UAS and SmallSat Weekly News

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

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Florida Ban on Foreign Drones for State Use Takes Effect Miriam McNabb April 06, 2023

Florida has now banned state and local government agencies from using drones from a "foreign country of concern," which means that thousands of DJI drones being used by public safety departments cannot be used.

The ban took effect on Wednesday, April 5 2023. The ban does not affect commercial and private drone use.

The Florida law is an unfunded mandate, which will force individual public agencies to come up with the money to replace their drone fleets and train staff on new technology.

While Florida Gov. Ron DeSantis has repeatedly claimed that Chinese drone technology poses a security risk, a survey by DRONERESPONDERS indicates that more than 90% of Florida public safety agencies are currently using DJI drones, as is the case across the country.

The ban has met with significant negative response today, as users and stakeholders calculate the value of hardware which will now need to be replaced. According to one local Florida news station, "the Broward Sheriff's Office has grounded 63 drones, purchased at a cost of $300,000, while Miami-Dade police and fire rescue have had to ground 41 drones, which cost more than $200,000."

Florida's Department of Management Services has published a short list of approved drone providers: *Pursuant to section 934.50(7)(b), Florida Statutes, the department hereby provides the following list of approved manufacturers whose drones may be purchased or otherwise acquired and used by a governmental agency under section 934.50, Florida Statutes:*

- *Skydio*
- *Parrot*
- *Altavian*
- *Teal Drones*
- *Vantage Robotics*

The list appears to be based on the Department of Defense's DIU "Blue sUAS" list but is a list of manufacturers rather than platforms. The list does not include all US-manufactured or NDAA

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

compliant drones. https://dronelife.com/2023/04/06/florida-ban-on-foreign-drones-for-state-use-takes-effect/

BVLOS Power Line Inspection, No Visual Observers: The Phoenix Air Unmanned Waiver Miriam McNabb April 06, 2023 by DRONELIFE Staff Writer Ian M. Crosby

The Federal Aviation Administration has granted Phoenix Air Unmanned, LLC (PAU) a broad area waiver authorizing beyond visual line of sight (BVLOS) flights for conducting utility powerline inspections. This authorization applies throughout the United States, and builds upon thousands of miles of flight experience with BVLOS transmission line inspection.

PAU Managing Director William Lovett said, "We have flown over 13,000 miles of inspections for Xcel Energy under FAA BVLOS waivers and can now scale the same services to all utilities across the United States."

The authorization allows PAU to conduct operations beyond the visual line of sight of the remote pilot in command and visual observers and to fly over both people and moving vehicles. The waiver is reliant upon a safety case incorporating electronic airspace surveillance, an explicit operating area, and performance criteria guaranteeing operational safety. https://dronelife.com/2023/04/06/bvlos-power-line-inspection-no-visual-observers-whats-involved-in-the-pheonix-air-unmanned-waiver/

McLean startup raises $75M for air taxi network MARCH 30, 2023 PAUL BIBEAU

Air taxis are close to becoming reality. The industry could generate up to $16 billion in new business investments in Virginia and carry as many as 66 million passengers by 2045, according to a January report from the Virginia Innovation Partnership Corp. and the state commerce and trade secretary.

But those taxis will require management so they don't crash into other aircraft. That's where McLean-based AURA Network Systems Inc. comes in.

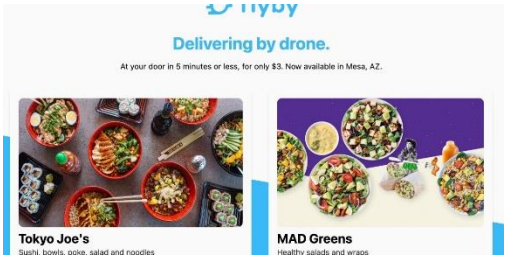
AURA — which stands for Advanced Ultra Reliable Aviation — is developing a secure, regulatory-compliant network that can control unmanned, remotely piloted aircraft on

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

extended flights beyond an operator's visual line of sight. In November 2022, AURA raised $75 million in financing from investment companies including Fortress Investment Group LLC and Mudrick Capital Management LP. AURA has an exclusive license from the Federal Communications Commission to operate its network on the 450 MHz band, which is reserved for aviation purposes.

AURA tested its network in Maryland in July 2022. Pilots flew a Cessna 208 Caravan while the network tested its ability to switch control of the plane from one ground station to the other. The next step is to build a network for specific companies. That will probably first be cargo companies, which will use the network for delivery routes.
https://www.virginiabusiness.com/article/mclean-startup-raises-75m-for-air-taxi-network/?oly_enc_id=9130E4751801F0T

Flyby pairs $4 million seed infusion with drone delivery pilot launch Bruce Crumley - Apr. 7th 2023



Automated drone company Flyby has announced a pair of significant developments in its business expansion plans, with a launch of aerial food delivery activities coinciding with a $4 million infusion of seed financing.

Founded in 2020 by a group of engineers hailing from Yale, NASA's Jet Propulsion Laboratory, and Anduril, Flyby has been developing UAVs to provide end-to-end automated applications – including inspection and public safety uses – while readying launch of its own delivery activities. This week, Flyby said it would commence those by transporting orders for several specialized food retailers in select cities under a pilot program it expects expand over time.

At the same time, Flyby revealed it had secured $4 million in seed funding to scale its business pursuits from MaC Venture Capital, Weekend Fund, Anthemis, and Evening Fund, in addition to several other backers.

Though Los Angeles-based Flyby has been producing its F-11A UAVs using machine learning architecture to allow clients to run AI applications on the edge for fully automated operations, it has also been gearing itself up to enter the expanding drone delivery sector. This week it said it is starting those in cities like Mesa, AZ with an initial group of food partners.

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

Those include Nekter Juice Bar, the MAD Greens salad outlet, Tokyo Joe's sushi restaurants, and crunchy shiitake mushroom chip maker Popadelics. https://dronedj.com/2023/04/07/flyby-pairs-4-million-seed-infusion-with-drone-delivery-pilot-launch/#more-92261

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US senators introduce legislation to reauthorize test sites in support of UAS research April 6, 2023 Jenny Beechener

US senators Mark Warner and John Hoeven have introduced legislation to support the research and development of unmanned aerial systems (UAS) technologies at the nation's UAS test sites.

The legislation:

- Extends the authorization for the FAA's UAS test sites for an additional five years through 2028;
- Formally authorizes research grants through the FAA for the purpose of demonstrating or validating technology related to the integration of UAS in the national airspace system;
- Requires a grant recipient to have a contract with an FAA UAS test site;
- Identifies key research priorities, including detect and avoid capabilities; beyond visual line of sight (BVLOS) operations; operation of multiple unmanned aircraft systems; unmanned systems traffic management; command and control; and UAS safety standards. https://www.unmannedairspace.info/latest-news-and-information/us-senator-introduce-legislation-to-reauthorise-test-sites-in-support-of-uas-research/

UAV market to grow from $26.2b in 2022 to $38.3b by 2027 at CAGR of 7.9% April 6, 2023 Jenny Beechener

The acceptance of UAVs or drones has steadily been increasing across the world for use in law enforcement and commercial applications. UAVs are witnessing increased demand owing to their cost-effectiveness and advancements over the last couple of years, according to Markets and Markets

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

Rising demand for military C4ISR capabilities is driving the demand for UAVs. Drones are used to gather data about ongoing and life-threatening military missions with the help of their command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities which are used to reinforce, boost, or implement command and control strategies and directives within military and intelligence frameworks.

C4ISR powered by AI uses machine learning to identify and classify tanks and other vehicles, improves image feeds, and provide driving assistance by giving early warning on obstacles and changing ground conditions. Governments are also quickly adopting these technologies to improve their defense arsenal. https://www.unmannedairspace.info/latest-news-and-information/uav-market-to-grow-from-usd26-2b-in-2022-to-usd38-3b-by-2027-at-cagr-of-7-9/

H2FLY "successfully passes liquid hydrogen fueling tests for its HY4 aircraft" April 5, 2023 Philip Butterworth-Hayes

H2FLY, the Stuttgart-based developer of hydrogen fuel cell systems for aircraft, today announced that it has successfully passed liquid hydrogen on-ground filling tests with the newly developed liquid hydrogen tank which is integrated into its HY4 aircraft.

"The efforts are part of the European project HEAVEN, a consortium of five partners to demonstrate the feasibility of using liquid, cryogenic hydrogen-powered fuel cell powertrain in aircraft, led by H2FLY," reports the company. "H2FLY has successfully passed the filling tests of the new liquid hydrogen storage system which is designed and supplied by its project partner Air Liquide based on H2FLY's requirements. The filling procedure took place in preparation for the forthcoming coupling tests in which the liquid hydrogen storage system will be coupled with the fuel cell system to form a complete hydrogen-electric powertrain. H2FLY led the test campaign on Air Liquide's Campus Technologies Grenoble, in Sassenage, France together with Air Liquide.

Prof. Dr. Josef Kallo, co-founder and CEO of H2FLY says "The successful on-ground filling tests today, mark the next milestone in our pursuit to doubling the range of our HY4 aircraft. It is a critical step for our upcoming flight test campaign this summer, which will demonstrate the feasibility of liquid hydrogen as a fuel for medium and long-haul flight."
https://www.unmannedairspace.info/latest-news-and-information/h2fly-successfully-passes-liquid-hydrogen-fuelling-tests-for-its-hy4-aircraft/

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Teal partners with Volatus Aerospace to provide connectivity to cellular-equipped drones April 6, 2023 Jenny Beechener

Teal has partnered with Volatus Aerospace to provide global mobile carrier agnostic connectivity for cellular-equipped drones to bring reliable autonomy and beyond visual line of sight (BVLOS) operations to clients, says the press release.

Teal provides single and multi-eSIM connectivity designed to give their clients the ability to connect any drone onto any network globally. Roaming is expensive, and Teal connects cellular-equipped drones directly onto global networks. This translates into lower latency, higher redundancy, higher throughput, and cost savings.

Volatus Aerospace has begun the roll out of Teal's eSIM platform in Canada and the United States, with the goal of rolling out Teal on all global cellular-equipped drones.
https://www.unmannedairspace.info/latest-news-and-information/teal-partners-with-volatus-aerospace-to-provide-connectivity-to-cellular-equipped-drones/

Flyby Launches Food Drone Delivery With Nekter Juice Bar, Salad Collective April 10, 2023 News

Today Flyby Robotics, the end-to-end drone automation and delivery company, announced that they have raised $4M in pre-seed investment funding. The round was led by MaC Venture Capital, with participation from Weekend Fund, Anthemis, and Evening Fund. Other strategic investors include Naval Ravikant, (Co-Founder of AngelList); Balaji Srinivasan, (Finance and former CTO of Coinbase); Karen Pritzker's VC fund, Gaingels, Ryan Hoover (Founder at Product Hunt); and Cliff Sirlin (Managing Director at LaunchCapital).

Founded by a team of engineers out of Yale, NASA's Jet Propulsion Laboratory, and Anduril, Flyby was created to unlock the labor-saving potential of UAV technology for every merchant.

This news comes alongside their pilot launch and a series of active partnerships with food retailers and innovative snack brands across the US. The first cohort of live retailers include smoothies from Nekter Juice Bar, salad from MAD Greens, sushi from Tokyo Joe's, and crunchy

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

shiitake mushroom chips from Popadelics. During the live pilot, customers from participating retailers can order drone delivery for just $3, and experience delivery times averaging under 4 minutes. https://uasweekly.com/2023/04/10/flyby-launches-food-drone-delivery-with-nekter-juice-bar-salad-collective/?utm_source=rss&utm_medium=rss&utm_campaign=flyby-launches-food-drone-delivery-with-nekter-juice-bar-salad-collective&utm_term=2023-04-10

The Drone Racing League Makes History by Streaming Full Season in a Metaverse World April 10, 2023 Drone Racing

The Drone Racing League will air their 2022-23 DRL Algorand World Championship Race Finals on Saturday, April 8th at 3pm EST on NBC, Youtube, Twitter, TikTok, Twitch, Instagram, and Facebook. With metaverse sports expected to grow to an $80 billion industry by 2030, DRL is championing the next phase of digital sports through its inaugural "DRL Metaverse Marathon" to become the first property to debut their entire season in the metaverse immediately following the broadcast.

The DRL Metaverse Marathon, developed by AI and Metaverse company, Meetkai, will showcase 13 levels of real-life and esports drone racing in a digital twin of the DRL SIM video game's popular MegaCity map. With only a mobile device or computer needed to enjoy the experience, fans will simply click a link to jump in as avatars, explore their favorite parts of this skyscraper-themed world, watch DRL through more immersive views, interact, and have the exclusive opportunity to meet the recently clinched-DRL Algorand World Champion Pilot MCKFPV (South Korea) among top DRL Pilots, including Hollywood drone-filmmaker Vanover (USA) and gamer-turned-pro-racer Halowalker (Germany).
https://uasweekly.com/2023/04/10/the-drone-racing-league-makes-history-by-streaming-full-season-in-a-metaverse-world/?utm_source=rss&utm_medium=rss&utm_campaign=the-drone-racing-league-makes-history-by-streaming-full-season-in-a-metaverse-world&utm_term=2023-04-10

New funding lifts diversified development of REGENT's seaglider Bruce Crumley - Apr. 10th 2023

Advanced air mobility company REGENT has gotten a boost in its effort to market its electric seaglider as a more affordable and efficient alternative to next-generation aircraft designed to operate from ground terminals, with investments from US defense giant Lockheed Martin and

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

Japanese freight and logistics firm Yamato Holdings.

REGENT announced the separate deals signed in recent weeks, saying the financial infusions of undisclosed amounts would assist its work in developing its flagship Viceroy seaglider. The company says it has already secured over 400 orders worth $7.9 billion from major airlines and leading ferry operators across different continents.

The funding comes from the investment unit Lockheed Martin Ventures, and Japan's largest parcel transporter and logistics group, Yamato. Following recent seeding from the Japan Airlines Innovation Fund, REGENT says it now possesses over $50 million in finances to continue developing its seaglider tech. https://dronedj.com/2023/04/10/new-funding-lifts-diversified-development-of-regents-seaglider/#more-92292

Start-up One Way Aerospace exits stealth with details on its FPV drone for Ukraine Bruce Crumley - Apr. 10th 2023

It isn't every day that a tech start-up comes out of stealth mode in the midst of a war threatening the very existence of its host country, but Kyiv-based One Way Aerospace is doing just that by unveiling its work to provide Ukraine with a range of affordable yet effective drone munition systems.

On Monday, One Way went public with its activities, supplying Ukraine with locally developed and produced drone systems in its defense against Russia's invasion. Central to those is its evocatively named AQV 100 Scalpel UAV, which observers of the conflict have seen dealing resounding blows to Russian targets without knowing it was a One Way invention.

Produced with Ukraine manufacturing partner Iziviz, One Way's Scalpel strike drone can carry a one to 2.5 kilo charge up to 10 km, flying at top speeds of 108 km/h. The company says that quickness, the craft's small size, and its quiet motors lower the risk of detection.

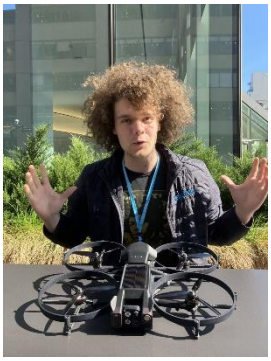
At $999 per unit, One Way says the Scalpel is several times less expensive than military-grade drones being supplied to Ukraine by Western companies. In addition to heavier-lift and longer-flying configurations of the Scalpel quadcopter, it also has a line of longer-range fixed-wing craft like the Scythe, which can carry between 36 to 70 kgs over 750 km. https://dronedj.com/2023/04/10/start-up-one-way-aerospace-exits-stealth-with-details-on-its-fpv-drone-production-for-ukraine/#more-92281

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

SWAT Drones Give 23-Year-Old Founder Net Worth Over $100 Million Blake Schmidt April 10, 2023

Now 23, Blake Resnick leads Brinc Drones, one of the largest makers of the aircraft in the US. The company, which has about 100 employees, has raised more than $80 million from the likes of OpenAI founder Sam Altman, former acting Defense Secretary Patrick Shanahan and even Sam Bankman-Fried.

With all that backing, his startup, founded in 2019, is now worth more than, $300 million making Resnick, who owns about half, a centimillionaire. He's a 2020 Thiel fellow — the program designed by PayPal co-founder Peter Thiel to undermine traditional education by encouraging young entrepreneurs to leave college and start companies with $100,000 grants.



Blake Resnick

His firm is carving out a niche in public safety, where the technology is relatively nascent after years of dominance by Chinese billionaire Frank Wang's DJI. Wang's company now faces regulatory challenges. In addition to US sanctions against DJI, at least nine states are considering a ban on Chinese-made drones for government agencies, following Florida's lead.

Brinc, is focused specifically on selling to some 7,000 SWAT teams across the country. Other US startups include Skydio, which has prominent backers such as Kevin Durant and In-Q-Tel, the venture arm of the Central Intelligence Agency.

https://www.bloomberg.com/news/articles/2023-04-10/a-23-year-old-becomes-centimillionaire-with-drones-for-swat-teams?utm_medium=social&cmpid=socialflow-twitter-business&utm_campaign=socialflow-organic&utm_source=twitter&utm_content=business

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Red Cat Holdings Invests in Firestorm Modular UAS Company Press Release

Red Cat Holdings, Inc. a military technology company integrating robotic hardware and software to protect and support the warfighter, has made a significant financial investment in Firestorm, an American company developing the first completely Modular Unmanned Aerial System that is 3D printed and payload agnostic.

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

Firestorm is building a new category of fixed-wing UAS with 30-day product iterations, a commitment to open-system architectures, and an additive manufacturing approach that allows them to scale production in an elastic manner.

"Firestorm is changing how UAV's can be designed, manufactured, and delivered quickly, and the Firestorm system solves a lot of problems for many critical situations. Their long-range and long-duration loitering capabilities are a cost-effective approach to winning in the air. We believe that our Teal 2 drone and the Firestorm UAV could be a great combination for the warfighter," said Red Cat CEO Jeff Thompson. https://www.uasvision.com/2023/03/16/red-cat-holdings-invests-in-firestorm-modular-uas-company/

Patent pending: Amazon pitches 'collective' drones, Walmart eyes dynamic shipping April 10, 2023 Max Garland Senior Reporter

Multiple drones could link together to form configurations ranging from a flying V to a large cube, an application from the online retail giant proposes. With their powers combined, they are a collective drone

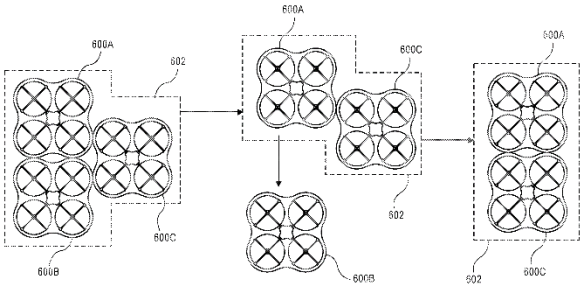

FIG. 6

The filing details a "collective" drone, or unmanned aerial vehicle (UAV), that transports a wide range of items by not being limited to the capabilities of a single drone.

"For example, rather than using one large UAV to carry a larger or heavier item, multiple smaller UAVs may couple together to form a collective UAV that is used to carry the larger or heavier item," the filing said.

The application shows various configurations for a collective drone, ranging from a flying V to a cube made up of 24 individual drones.

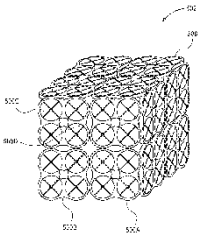
FIG. 5

Navigating as a collective drone also allows the coupled drones to share resources, reduce energy consumption and be more visible to other aircraft and air traffic control. The filing details ways drones can communicate to determine if they should form a collective drone. https://www.supplychaindive.com/news/patent-pending-amazon-collective-drone-delivery-walmart/646788/

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

How The Air Force Is Using Small Drones to Prove Big Capabilities EMMA

HELFRICH APR 10, 2023 THE WAR ZONE

Created by the Networked Weapons Laboratory, the customized small drones are designed to behave like the weapons they help develop.

Using small drones that look largely similar to the appearance of a radio-controlled hobbyist plane, the Air Force Research Laboratory (AFRL) is flight-testing various algorithms, behaviors, components, and concepts to inform the development of future weapons and air combat capabilities.

Known specifically as the Networked Weapons Laboratory (NWL), the drone fabrication shop falls under the leadership of the AFRL's Munitions Directorate, which describes itself as being "responsible for developing superior weapons technologies that are effective and affordable for our warfighter."

One of the UAVs used by the NWL. Credit: AFRL

Kevin O'Neal, chief of the Autonomy, Navigation, & Control branch within the AFRL's Munitions Directorate, told *The War Zone,* "The NWL uses several types of UASs to represent the in-flight performance of air-to-ground and air-to-air missile systems without the cost of using current munitions for each software or network test. This allows the NWL to iterate across multiple hardware and software programs on a weekly or daily cycle instead of a few very costly flights per year."

The NWL's drones offer a cost-effective and reusable way to evaluate these complex technologies without having to fit them inside a munition's body or more complex platform. https://www.thedrive.com/the-war-zone/how-the-air-force-is-using-small-drones-to-prove-big-capabilities

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

GA-ASI Successfully Tests MQ-20 Avenger UAV with Autonomous LEO Satcom Data Link April 11, 2023 News

On April 6, 2023, General Atomics Aeronautical Systems (GA-ASI) conducted live, tactical, air combat maneuvers using Artificial Intelligence pilots to control a company-owned MQ-20 Avenger® Unmanned Aircraft System. Collaborative maneuvers between human and AI pilots were conducted using GA-ASI's Live, Virtual, Constructive collaborative combat aircraft (CCA) ecosystem over a Low Earth Orbit satellite communication provider's IP-based Mission Beyond Line of Sigh datalink. The LEO SATCOM connection was also used to rapidly retrain and redeploy AI pilots while the aircraft was airborne, demonstrating GA-ASI's ability to update AI pilots within minutes.

This marks the first deployment of a LEO SATCOM provider connections running on an operationally relevant unmanned combat aerial vehicle platform. The team used two L3Harris Technologies RASOR Multi-Functional Processors – one that housed the transceiver card and another that controlled the Active Electronically Scanned Array (AESA). The test aircraft was outfitted with a Ball Aerospace BLOS AESA system, capable of full duplex operation. The demonstration highlighted GA-ASI's commitment to operationalizing CCA by fusing innovative future warfare technologies, such as GA-ASI's AI pilots and LVC ecosystem, and L3Harris and Ball Aerospace BLOS datalink solutions. https://uasweekly.com/2023/04/11/ga-asi-successfully-tests-mq-20-avenger-uav-with-autonomous-leo-satcom-data-link/?utm_source=rss&utm_medium=rss&utm_campaign=ga-asi-successfully-tests-mq-20-avenger-uav-with-autonomous-leo-satcom-data-link&utm_term=2023-04-11

12Apr23

DRONE SAFETY DAY 2023 SET FOR END OF APRIL April 11, 2023 Sally French

It's no Christmas or Halloween, but the drone industry's own holiday is coming this month. Called "Drone Safety Day 2023," it's a holiday invented by the Federal Aviation Administration, and it's set for Saturday, April 29, 2023.

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

Drone Safety Day is conjured up by the FAA, but it's made possible by individual companies and organizations around the country. In a symbiotic relationship, those groups put on real, live individual events to ride the wave of the FAA's marketing of the 'holiday.'

It's an opportunity for businesses, schools, and organizations to share how they use drones with the broader community, and drone enthusiasts get an excuse to share their passion. Of course, the heavily-safety-oriented FAA gets a platform to continue to hammer home its safety message. https://www.thedronegirl.com/2023/04/12/drone-safety-day-2023-april-faa/

U.S. defense industry plans first Taiwan trip in four years

RYO NAKAMURA, Nikkei April 11, 2023

U.S. airmen with an Air Force drone in Afghanistan in March 2016. Uncrewed vehicles are seen as key to deterring a Chinese attack on Taiwan. © Reuters

WASHINGTON -- Around 25 U.S. defense contractors plan to send representatives to Taiwan in early May to discuss joint production of drones and ammunition, US Taiwan Business Council President Rupert Hammond-Chambers told Nikkei, as Washington explores various options to help bolster the island's defenses.

The delegation will be led by Steven Rudder, the retired commander of the U.S. Marine Corps Forces Pacific. This would be the first large group of envoys focused specifically on the defense industry to visit Taiwan from the U.S. since 2019.

In addition to talks with representatives from the Taiwanese defense industry, it is looking to meet with Taiwanese President Tsai Ing-wen.

Hammond-Chambers said that Tsai is focused on bolstering Taiwan's defense industry and that the trip is meant "to promote defense industry cooperation with Taiwan."

The U.S. delegation will look for opportunities to provide advanced technology and jointly develop drones with Taiwanese companies. Several American defense contractors with drone expertise will take part in the upcoming trip. https://asia.nikkei.com/Politics/International-relations/Taiwan-tensions/U.S.-defense-industry-plans-first-Taiwan-trip-in-four-years#:~:text=WASHINGTON%20%2D%2D%20Around%2025%20U.S.,help%20bolster%20the%20island's%20defenses.

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

SkyDrop Receives Approval from New Zealand's CAA to Launch Regular Drone Deliveries April 12, 2023

SkyDrop (formerly Flirtey), announced that it has now received Part 102 approval from New Zealand's Civil Aviation Authority to launch SkyDrop's first drone hub in Huntly, New Zealand. With this groundbreaking approval, SkyDrop is now the first company approved for live store to door drone delivery in New Zealand, which includes certain beyond visual line of sight operations. This marks a major milestone for the drone delivery solutions provider in its quest to make drone delivery accessible to larger populations.

The CAA granted the approval after conducting a thorough review of SkyDrop's technology and operating procedures. Underpinning this approval is SkyDrop's industry-leading safety technology including an onboard Parachute Recovery System which was reviewed by the CAA.

The risk assessment method that secured this approval can be adapted to additional locations to build a nationwide network of drone hubs across New Zealand, and to Australia, Canada, and the European Union member countries who all use the JARUS SORA method.
https://uasweekly.com/2023/04/12/skydrop-receives-final-approval-from-new-zealands-caa-to-launch-regular-drone-deliveries/?utm_source=rss&utm_medium=rss&utm_campaign=skydrop-receives-final-approval-from-new-zealands-caa-to-launch-regular-drone-deliveries&utm_term=2023-04-12

Skyports to run Orkney's interisland drone delivery for Royal Mail Bruce Crumley - Apr. 12th 2023

The delivery division of UK drone services and advanced air mobility infrastructure company Skyports has been selected to operate aerial distribution routes between Scotland's Orkney islands for the national postal company, Royal Mail.

Skyports Drone Services will be launching the Orkney I-Port drone delivery project for Royal Mail during an initial three-month trial period in the coming weeks and hopes to extend it permanently from there. The pilot phase is being partially underwritten by a grant from the UK Department for Transport's Freight Innovation

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

Fund, which earlier this week selected Skyport's proposal for the new, sustainable approach to cargo transportation across the chain.

Under the plan, Skyports will oversee the interisland distribution of Royal Mail letters and parcels flown to Orkney's main postal facility in Kirkwall. In doing so, the company's delivery UAVs will take over feeder activities to local post offices for last-mile distribution currently handled by ferries. Due to the archipelago's often harsh and rapidly changing weather conditions, the maritime link of mail flows is vulnerable to recurring interruptions.
https://dronedj.com/2023/04/12/skyports-to-run-orkneys-interisland-drone-delivery-for-royal-mail/

13Apr23

Department of Defense to Purchase Unmanned Helicopters from Spain's Alpha Unmanned

Miriam McNabb April 12, 2023 by DRONELIFE Staff Writer Ian M. Crosby

The U.S. Department of Defense has awarded system integrator Rapid Expeditionary Concepts with a prime contract for the purchase of Alpha 900 unmanned helicopter systems manufactured by Alpha Unmanned Systems for integration, test, evaluation, and deployment. The Prime, a provider of end-to-end Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance & Reconnaissance solutions, will oversee the integration of a specialized electro-optical sensor for use in counter-unmanned aerial system operations. Along with the fully integrated solution, The Prime and Alpha will offer deployment and training support for the Alpha 900 in a joint operational evaluation held by the Department of Defense over the next two years.

The Prime possesses considerable experience adapting commercial-off-the-shelf technology for customers in the defense, energy, and special operations sectors. The Prime leverages its expertise to turn end-user-provided operational requirements into technical solutions, surpassing the U.S. DOD's requirements to create a CUAS solution utilizing the Alpha 900.
https://dronelife.com/2023/04/12/u-s-department-of-defense-to-purchase-unmanned-helicopters-from-spains-alpha-unmanned/

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

Bill Calls for Reauthorization of UAS Test Sites and Continued UAS Research & Development

Commercial UAV News Staff APRIL 10, 2023

Recently, Sens. Mark R. Warner (D-VA) and John Hoeven (R-ND) introduced legislation to boost UAS research and development of unmanned aerial systems (UAS) technologies at the nation's UAS test sites. Established through the FAA Modernization and Reform Act of 2012, these sites are aimed at providing "verification of the safety of public and civil UAS, operations, and related navigation procedures before their integration into the national airspace system (NAS)."

There are currently seven UAS test sites in the US:

- Griffiss International Airport, NY
- New Mexico State University, NM
- North Dakota Department of Commerce, ND
- State of Nevada, NV
- Texas A&M University Corpus Christi, TX
- University of Alaska Fairbanks, AK
- Virginia Polytechnic Institute & State University, VA

The introduction of the Warner/Hoeven bill comes at a time of increased focus on furthering uncrewed technology in the US. For example, in February, Warner joined Senator John Thune (R-SD) to put forward the "Increasing Competitiveness for American Drones Act of 2023." That bill would revamp the process for acquiring waivers from the Federal Aviation Administration (FAA) for drone flights beyond visual line of sight (BVLOS).

https://www.commercialuavnews.com/regulations/warner-hoeven-introduce-legislation-to-reauthorize-uas-test-sites-support-unmanned-aerial-systems-research-development?mkt_tok=NzU2LUZXSi0wNjEAAAGLGsEjZ_BiyujEiFZKoyxFhnlzkEVqaeN0nRE5Ih42T6efykUMs8acF_N_NCJchxIP0S78H1Q_jrTE4I21bcH3LQtl9ru1m2TmB1MyULr3cuZxClk

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

Faster, Greener, Cheaper, Quieter, and Safer: Manna Drone Delivery in Ireland

APRIL 10, 2023 Juan Plaza

After so many years of promises and expectations, it feels good to report on current applications for uncrewed aerial technology and companies that are actually accumulating the necessary experience and business sense to become profitable.

Manna Drone Delivery has managed to create a unique business model that has allowed the company to grow and expand geographically in a way that would make it profitable by Q4 this year.

We had a fascinating conversation with Bobby Healy, CEO of Manna Drone Delivery, in which he explained the business model, the history, and the exciting road ahead as they plan their North American launch.

"We see ourselves as a logistics company," said Healy. "Our model is to place the product of any vendor at the suburban home of any consumer in our covered area. In other words, we are product agnostic, and even though most requests are for food, the set-up is designed to support any product."

Currently the service is concentrated in the Dublin suburb of Balbriggan and the number of deliveries is staggering. https://www.commercialuavnews.com/drone-delivery/faster-greener-cheaper-quieter-and-safer-manna-drone-delivery-and-the-reality-of-drone-deliveries-in-ireland?mkt_tok=NzU2LUZXSi0wNjEAAAGLGsEjZ6-Nmh_w2qtpQnNfxq99UYwEOAbJVZPJjdov32VQR96AWeeGpYAaiz2LwzTUAXHCzkmIPuZtVjBFEiKxBpplpEa0pGep45ZGFgUI49Vu14I

Xwing's Superpilot Becomes FAA's First 'Standard' UAS Certification Project

Commercial UAV News Staff APRIL 12, 2023

Autonomous aviation company, Xwing, has submitted a Project Specific Certification Plan (PSCP) to the Federal Aviation Administration (FAA), becoming the first Standard Category large unmanned aerial system (UAS) to receive official project designation. This marks the beginning of the process for approval of uncrewed commercial cargo operations in the national airspace.

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

Unlike other aviation projects that focus on augmenting piloted operations with autonomous technology or have Special Category certification, Xwing's Superpilot technology integrates into existing type certified aircraft to enable uncrewed operations that work within the existing air traffic control system. Superpilot harnesses advanced AI and machine learning technologies to become the world's first fully autonomous gate-to-gate flight technology.

The company's PSCP submission is the result of years of collaboration between Xwing and FAA officials to develop a certification plan for UAS approval. With project designation, Xwing is now on a recognized path toward regulatory approval for uncrewed commercial cargo flights. This process represents the first time the FAA has assigned resources to a UAS for a Standard Category airworthiness certificate. https://www.commercialuavnews.com/regulations/xwing-s-superpilot-becomes-faa-s-first-standard-uas-certification-project?mkt_tok=NzU2LUZXSi0wNjEAAAGLGsEjZwe9z_uUazYPF6kBeN2gNUqnEWD8fdFJSAOWrUBvCloWriE1tVkL5Kvu0j723WLEYPY9Zwq7_TYB3VIno2jEgP1inxhcwvHYrT5MYwygnmA

Kea Aerospace debuts solar-powered stratospheric UAS with Audi EV technology April 13, 2023 News

The New Zealand-based company Kea Aerospace has developed an innovative solar-powered stratospheric aircraft, called the Kea Atmos Mk 1, which is designed for high-altitude flight testing. The aircraft has a wingspan of 12.5 meters and weighs under 40 kilograms, making it lightweight enough to fly at altitudes higher than commercial airliners, up to 50,000 feet. To launch the Kea Atmos Mk 1, Kea Aerospace is using an Audi e-tron Sportback electric vehicle, which provides the necessary power to get the aircraft off the ground.

According to Kea Aerospace CEO Mark Rocket, the company has been building and testing a range of electric-powered aircraft and high-altitude balloons as part of its program to build a global fleet of solar-powered uncrewed aircraft that will fly in the stratosphere for months at a time. The X10 aircraft, which Kea Aerospace flew in February 2022 for 36 hours non-stop, proved the perpetual flight capability at low altitudes.

Each Kea Atmos Mk 1 aircraft will carry a suite of advanced aerial imagery equipment that offers game-changing advances for many industries including environmental monitoring, precision agriculture, disaster management, and maritime awareness. https://uasweekly.com/2023/04/13/kea-aerospace-debuts-solar-powered-stratospheric-uas-with-audi-

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

ev-technology/?utm_source=rss&utm_medium=rss&utm_campaign=kea-aerospace-debuts-solar-powered-stratospheric-uas-with-audi-ev-technology&utm_term=2023-04-13

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Drone News of the Week, April 14: DRONELIFE Headlines, All in One Place

Miriam McNabb April 14, 2023

Excerpts from the DRONELIFE drone news of the week ending April 14, 2023.

Czech Primoco UAV to Supply Navigational Calibration System for Airports

Czech UAV manufacturer Primoco UAVhas signed a contract to supply Malaysian company GIAAN GROUP with a new NAVAID calibration system. This calibration solution is utilized by the Primoco UAV One 150 UAVs, and has applications in the inspection, calibration, and evaluation of a range of airport navigation equipment including ILS/VOR/DME/TACAN/COM, as well as visual tools such as PAPI/VASI. GIAAN seeks to leverage the system to conduct calibration missions at airports within the Southeast Asia region. The EUR 3.7 million contract also includes the purchase of two 150 UAVs.

Mapping Paradise: Event 38 and PLACE Partner to Map Turks and Caicos

Mapping drone manufacturer Event 38 Unmanned Systems has announced the successful deployment of its E400 fixed-wing mapping drone for the collection of aerial imagery and mapping data in Turks and Caicos, which had not been mapped in at least ten years. In only a few days, the drone gathered sufficient data to produce orthomosaics of the entirety of both islands, totaling 238 square kilometers. The project was conducted by PLACE, a global non-profit organization granting access to mapping data by providing hyperlocal and precise optical imagery. https://dronelife.com/2023/04/14/drone-news-of-the-week-april-14-dronelife-headlines-all-in-one-place-to-read-or-listen/

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