.throckmorton@nianet.org; photographybydavid.dr@gmail.com; mgboyd99@gmail.com; iohndcalder@gmail.com; mpapazis@scott-macon.com; bigbenjmn@gmail.com; bljohnson@virginiamohs.com; amy.wiegand@droneup.com; stevel@co.kinggeorge.state.va.us; dbrillembourg@avidaerospace.com; daniel.g.wolfe@usi-inc.net; blarys@cox.net; kim@wildflowerintl.com; carly@wildflowerintl.com; DMorris@ReinventHR.org; genevieve.ebarle@nianet.org; marco.rubin@cit.org; mytravelexpert@msn.com; ichapman@cwm-law.com; codyreese21@yahoo.com; jcostuli@odu.edu; jselfridge@gmail.com; chris@assayonwheels.com; dbarton@daa.com; pierre@si-forest.com; lynn.mcdaniel@ctr-cit.org; tracy.tynan@cit.org; jerylrhill@gmail.com; chewlett@deloitte.com; aoksoy@odu.edu; charles@tudorproductions.com; Frederic.dalorso@act.nato.int; bi.sharon.hall@sbcglobal.net; chris.moad@earlycharm.com; info@droneii.com; EdMullinSr@outlook.com; Brian.spratt@siforest.com; Mike.griffin@si-forest.com; Lisa.May@murphian.com; mfrigeli@pmasolution.com; amy.wiegand@droneup.com; roger.venezia@maryland.gov; mattisdrone@gmail.com; johnmarkva@mac.com; jhawk009@odu.edu; dmperkins@odu.edu; davidplace47@gmail.com; ksrawat@ecsu.edu; Thomas.garrett@yahoo.com; marco@expressdroneparts.com; info@pt2go.com; Wasilenko@emeritus.evms.edu; shaun@caterboom.com; kbarquinero@gmail.com; amy.k.klarup@nasa.gov; Daniel.Berry@act.nato.int; cvidoli@fastmail.fm; evandro@airgility.co; Jeanne.larcombe@gmail.com; s.snedecor@advancedaircraftcompany.com; rbesser@stevens.edu; ac@cordillera-apps.com; ci@cispadycpa.com; eashby2008@gmail.com; lena.little@nasa.gov; michael..Ifrench.civ@mail.mil; mrichards@wildflowerintl.com; Amber.Wilson@doav.virginia.gov: Theresa@redorangestudio.com; keagle@odu.edu; ac@cordillera-apps.com; uasci@dcnteam.com; carole.mattessich@nianet.org; dbowles@odu.edu; joshb@uavfactory.com; mcopeland@eagleaviation.tech.com; gp@cordillera-apps.com; roberthrea@gmail.com; miriam@dronelife.com; david@where2wheel.com; chris.bugg@sandler.com; zachary.johns@hush.aero; joe.piazza@teamalaris.com; aj.gallagher@hush.aero; jonathan.kelly@ssaihq.com; steve fitzsimmons@comcast.net; dougsmith@hreda.com; mail@GlobalStrategySupport.com; larry.lombardi@currituckcountync.gov; dgagne@divcom.com; mickey@cowden.tech; rese.cleaver@droneup.com; Jim@JHWUnmannedSolutions.com; ovadia.salama@gmail.com; ajaques@airt.ngo; byron@airsupply.com; wyatt@airsupply.com; Andrew@airsupply.com; nio@phaseone.com; rbo@phaseone.com; colter.menke@maryland.gov; steve.jarriel@dronevideopartners.com; david@americanaerospace.com; bobaldrich@geturgently.com; chris@geturgently.com; patrice@trisdom.com; missie@vpdrone.com; pramod@airgility.co; Don.Berchoff@trueweathersolutions.com; sales@inertiallabs.com; ccoffey@lrprecisiontooling.com; mwhite@Irprecisiontooling.com; don@zenithaerotech.com; anielsen@odu.edu;

JMay@autonomousflight.us; Tim@ QuestKnightEnterprises.com; andrew.branson@droneup.com; tjs12454@gmail.com; orders@airsupply.com; michaelfrench070@gmail.com; michael.beiro@linebird.net; jeff.etter@droneup.com; ryan.williams@droneup.com; greg.james@droneup.com; idaniel@missiongo.io; elle.pechiney@alarispro.com;

Robert Rea | Axcel Innovation | Suffolk, VA robert.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com


## UAS and SmallSat Weekly News

jessica.ambrose@droneup.com; danny.cullen@droneup.com; a.frank@advancedaircraftcompany.com; anthony.vittone@droneup.com; stanley@nianet.org; Pstoutamire@autonomousflight.us; sgreen@mwcllc.com; Supremeroman77@gmail.com; karenandkeith@cox.net; daniel.g.wolfe@usiinc.net; davehinton757@gmail.com; msterk@thelongbowgroup.com; Richard.Laing@ncia.nato.int; richard.r.antcliff@gmail.com; Zachary.johns@hushaero.com; carrie.rhoades@nasa.gov; ryan.labarre@firstiz.com; istorm22@gmail.com; director@gsdm.global; joefuller757@gmail.com; cwood3910@att.net; hudpagosa@yahoo.com; mlboshier@gmail.com; bdallen@odu.edu; b.fenigsohn@advancedaircraftcompany.com; mspapen1@gmail.com; matt.beatty@droneup.com; deancartini@cartinidrones.com; chris sadler@verizon.net; chris.sadler@ctr-vipc.org; jschultz@areai.com; Chris.Sadler@VirginiaIPC.org; Tom.mastaglio@outlook.com;
Brandon.graham@nianet.org; Robin.ford@nianet.org; CameoBluejay@protonmail.com;
ed.alvarado@droneii.com; tori.brudi@droneup.com; jacqueline.putegnat@droneup.com; markprosper@ymail.com; ngrden@reinventhr.org; dan.jakab@droneup.com;
David.smith@vsp.virginia.gov; earthcare@aol.com; marchuleta@edgeautonomy.io email; patrick.santucci@droneup.com; michele@macjamlaw.com;
w.i.fredericks@advancedaircraftcompany.com; vippnv@earthlink.net;
trevor brinkman@surryschools.net; maria.mendez@inertiallabs.com; dbutton@edgeautonomy.io;
Tim@startwheel.org, charles.e.juenger@nasa.gov; pgleavy3@gmail.com; ben.g@elsight.com;

