UAS and SmallSat Weekly News

Contents

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29Aug20

Autonomous Air Taxi Concept Unveiled 25 Aug 2020 Mike Ball

UAVOS has unveiled a new concept for an autonomous air taxi vehicle based on an all-electric, tandem-rotor helicopter design. SumoAir, which can be operated manually as well as autonomously, consists of a five-seater passenger section and a pilot cabin. The new project forms part of the company's R&D efforts to explore the fundamental technologies behind electric aircraft and the emerging urban air mobility market.

The SumoAir unmanned helicopter is powered by two large three-bladed horizontal rotors with a diameter of 23 ft, mounted one in front of the other, driven by two electric motors at around 520 rpm to ensure a low acoustic footprint. Built-in-safety features include autorotation flight and landing capabilities. UAVOS has designed the platform with a cruise speed of approximately 87 mph with a flight endurance of up to 1.3 hours. The aircraft will be able to cruise at altitudes of up to 8200 ft. Measuring 37.7 ft in length and 24.6 ft in width, it will be able to carry up to 3700 lb. https://www.unmannedsystemstechnology.com/2020/08/autonomous-air-taxi-concept-unveiled/

New product by Volarious turns DJI Mavic 2 into a tethered drone Scott Simmie Aug. 28th 2020

It's a clever idea. Take an off-the-shelf Mavic 2 and give it the ability to capture data over an extended period of time – or even an extended geographical area. We can envisage many use-case scenarios where an operator might simply want a drone to persistently hover and monitor a specific situation. Think crowds, civil unrest, even use by firefighters in fire suppression. That's precisely what a Singapore-based company, Volarious, has in mind.

The product is called the V-Scout. And it's a pretty cool idea: Using a special battery, it tethers a Mavic 2 to a box that auto-unreels the tether and uses a sensor to continuously maintain the correct tension.

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"We believe the market is in the public safety and border patrol sector," responded Weiliang Zhang, CEO of parent company Avetics Global Pte Ltd. and one of the founders. The great thing about tethered systems is that they can continuously deliver power. That means the Mavic 2 can stay in the air as long as you're willing to keep monitoring it. https://dronedj.com/2020/08/28/new-product-by-volarious-turns-dji-mavic-2-into-a-tethered-drone/#more-34689

Easy Aerial Announces $6.15M in Series A Funding August 26, 2020 News

Easy Aerialannounced today that it has successfully raised $6.15M in Series A funding. This funding round was led by the same private investment group that participated in the company's initial seed rounds totaling $4.75M between 2017 and 2019. The oversold round, which was closed prior to its opening, also saw the participation of several new strategic investors.

The lead private investment group's sustained investment, along with the addition of new investors, is a testament to the confidence the private investment community has in the company, even amidst COVID-19 uncertainties.

The new investment round will enable Easy Aerial to further capitalize on its position as a leading innovator in autonomous monitoring solutions. This includes rapidly scaling to meet growing commercial, government and military demand in both the United States and internationally and adding new sales and support offices in Israel. https://uasweekly.com/2020/08/26/easy-aerial-announces-6-15m-in-series-a-funding/?utm_source=rss&utm_medium=rss&utm_campaign=easy-aerial-announces-6-15m-in-series-a-funding&utm_term=2020-08-28

DJI on U.S. Government Drone Regulation and Fear-Based Policies: "Everyone Pays" Miriam McNabb August 27, 2020

Part 107 was lauded as opening the doors to the commercial drone industry – and was developed in collaboration with industry stakeholders.

"But Part 107 was four years ago," says DJI's VP of Policy and Legal Affairs Brendan Schulman. "And I hate to say it, but to many of you

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it's obvious: That was America's high-water mark for drone regulation… since then, progress on regulations has stagnated."

The FAA promised to develop a framework for routine flight over people and night operations quickly – but the promised regulations have stalled since U.S. security agencies stepped in. A proposed rule for Remote ID, which was widely expected to be a stepping stone to those regulations, was delayed for more than two years: and remains a complex and solution.

Commenting that the FAA had not followed the recommendations of its own Rulemaking Committee in developing the Remote ID proposal, Schulman says that the 53,000 comments filed on the proposal are "a clear signal that there is broad concern about the FAA proposal."

"Now if nothing changes, fear-based policy is going to cost you money, make it more complicated to fly, and delay your ability to fly in expanded operations. But there are even worse proposals out there. Some would take away your ability to choose the best drone for your job, or force you to buy a certain type of drone, or even ground your operation, no matter how beneficial." https://dronelife.com/2020/08/27/dji-on-u-s-government-drone-regulation-and-fear-based-policies/

30Aug20

Drones dropping "Dragon Eggs" are Colorado's latest aerial assault weapon for wildfires

AUG 28, 2020 Jason Blevins @jasonblevins The Colorado Sun — jason@coloradosun.com

GLENWOOD CANYON — Flames erupt on the hillside as plumes of smoke billow into the hazy sky above the Colorado River. A box of "Dragon Eggs" are dropped from a helicopter or drone to help spark controlled fires that create containment lines.

Kelly Boyd piloted a drone that dropped balls of fiery chemicals, called Dragon Eggs,that ignited the sprawling bowl of scrub oak, piñon and sage in what firefighters call a "burnout operation." The flames crawled down the basin, charring dry timber and foliage along the southeast edge of the 32,000-acre Grizzly Creek fire. That burned barrier connected two other containment lines, creating a barrier on the fire's southern edge that prevented it from spreading any farther south. By Wednesday, thanks in part to the burnout on that southern flank, firefighters were able to increase their containment of the wildfire to 61%.

Drones did more than surgically strafe the cliffside with Dragon Eggs, which contain 3 grams of potassium permanganate and drop from a gizmo bolted to the drone that injects them with

glycol to create a chemical reaction that causes them to burn for about a minute after hitting the ground. The Unmanned Aircraft Systems also scan the edge of fires with an infrared camera to identify hotspots where crews can bury or douse rogue embers that hop containment lines. https://coloradosun.com/2020/08/28/drones-dropping-dragon-eggs-colorado-firefighting-grizzly-creek/?utm_source=Airborne+International+Response+Team+%28AIRT%29+News+List&utm_campaign=cf962ba20b-EMAIL_CAMPAIGN_2020_08_30_11_36&utm_medium=email&utm_term=0_2ecada6f57-cf962ba20b-33089729

Amateur drone videos could aid in natural disaster damage assessment 28-AUG-2020 CARNEGIE MELLON UNIVERSITY

PITTSBURGH--It wasn't long after Hurricane Laura hit the Gulf Coast Thursday that people began flying drones to record the damage and posting videos on social media. Those videos are a precious resource, say researchers at Carnegie Mellon University, who are working on ways to use them for rapid damage assessment.

By using artificial intelligence, the researchers are developing a system that can automatically identify buildings and make an initial determination of whether they are damaged and how serious that damage might be.

Satellite imagery doesn't provide enough detail and shows damage from only a single viewpoint -- vertical. Drones, however, can gather close-up information from a number of angles and viewpoints. It's possible, of course, for first responders to fly drones for damage assessment, but drones are now widely available among residents and routinely flown after natural disasters. https://www.eurekalert.org/pub_releases/2020-08/cmu-adv082720.php?utm_source=Airborne+International+Response+Team+%28AIRT%29+News+List&utm_campaign=cf962ba20b-EMAIL_CAMPAIGN_2020_08_30_11_36&utm_medium=email&utm_term=0_2ecada6f57-cf962ba20b-33089729

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Manned eVTOL Takes Test Hop in Japan Russ Niles August 30, 2020

A Japanese company has completed what it says is the first manned test of a single-seat octocopter in the country. SkyDrive did a four-minute hop with the SD-03 electric VTOL vehicle

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at the Toyota Test Field on Aug. 28. The pilot was at the controls, but computers helped him maintain stability. There were also backup remote-control pilots watching from the ground. The company says the SD-03 has a separate motor for each of the eight rotors, which work in counter-rotating pairs.

Size matters in crowded places like Japan and the company says the SD-03 has the smallest footprint of any manned eVTOL. The aircraft is 13 feet square and stands 6 feet high and "requires only as much space on the ground as two parked cars." The company repeatedly refers to the aircraft as a "flying car" in its literature but it isn't equipped to drive on the road. The company is hoping Japan's aviation regulators will sign off on flights outside the testing field before the end of the year. https://www.avweb.com/aviation-news/manned-evtol-takes-japanese-test-hop/?MailingID=437

Westpac Little Ripper drone protects beachgoers from sharks Josh Spires Aug. 31st 2020

The Westpac Little Ripper drone has been flying over Port Macquarie-Hastings in Australia for the past few months, alerting beachgoers of nearby sharks. The shark-spotting drone has sounded the alarm 14 times in four months.

The shark-spotting drone is equipped with the SharkSpotter AI that can detect sharks based on the type while letting the drone operator know whether the shark is dangerous.

A local surf school has been able to improve the safety factor by running the school in the waters that are protected by the drone. This has allowed parents to have greater peace of mind when it comes to their children's safety.

Drones are being used by Australian lifeguards to monitor and track sharks swimming in and around popular beaches. The drone known as the Little Ripper uses AI to detect sharks, alerting lifeguards, emergency services, and swimmers. The shark-spotting drone has a 90% accuracy rate, while current manned aircraft have accuracy rates of around 20%.
https://dronedj.com/2020/08/31/westpac-little-ripper-drone-protects-beachgoers-from-sharks/

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DARPA's Gremlin program completes second round of testing Josh Spires Aug. 31st 2020

The second round of testing focused on risk-reducing flights in preparation for tests later on in the year.

The tests took place over a few days near the end of July with the X-61A UAVs successfully passing all tests. The tests focused on the recovery systems and were able to keep one of them in the air for more than two hours. The X-61A UAV was also able to fly in formation with a C-130 aircraft at a distance of 125 feet.

The team will start its third round of testing later this year in October to recover the first X-61A UAVs and then two during the same flight. By the end of the year, the team hopes to have wrapped up the testing phase and be able to capture four X-61A UAVs within 30 minutes. https://dronedj.com/2020/08/31/darpas-gremlin-program-completes-second-round-of-testing/

Emesent's Hovermap Pilots the World's First Underground Drone Flight with the DJI M300 August 29, 2020 Mapping and Surveying

The flights took place on 4 August at the Round Oak Mt Colin copper mine in Cloncurry, Queensland and were followed by similarly successful flights at another underground mine on the 13th of August.

Emesent's Hovermap LiDAR mapping and autonomy payload was used to add advanced autonomy to the newly launched DJI Matrice 300 RTK. Coupling Hovermap with the M300 allows users to let the drone fly autonomously and safely into GPS-denied or inaccessible environments, such as densely packed warehouses, the undersides of bridges and in underground mines. https://uasweekly.com/2020/08/29/emesents-hovermap-pilots-the-worlds-first-underground-drone-flight-with-the-dji-m300-rtk/?utm_source=rss&utm_medium=rss&utm_campaign=emesents-hovermap-pilots-the-worlds-first-underground-drone-flight-with-the-dji-m300-rtk&utm_term=2020-08-31

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Schiebel & Nordic Conduct World's First Full-scale Offshore UAV Flight For Equinor August 28, 2020 News

Schiebel, together with partner Nordic Unmanned, successfully demonstrated to Norwegian energy company Equinor the cargo delivery capability of its CAMCOPTER® S-100 to offshore platform Troll A. This is a world's first full-scale offshore UAV delivery from shore to an active oil and gas installation.

The exercise simulated the scenario of an urgent requirement for spare parts at the gas production platform located in the North Sea. The distance was 55 nm. The flight trials also included a successful Search and Rescue mission, where a "man over board" dummy was quickly located by the UAV, transmitting the positioning data and live images using the L3 Harris Wescam real-time Electro-Optical/Infra-Red camera and an Automatic Identification System.
https://uasweekly.com/2020/08/28/schiebel-camcopter-s-100-nordic-unmanned-carry-out-worlds-first-full-scale-offshore-uav-flight-for-equinor/?utm_source=rss&utm_medium=rss&utm_campaign=schiebel-camcopter-s-100-nordic-unmanned-carry-out-worlds-first-full-scale-offshore-uav-flight-for-equinor&utm_term=2020-08-31

1Sep20

US Defense Innovation Unit selects Parrot as major drone supplier for US Government APPLICATION HEADLINE NEWS ALEX DOUGLAS SEPTEMBER 1, 2020

The DIU is a Department of Defense organization that accelerates commercial technology, and the Blue sUAS program is a spin-off of the Short-Range Reconnaissance program launched by the Army and DIU in April 2019.

Parrot has been selected once more by the DIU as one of the five participants in the Blue sUAS program. Parrot was invited to present its solutions on August 19, 2020. At this virtual event, Parrot revealed two new high-performance tactical reconnaissance drones.

With 10 years' experience developing micro drones for the commercial and consumer markets – during which time Parrot has produced over 4.5 million drones – Parrot is the most established company in the Blue sUAS program.

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https://www.commercialdroneprofessional.com/us-defense-innovation-unit-selects-parrot-as-major-drone-supplier-for-us-government/?utm_medium=push&utm_source=notifications

Amateur Drone Videos Could Aid in Natural Disaster Damage Assessment Byron Spice August 28, 2020

It wasn't long after Hurricane Laura hit the Gulf Coast Thursday that people began flying drones to record the damage and posting videos on social media. Researchers at Carnegie Mellon University are working on ways to use them for rapid damage assessment.

By using artificial intelligence, the researchers are developing a system that can automatically identify buildings, make an initial determination of whether they are damaged and how serious that damage might be.

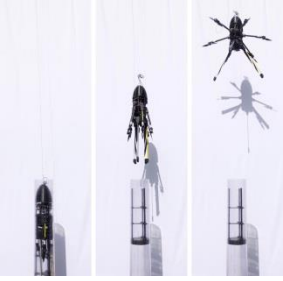
The system can identify if the damage is slight (yellow) or serious (orange) or if the building has been destroyed.

"Current damage assessments are mostly based on individuals detecting and documenting damage to a building," said Junwei Liang, a Ph.D. student in CMU's Language Technologies Institute. "That can be slow, expensive and labor-intensive work."

Satellite imagery doesn't provide enough detail and shows damage from only a single viewpoint — vertical. Drones, however, can gather close-up information from a number of angles and viewpoints. First responders can fly drones for damage assessment, but drones are now widely available among residents and routinely flown after natural disasters.
https://www.cmu.edu/news/stories/archives/2020/august/drones-hurricane-damage.html

Caltech's Cannon-Launched SQUID Drone Doubles in Size, Goes Autonomous

Evan Ackerman 27 Aug 2020



Caltech & NASA JPLCannon-launching the SQUID drone

At IROS last year, Caltech and NASA's Jet Propulsion Lab presented a prototype for a ballistically launched quadrotor—once folded up into a sort of football shape with fins, the drone is stuffed into a tube and then fired straight up with a blast of compressed CO_2, at which point it unfolds, stabilizes and flies off. It's been about half a year, and the

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prototype has been scaled up in both size and capability, now with a half-dozen rotors and full onboard autonomy that can squeeze into a 6-inch tube.

SQUID stands for Streamlined Quick Unfolding Investigation Drone. The original 3- SQUID has been demoted to "micro-SQUID," and the new SQUID is this much beefier 6-inch version. Tube-launched drones are unique in that they remove the requirement for the kind of takeoff conditions that most drones expect. A demonstration last year showed micro-SQUID launching from a moving vehicle, but the overall idea is that you can launch a SQUID instantly and from pretty much anywhere. https://spectrum.ieee.org/automaton/robotics/drones/caltech-canon-launched-squid-drone

Drone Delivery? Amazon Moves Closer With FAA Approval Concepción de León Aug. 31, 2020

Amazon has received federal approval to use drones to deliver packages, bringing the retailer a critical step closer to its goal of shortening delivery times to 30 minutes or less.

Amazon did not say when customers could expect drones to drop packages at their doorsteps. Obtaining the F.A.A. certificate was an "important step," the company said, adding that it would continue to test the technology, which has been in development for years.

David Carbon, the vice president of Prime Air, said in a statement that the company would "continue to develop and refine our technology to fully integrate delivery drones into the airspace, and work closely with the F.A.A. and other regulators around the world to realize our vision of 30-minute delivery."

At a conference in Las Vegas last year, Amazon revealed a fully electric hexagonal drone that could carry up to five pounds. The drone had advanced spatial awareness technology that allowed it to avoid contact with other objects.
https://www.nytimes.com/2020/08/31/business/amazon-drone-delivery.html

UAVtek receives drone innovation award for nano drones Josh Spires Sep. 1st 2020

British drone manufacturer UAVtek has been awarded the drone innovation award for its 200-gram nano drone that goes by the name Bug. The Bug provides military forces and law enforcement with an eye

in the sky while making minimal noise.

The Bug is considered a Class 1A nano UAV with a flight time of 40 minutes and a top speed of 50 mph while flying on a 5.8GHz or LTE connection which gives it a max range of 30 miles. UAVtek says the drone can be flown in all weather conditions and can fly in winds of 35 knots and gusts of 45 knots.

The drone can fly fully autonomously with pre-programmed missions and can swarm with other Bug drones right out of the box. The drones use GPS to follow the 'leader' drone with algorithms controlling the spacing, formation, and making sure they don't all fly into one another. https://dronedj.com/2020/09/01/uavtek-receives-drone-innovation-award-for-nano-drones/

2Sep20

FAA Won't Charge Rogue Drone Pilot Who Stopped Firefighting Jason Reagan September 01, 2020

Last week, FAA officials told the Arizona Daily Star they would not prosecute an unidentified person who flew a drone over restricted airspace at the Bighorn wildfire scene in Arizona.

Unfortunately, a few "bad apple" drone pilots have disrupted other firefighting efforts over the past few years. In 2019, Arizona State Forestry officials spotted a drone over the Coldwater fire – a blaze that burned more than 6,000 acres of the Coconino National Forest. The sighting forced officials to temporarily ground a firefighting helicopter.

Illegal drone flights not only disrupt firefighting efforts but also frustrate enforcement attempts. "If the Forest Service can't get at their assets at that moment, then the fire gets an upper hand. It's all so time sensitive."

In a statement to the Star, FAA spokesperson Ian Gregor said: *"*We conducted a thorough investigation into this incident. However, we were not able to conclusively determine that the suspected drone operator was the pilot. That said, we did counsel the drone pilot, both orally and in writing, about the importance of not flying drones near wildfires and observing any [flight restrictions] that are in place.*"* https://dronelife.com/2020/09/01/faa-wont-charge-rogue-drone-pilot-who-stopped-firefighting/

Pipistrel Announces Hybrid Electric Cargo eVTOL Paul Bertorelli September 1, 2020

Pipistrel, the innovative Slovenian company that has been producing electric trainers for several years, now says it's ready to take orders for a hybrid-electric eVTOL cargo carrier capable of delivering up to 1000 pounds over an unspecified distance. But the Nuuva V300, says the company, will be able to fly 110 pounds to a distance of more than 1500 miles. A smaller variant, the V20, is designed to carry payloads up to 44 pounds over shorter distances.

The V300 has a unique planform that houses four independent vertical-thrust electric motors on twin booms with an internal combustion engine offering horizontal thrust in a pusher configuration. The aircraft has two high-aspect-ratio wings, one low-mounted forward and a high-mounted wing in the rear. It has no vertical fin or rudder. A center section between the two booms provides the cargo hold and it's accessible via a hinged nose door. https://www.avweb.com/aviation-news/pipistrel-announces-hybrid-electric-cargo-evtol/?MailingID=438

Over 40 UAS solutions providers sign up to virtual Commercial UAV Expo Americas APPLICATION BUSINESS HEADLINE NEWS ALEX DOUGLAS SEPTEMBER 2, 2020

These exhibitors will be displaying cutting-edge airframes, components, software, and services, as well as end-to-end solutions focused on commercial applications. 18 solution providers will be exhibiting at Commercial UAV Americas for the first time and event organizers expect even greater international participation now that those abroad can attend remotely without needing to travel.

Lisa Murray, group director at Diversified Communications, said: "By organizing a virtual event, we're able to provide the needed connection and education during this time when gathering face to face is not possible."

The Virtual Exhibit Hall pass is free and includes access to the virtual outdoor flying demos, emerging technology showcases, keynote panels Drone Delivery in the Era of a Pandemic, Women in Drones and insightful keynotes delivered by speakers from the UPS Flight Forward team, FAA, DHS and The White House. https://www.commercialdroneprofessional.com/over-40-uas-solutions-providers-sign-up-to-virtual-commercial-uav-expo-americas/

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20 DRONES TO BUY NOW Gadget Flow

If you have a thing for aerial photography or just love technology, these drones are totally worth a try. From big brands to crowdfunding campaigns, check out some of the coolest drones 2020 has given us so far. https://flipboard.com/@gadgetflow/20-drones-to-buy-now-3qnhjhfp4s538s6d?from=share&utm_source=flipboard&utm_medium=share

Drone Delivery Canada completes critical tests for Condor drone Josh Spires Sep. 2nd 2020

The latest round of testing was for the triple-redundant communications system (satellite, cellular, 900MHz RF), triple-redundant navigational guidance system, triple-redundant autopilot system and the remote monitoring capabilities from the ground.

The Condor is the company's largest drone with a maximum take-off weight of 476 kg and a maximum payload weight of 180 kg. The drone is capable of flying at a maximum speed of 120 kph and has a maximum flight range of 200 km. Condor uses a two-stroke gasoline engine to spin its two rotors while navigating using a GPS-based system.

You can watch a quick teaser video of the Condor drone before the company begins to share more videos of the drone in action. https://dronedj.com/2020/09/02/drone-delivery-canada-completes-critical-tests-for-condor-drone/

Buss Energy Group invests in Aero Enterprise Press 21 August 2020

The **Buss Energy Group** from Hamburg continues its growth course with a strategic stake of 24.9 percent in Aero Enterprise GmbH from Linz. The Austrian company has been operating inspection flights on onshore and offshore wind turbines with self- developed flying robots since 2013.

The drones are based on helicopter technology and thus can be used at high wind speeds. This strength – a key quality of the AERO-SensorCopter that is superior to the typical quadrocopter – is particularly relevant at high sea. Here the weather conditions are a frequent obstacle. Also,

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long flight times of the drones are a great advantage especially for offshore use. Furthermore, the drone inspection flight is fully autonomous and continuously monitored.

The high-resolution image data is evaluated by using the in-house-developed AERO-Software Package. Damage detection and classification is largely automated with the support of Artificial Intelligence. The subsequent automation of data transfer to the customer's software environment and the automatically generated reports enable efficient and objective reporting on the condition of the wind turbines and potential repairs needed. In addition, the drones can provide exact comparative data from previous inspections.
https://www.suasnews.com/2020/08/buss-energy-group-invests-in-aero-enterprise/?utm_campaign=Energy%20Drone%20%26%20Robotics%20Coalition%20Content&utm_medium=email&_hsmi=94432061&_hsenc=p2ANqtz-83J69JFb0GzCHNUJ76yKt8eUZ76vg4fgraNlKvD4AkrE91Zu6hFEvwhLy3qvJ2X7IfFj4KeEkztVRLOXsPu_MaBjAiSQ&utm_content=94432061&utm_source=hs_email

3Sep20

Security and Surveillance Drones: Meet the ALTI Ascend Miriam McNabb September 02, 2020

"The ALTI Ascend is our smallest aircraft option. We have been developing and improving this system for over a year now," says Ian Share, ALTI's Chief Sales Officer. With a wingspan of only 2 meters – about 6 1/2 feet – the Ascend can be easily transported by a single operator – but still offers an impressive flight endurance of 4-6 hours.

Ascend is battery-powered for vertical take-off and landing and gas powered for forward flight. "Our composite carbon fiber airframes are designed to maximize endurance by having the most efficient airfoil design for any aircraft of it size and class. The airframe is designed with an integrated fuel tank, dihedral, washout winglets, VTOL pods, dual elevator control surfaces, navigation and landing lights, quick-lock tool-less wing latch, and connectors to offer the best possible aerodynamic efficiency." https://dronelife.com/2020/09/02/security-and-surveillance-drones-meet-the-alti-ascend/

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Amazing Drone Video: Industrial Application Gathers Incredible Footage of the Dead Sea Miriam McNabb September 02, 2020

Today, Percepto announced that they've been granted a BVLOS waiver to fly at the ICL Dead Sea site in Israel. The application is industrial – but the amazing drone video of the Dead Sea resulting from the project is fascinating.

The waiver granted by the Civil Aviation Authority of Israel enables ICL Dead Sea – a speciality potash, mineral and chemicals company – to use Percepto's drone-in-a-box solution "to carry out inspection, safety and security missions at its operations at the Dead Sea site."

CEO of Percepto, Dor Abuhasira, states: "The ability to fly autonomous drones BVLOS enables organizations to increase the frequency of their inspections, especially in remote, vast and inhospitable environments. A single operator can manage a wide and diverse range of missions using one familiar secure online interface, from anywhere." Check out this amazing drone video of the lowest place on earth. https://dronelife.com/2020/09/02/amazing-drone-video-industrial-application-gathers-incredible-footage-of-the-dead-sea/

Elistair and the Issue of Unlimited Flying Time for Drones Juan Plaza AUGUST 27, 2020

A French company, Elistair, has deveoped a power base that is designed to function with most commercially available brands of drones and provide hours of flight time on a 230 ft wire.

We had the opportunity to connect with Guilhem de Marliave, founder and CEO of Elistair on a range of topics, from pure technology to market focus and the future. "Elistair is one of the leading tethered drone companies, with a strong focus on facilitating the access to unlimited aerial data," Guilhem stated. "We have reached 40K tethered flight hours in over 65+ countries. With our large range of Air Module compatible with 50+ commercially available drones, our clients can easily tether their whole drone fleet with a single station."

"Since the launch of our first tethering station in 2015, Elistair has become the industry leader with over 600 tethered stations deployed so far helping security forces monitor events, secure sites and protect assets." https://www.commercialuavnews.com/public-safety/elistair-and-the-issue-

of-unlimited-flying-time-for-drones?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiWldRek5EYzJPR1E1T1dRMSIsInQiOiJCd0YzWndmeFRGR2FhekZzZTVkbW9wVk9keDhURlRMNWFDNW90U0ZtK3FGZlNXQkorSTRrM1lLcmdvVnFHQXEwc252SVNQbGRDWTNGTE5DVEp6S0szRzVWaWV3TVlxS2J1dVZRSTFMdm1MbzJhTlYwcTdOSVVzYjJpQ2hWc1kwMyJ9

Autel announces 'Made in the USA' EVO II Dual Bundles Scott Simmie Sep. 3rd 2020

Drone manufacturer Autel announced on September 3 that its EVO II Dual drone package is "Made in the USA" — meaning it will have a competitive edge over drones manufactured elsewhere — and particularly drones of Chinese origin. The Department of Interior has banned the use of Chinese-made drones or drones containing Chinese parts over data security concerns — and the Trump administration's Anti-China sentiment seems to be growing.

The Department of Interior has already banned the use of drones containing Chinese components, as well as planned purchases of Chinese-made drones. Now, Autel is taking the opportunity to leverage the anti-China backlash. Despite the fact the company itself is from China, it has announced that its latest products, aimed at First Responders and other Enterprise users, qualify as "Made in the USA."

Autel's EVO II will carry a "Made in the USA" designation

The word came in a news release. In it, the company said its Autel Enterprise line "offers end-users the opportunity to use aircraft manufactured in the USA with foreign and domestic parts and labor." https://dronedj.com/2020/09/03/autel-announces-made-in-the-usa-evo-ii-dual-bundles/

Honeywell Unveils Next-Generation Avionics Lab for UAS September 2, 2020 News

A new research and development lab built by Honeywell (NYSE: HON) is demonstrating the company's technological capabilities in both hardware and software for the unmanned aerial systems and urban air mobility markets. The lab, which resembles a conceptual UAM vehicle flight deck with real hardware, is the first of its kind to demonstrate actual fly-by-wire controls and vehicle avionics integrated in a lab setting. It will be used to develop, test and demonstrate Honeywell's industry-leading technology aimed at simplifying the operations of future vehicles.

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Stéphane Fymat, vice president and general manager, UAS/UAM, Honeywell Aerospace said, "With this new lab we can fully simulate real vehicle functionality with real hardware for our customers, which will cut back on costly flight test hours and help them reach their goal of attaining simplified vehicle operations." The concept of simplified vehicle operations, or SVO, combines automation and human factors best practices with the goal of reducing the amount of knowledge an operator must have to safely fly an aircraft. The new lab is located at Honeywell's Deer Valley avionics facility in Phoenix, Arizona. https://uasweekly.com/2020/09/02/honeywell-unveils-next-generation-avionics-lab-for-uas/?utm_source=rss&utm_medium=rss&utm_campaign=honeywell-unveils-next-generation-avionics-lab-for-uas&utm_term=2020-09-03

Citadel Defense Wins $12.2M U.S. Department of Defense Contract September 2, 2020 Counter UAS News

The U.S. Government and Department of Defense has awarded Citadel Defense a $12.2M contract to defeat enemy drones on the battlefield and at covered locations in the United States. The decision to purchase Titan systems was made after extensive U.S. Government evaluation that assessed more than a dozen other counter drone solutions.

"Deployed warfighters designed the system. Weighing 20 pounds and capable of autonomous operation, Titan has been detecting, identifying and defeating adversarial drones in extremely isolated fixed locations, complex urban environments, mobile missions on-the-move and dismounted operations where man-portability is a premium," says Matthew England, VP of Citadel Defense.

After 14-months of combat deployments and government evaluations, Titan uniquely addressed DOTMLPF (doctrine, organization, training, material, leadership and education, personnel, and facilities) strategies required for modernization in the fight against nefarious commercial and handmade drones.

The system's artificial intelligence and deep learning foundation enables Titan to match or outpace the speed of the evolving threat, whether multi-agents and/or swarms, and provides an ideal capability for layered C-sUAS defenses. https://uasweekly.com/2020/09/02/citadel-defense-wins-12-2m-u-s-department-of-defense-

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contract/?utm_source=rss&utm_medium=rss&utm_campaign=citadel-defense-wins-12-2m-u-s-department-of-defense-contract&utm_term=2020-09-03

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Volansi to Begin Middle-Mile Drone Delivery in NC RENEE KNIGHT AUGUST 27, 2020

The VOLY C10- Gen 2 all-electric UAS from Volansi

The Concord, California-based cargo drone delivery service provider recently signed a teaming agreement with the North Carolina Department of Transportation.

To start, the drone will perform tests under Part 107 rules as part of the UAS Integration Pilot Program. Once granted the proper waivers, the team plans to fly missions that take the drone beyond visual line of sight. Flights will take place in a central part of the state in rural environments.

The VOLY C10, the drone being deployed for this project, is an all-electric, hybrid VTOL fixed-wing system that can complete two-way missions with minimal infrastructure needs. The drone lands at the delivery point, giving it the ability to deliver and return items such as samples for analysis and diagnosis and parts for repairs.

The UAS can carry up to 10 pounds of cargo 50 miles, with the company's flight operations team handling all operations to provide an end-to-end delivery service.
https://insideunmannedsystems.com/volansi-to-begin-middle-mile-drone-delivery-in-nc/

Falcon 9 launch adds 60 Starlink satellites to orbit as constellation beta testing continues Caleb Henry September 3, 2020

WASHINGTON — SpaceX on Sept. 3 launched 60 Starlink internet satellites on a Falcon 9 rocket while disclosing early testing results from the constellation for which it has now launched 713 satellites.

SpaceX plans to roll out a public beta of Starlink internet service later this year, but is for now testing the service with employees, Kate Tice, senior certification engineer at SpaceX, said during the launch webcast.

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That testing demonstrated download speeds above 100 megabits per second, and "super low latency," she said. "Our latency is low enough to play the fastest online video games, and our download speeds are fast enough to stream multiple HD movies at once and still have bandwidth to spare."

The Starlink megaconstellation, which could number 12,000 or even 42,000 satellites, remains "very much a work in progress," she said. "Over time, we will continue to add features to unlock the full capability of that network." https://spacenews.com/falcon-9-launch-adds-60-starlink-satellites-to-orbit-as-constellation-beta-testing-continues/

What's Happening With UTM? FAA Moves to Next Phase of Testing Miriam McNabb September 03, 2020

If you've been wondering what's happening with UTM (unmanned traffic management) you aren't alone. That's mostly because UTM isn't just one policy or piece of technology, it's a complex framework of regulations and solutions working together. Remote ID regulation and technology, which has been in development for years now, is a critical piece of that framework.

In January of 2019, the FAA began Phase I of the UTM Pilot Program. Objectives included "(1) the exchange of flight intent among operators, (2) the generation of notifications to UAS Operators regarding air and ground activities, known as UAS Volume Reservations and (3) the ability to share UVRs with stakeholders, including other UAS Service Suppliers and the Flight Information Management System," according to the FAA. This phase was completed in August of 2019.

UPP Phase 2 will test Remote ID capabilities and unmanned traffic in increasingly dense airspace, such as may be found in urban areas or around major airports. In April of 2020, the FAA chose the NY UAS Test Site at Griffis International Airport and the Virginia Tech, Mid Atlantic Aviation Partnership (MAAP) as the Phase 2 test sites: Northeast UAS Airspace Integration Research Alliance, Inc. (NUAIR), which manages the NY UAS Test Site, announced that virtual collaboration with technology partners began in April, and live flights are set to begin this month.

A NUAIR press release lists the NY Test Site's technology and testing partners. "Oneida County and the New York UAS Test Site have partnered with multiple local, national and international

organizations to complete the work outlined in UPP Phase 2, including: Aerodyne Measure, AiRXOS, Albany County Sheriff's Office, ANRA Technologies, AX Enterprize, Flytrex, Johns Hopkins University – Applied Physics Lab (on behalf of the FAA TCAS Program Office), NUAIR, Oneida County Sheriff's Department, OneSky, ResilienX, Skyward, Syracuse Fire Department and TruWeather Solutions." https://dronelife.com/2020/09/03/whats-happening-with-utm-faa-moves-to-next-phase-of-testing/

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