



UAS and SmallSat Weekly News

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Dive Delivery Begins Backyard Drone Deliveries PRESS 2020-05-08

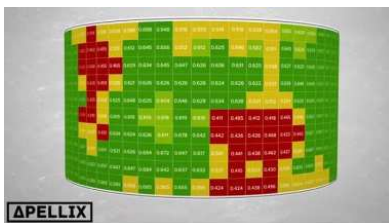


Residents of San Mateo and Contra Costa counties in California can now sign up to participate in the trials by [clicking here](#) – upon signing up, when ready, Dive Delivery will send out a certified remote pilot to first conduct a test flight without any cargo. After a successful test, the pilot will affix a lightweight package to the drone and conduct the actual delivery drop flight. Customers will be notified before and immediately after the operation to ensure they do not walk under the drone at any time.

Mission planning, airspace authorization and flight execution are managed by the Avison App, an iOS application typically installed on an iPad. An off-the-shelf drone is fitted with an air drop system, while release control is programmed into the Avison flight platform. The drone takes off from a predefined location via an automated waypoint mission, flies to the backyard of the residential customer, lowers into the marked location, automatically releases the package and returns to the launch location via the same flight path.

“Dive Delivery is doing groundbreaking work executing on last mile drone deliveries in the Bay Area. Working alongside a company like Dive to meet the needs of local communities in a time of crisis is really rewarding for us,” says James Broniec, VP of Business Development for Avison. https://www.uavexpertnews.com/2020/05/dive-delivery-begins-backyard-drone-deliveries/?utm_source=Master&utm_campaign=2caa9a5532-EMAIL_CAMPAIGN_2017_12_20_COPY_01&utm_medium=email&utm_term=0_35ad7bc94d-2caa9a5532-89168288

Apellix™ Now Piloting Drone-Based UT Inspections May 7, 2020 News



Apellix, protecting the world’s built and industrial environments through technology, is proud to announce they are now identifying pilot projects for **ultrasonic wall thickness** inspections of above-ground storage and terminal tanks.

Using semi-autonomous drones, Apellix performs measurements on tanks as high as 60 meters. The system can measure up to 100 locations per hour, reporting real-time results to the engineer who is safely on the ground. All test data, as



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well as test location, environmental data and video confirmation is timestamped and stored on the onboard computer for easy download to Excel™ or customer reporting software.

The Apellix systems use the DeFelsko PosiTector UTG M gauge with single element 5 MHz contact transducer. If you are interested in evaluating the system, please visit www.Apellix.com or contact Apellix at info@apellix.com or +1-904-647-4511

https://uasweekly.com/2020/05/07/apellix-now-piloting-drone-based-ut-inspections/?utm_source=rss&utm_medium=rss&utm_campaign=apellix-now-piloting-drone-based-ut-inspections&utm_term=2020-05-08

Elbit Systems Introduces a UAS-Based Long-Range Maritime Rescue Capability

May 7, 2020 News



[Elbit Systems](#) introduces a unique life saving capability to its [Hermes 900 Maritime Patrol Unmanned Aircraft System](#). Integrating detection and identification capabilities, onboard inflated life-rafts, and precision dispatch capability, enables the UAS to perform long-range maritime Search and Rescue (SaR) missions.

Capable of more than **24 hours of continuous flight**, it can operate in adverse weather conditions both day and night. It can carry up to four, six-person life-rafts that are integrated on its wings. Using an onboard maritime radar, the UAS detects survivor situations. Upon detection, the Electro-Optic/Infra-Red payload is deployed to provide visual identification, and a rapid calculation of the drop-point is performed, enabling the UAS to dispatch life rafts from a low-altitude of 600ft to a pin-pointed location at a safe distance from the survivors. A gradual inflation process of the life-rafts is initiated after dispatch and is completed upon landing.

The aircraft has been operational with the Israeli Air Force since 2015 and was selected by numerous customers including Switzerland, the UK, Brazil, Mexico, Chile, the EU, the UN and countries in Southeast Asia. https://uasweekly.com/2020/05/07/elbit-systems-introduces-a-uas-based-long-range-maritime-rescue-capability/?utm_source=rss&utm_medium=rss&utm_campaign=elbit-systems-introduces-a-uas-based-long-range-maritime-rescue-capability&utm_term=2020-05-08



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Scotland to get medical drone delivery trial this month [Sean Captain](#) May. 8th 2020

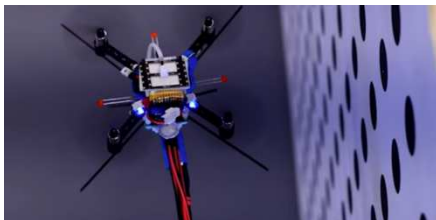


On May 25th, a weeklong trial will see drone shipments between Oban (a town northwest of Glasgow) and the nearby Isle of Mull. The 10.5 mile trips will deliver medical equipment from the National Health Service to frontline health workers on the island. The program is run by a London-based drone delivery company

called [Skyports](#). The drones will fly beyond visual line of sight. Skyports will be working closely with the Oban airport to coordinate the flights and will issue alerts warning airplane pilots when the flights are taking place.

The NHS and Skyports have not specified what type of supplies they will deliver or how often the flights will be. But it looks to be a much smaller operation than the [English Channel one](#). There, twin-engine gas-powered drones will deliver cargoes of up to 220 pounds from Lee-on-the-Solent in Hampshire to Binstead on the Isle of Wight in the Channel. It will involve up to four flights per day. <https://dronedj.com/2020/05/08/scotland-to-get-medical-drone-delivery-trial-this-month/>

Mosquito-inspired drone sensor could prevent collisions [Sean Captain](#) May 8th 2020



Researchers have a new concept for a cheap, lightweight sensor inspired by how mosquitos navigate in the dark. It works very differently from infrared or lidar sensors used on drones and other robots today. Instead, it relies on aerodynamics, as [Science reports](#).

Some mosquitos are nocturnal and able to navigate completely in the dark without hitting objects. In trying to determine how they do this, researchers discovered a curious structure: about 12,000 cells that ring the base of each of the animal's antennae. They realized that the cells measure how the antenna wobbles in flight.

The wobbling, they realized, comes from turbulence from the motion of the beating wings. As a mosquito flies near a wall or the ground, the vortex of air from the beating wings is distorted in a way that blows back on the antennae, producing a distinctive wobble. When the special cells register the wobble, the mosquito realizes it is close to an obstacle and adjusts course to avoid colliding with it.



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Researchers then built a synthetic version of this wobble sensor, weighing just 9.2 grams (0.3 ounces) and affixed it to a mini drone. With the sensor, the mosquito drone was able to register obstacles and avoid collisions just as a mosquito can. <https://dronedj.com/2020/05/08/mosquito-inspired-drone-sensor-could-prevent-collisions/#more-28449>

AlarisPro Unveils New User Interface for Unmanned Aircraft System Management Platform Amy Larkin info@teamalaris.com 410-881-0800 May 5, 2020



AlarisPro's software is the **only** platform that combines project management, flight logging, component-level maintenance and reliability data and performance analysis tools in one dashboard. The system helps reduce maintenance costs, improve efficiency, maximize operational safety and makes it easier to meet regulatory requirements.

AlarisPro's centralized platform also aggregates data across multiple systems to identify statistically-significant trends in fleet performance. The system then recommends actions that can prevent unnecessary downtime, damage to equipment, or risk to human safety.

The user interface updates include:

- Data visualization for actionable insights
- An intuitive dashboard to support decisions
- Maximizing mobility and facilitating offline data entry
- Streamlined data entry
- New functionality for asset management

AlarisPro will be exhibiting at Commercial UAV Expo on September 15-17 in Las Vegas, NV and at AUVSI XPONENTIAL on October 5-8 in Dallas, TX. To learn more, visit www.alarispro.com.

10May20

Drones: Incident Response & Decision-Making Wayne Baker May 1st, 2020

Through drone technology, we now have tools that enhance our situational awareness in the field. Standard aerial imagery enhances the initial scene size-up for crews at structure fires, wildland fires, rescue situations and hazmat incidents. Aerial thermal-imaging cameras help to: improve missing-person searches; find lost victims faster and increase their chances of survival; and mitigate risks to the boots on the ground (drones can be sent ahead of search parties, go to



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more dangerous areas and keep search parties away from cliffs or other potentially dangerous areas).



Traditional methods of determining a building fire's location, size and movement often are based on education and experience, such as reading smoke techniques. Standard aerial imagery and aerial thermal imaging can help to provide this information far more quickly and with greater accuracy.

All that said, it's extremely important to remember that this technology **never should replace** current strategies and tactics. We should continue to obtain a "hot lap" on building fires and use drones afterward to aid with monitoring changes in conditions. The ground level view and detail are crucial; the aerial view and details only increase this information-gathering capability. Drones help to enhance situational awareness, but they don't give you those all-important firsthand sights or sounds that provide valuable information for decision-making.

https://www.firehouse.com/operations-training/article/21133196/drones-incident-response-decisionmaking?utm_source=Airborne+International+Response+Team+%28AIRT%29+News+List&utm_campaign=af9a7f08f9-

[EMAIL_CAMPAIGN_2020_05_10_12_48&utm_medium=email&utm_term=0_2ecada6f57-af9a7f08f9-33089729#&gid=1&pid=1](https://www.firehouse.com/operations-training/article/21133196/drones-incident-response-decisionmaking?utm_source=Airborne+International+Response+Team+%28AIRT%29+News+List&utm_campaign=af9a7f08f9-EMAIL_CAMPAIGN_2020_05_10_12_48&utm_medium=email&utm_term=0_2ecada6f57-af9a7f08f9-33089729#&gid=1&pid=1)

Drones for Disaster Response: NASA STEReO Project Kicks Off May 5, 2020



Natural disasters, like wildfires and hurricanes, can lead to many lives lost and billions of dollars in costs across the U.S. each year. To help reduce that impact, drones have great potential to assist emergency responders by making their interventions even faster, more targeted and better able to adapt to changing circumstances. These vehicles and the systems that support them could multitask in unique ways, for

instance by using software to track firefighters on the ground before dropping forest fire retardant a safe distance away. A new NASA project, called [Scalable Traffic Management for Emergency Response Operations](#), or STEReO, is working on the tools needed to make this a reality. The team and its many collaborators kicked the project into gear with a workshop in February 2020.

While STEReO is conceived and led by NASA's Ames Research Center in California's Silicon Valley – and builds on NASA's research in [drone traffic management](#), human factors, vehicle



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autonomy and communications – a variety of partners will be essential to making it work. Many took part in February’s session to provide feedback on the opportunities foreseen and ways to overcome expected hurdles together. Participants ranged from federal agencies, like the U.S. Forest Service, the Federal Emergency Management Agency and the Federal Aviation Administration, to city and state fire departments and private companies providing UAS vehicles and services.

The NASA team is now working closely with its partners to design STEReO’s tools and operations for future emergency response efforts. This work will lead to initial flight demonstrations to be held at Ames and at NASA’s **Langley Research Center in Hampton**, Virginia. As the project matures, STEReO will show how its concepts would work by conducting a flight demonstration of a wildfire scenario and a simulation of a hurricane response. <https://www.nasa.gov/feature/ames/drones-for-disaster-response-nasa-stereo-project-kicks-off>

11May20

Positioning the COVID-19 drone response: delivering medicines but removing privacy rights? May 11, 2020 Philip Butterworth-Hayes Commentary *By Chris Stonor*



Since the outbreak of COVID-19, drones have frequently appeared in the world media. From stories about delivering medicines to the sick, flying coronavirus test samples to hospitals, delivering foods and general necessities to those living in more remote areas, to videos of drones reminding the public during lockdown to social distance and remain indoors via loudspeaker – or monitoring people who might harbor the virus, or disinfecting public spaces and sports stadiums. Some industry experts suggest the pandemic has been the making of drones, showing the world their **potential for human good**.

However, there is a **darker side**. For some, drones are being deployed to erode privacy laws and human rights. Silkie Carlo, Director of UKs ‘Big Brother Watch’, was quoted in the UK’s Times newspaper: “Drones are an extreme, militaristic form of surveillance. We’ve seen too many examples of police using them aggressively in place of measured public health communications.....Police using drones to surveil and bark orders at members of the public is usually **excessive and counterproductive**. Parliament should introduce stronger safeguards to circumscribe their use.”



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When a loudspeaker is attached to a drone, it can be seemingly transformed from an innocuous flying toy to something far more sinister. The ensuing pandemic and much of the world going into lockdown has given greater powers to the police and governments and previous clearly-drawn lines around privacy and security are starting to become blurred.

<https://www.unmannedairspace.info/latest-news-and-information/positioning-the-covid-19-drone-response-delivering-medicines-but-removing-privacy-rights/>

MQ-8C starts flight tests with new radar Greg Waldron 10 May 2020



Flight testing with the Leonardo AN/ZPY-8 Osprey radar commenced from the US Navy's Patuxent River testing facility in late February, says Northrop. "The radar significantly increases Fire Scout's detection and tracking of targets," says Melissa Packwood, program manager, tactical autonomous systems at

Northrop Grumman.

Several weeks of ground testing took place before the unmanned rotorcraft operated its first flight with the new radar on 27 February. It obtained initial operational capability in June 2019 and is scheduled for its first deployment in 2021.

"Employing high-frequency radio waves to 'see', an Osprey-equipped MQ-8C Fire Scout can detect targets at extremely long ranges, at night and even in stormy weather conditions when visibility is extremely poor," said the company.

"The radar's world-first flat-panel technology also means it can be installed within the mold line of the helicopter rather than having to use an underslung belly-pod."

<https://www.flightglobal.com/mq-8c-starts-flight-tests-with-new-radar/138307.article>

DRONEII: Add Your Voice to the 2020 Drone Industry Barometer Miriam

McNabb May 08, 2020



Drone research and consulting firm [DRONEII](#) has announced the annual survey of the drone industry which will inform the 2020 Drone Industry Barometer Report. Drone professionals are encouraged to participate in the survey, which will result in DRONEII's in-depth report on the state of the market. (See last year's report [here](#).)

"The **Global Drone Industry Barometer 2020** is a huge part of our efforts to make the drone industry more transparent and this year we're aiming to once again break our previous record



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of survey responses. As always – the more participants, the better the results!” says DRONEII. The link to the survey is [here](https://dronelife.com/2020/05/08/droneii-add-your-voice-to-the-2020-drone-industry-barometer/). <https://dronelife.com/2020/05/08/droneii-add-your-voice-to-the-2020-drone-industry-barometer/>

UKP30 million funding opportunity announced for electric air vehicle integration research May 11, 2020 Philip Butterworth-Hayes UAS traffic management tenders



“We will fund projects that develop integrated aviation systems and vehicle technologies that enable new classes of electric or autonomous air vehicles. Solutions should be able to be integrated into a mature operational environment, ensuring safe and reliable operation in flight and on the ground.

“This is phase 2 of a 3-phase program. In this phase, we are funding projects up to 18 months duration. We particularly welcome projects of shorter duration who can deliver rapid impact.

“This competition phase has two strands:

- Strand 1, the ‘fast track’ encourages applications from smaller businesses and organizations who might not work within the aerospace or aviation sector.
- Strand 2 will focus on larger projects and encourage applications that seek to integrate technologies and systems.

“We plan to open phase 3 of this program in winter 2021 when we will invite projects, including those who are not part of phase 2, to demonstrate an integrated ‘system of systems’ approach to the operation of new air vehicles in non-segregated airspace.

<https://www.unmannedairspace.info/uas-traffic-management-tenders/ukp30-million-funding-opportunity-announced-for-electric-air-vehicle-integration-research/>

Multiple cellular networks offer reliable BVLOS communications May 6, 2020 Jenny Beechener UAS traffic management news

Research by Dortmund University demonstrates “reliable long-range multi-link communication for unmanned Search and Rescue Aircraft (SAR) systems in Beyond Visual Line of Sight operation” according to a report published by the researchers on 1 May 2020.



The university participates in the LARUS project, funded by the Germany Federal Ministry of Education and Research, to develop the basis for an

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unmanned, automated search and localization system that is **fully integrated into civil airspace**, to be deployed by the German Maritime Search and Rescue Service. Its various sensors and communication interfaces enable the UAS to be used in additional scenarios like offshore industry and disaster management.

An abstract published by the university says with the increasing availability of unmanned aircraft systems, their usage for search and rescue is close at hand. Especially in the maritime context, aerial support can yield significant benefits. The article proposes and evaluates the concept of **combining multiple cellular networks** for highly reliable communication with those aircraft systems. The proposed approach is experimentally validated in several unprecedented large-scale experiments in the maritime context. It is found that in this scenario, conventional methods do not suffice for reliable connectivity to the aircraft with significantly varying overall availabilities between 68% and 97%. The underlying work, however, overcomes the limitations of single-link connectivity by providing availability of up to 99.8% in the analyzed scenarios.

All results and flight recording data sets are published along with this article to enable future related work and studies, external reproduction, and validation of the underlying results and findings. <https://www.unmannedairspace.info/latest-news-and-information/multiple-cellular-networks-offer-reliable-bvlos-communications-according-to-dortmund-university-research/>

Commercial drone industry showing early signs of recovery, says SkyWatch.AI

BUSINESS FINANCIAL NEWS UNITED STATES SAM LEWIS MAY 11, 2020



This is reported by SkyWatch.AI Drone after 31 US states recently removed certain lockdown restrictions. SkyWatch.AI is an insurance platform for the drone industry.

It said that during March and April over 25% of SkyWatch.AI pilots were affected by COVID-19 and altered their insurance to fit the new situation, whether by changing their plan or suspending it. After using a 60-day suspension policy implemented by the company, over 20% have now returned.

This, the company suggested, bodes well for the resurgence of the industry.

https://www.commercialdroneprofessional.com/commercial-drone-industry-showing-early-signs-of-recovery-says-skywatch-ai/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-329258-Commercial+Drone+Professional+DNA+-+2020-05-11



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Flylogix selected for CAA Innovation Sandbox APPLICATION BUSINESS NEWS UK ALEX DOUGLAS MAY 11, 2020



The CAA Innovation Sandbox, launched in May 2019, offers innovative companies the chance to collaborate over emerging concepts in a bid to help keep the UK's aviation sector the forefront of technology.

The project will enable safe operation of unmanned aircraft in open airspace alongside other air users providing services for the **offshore energy industry** and will build on an existing North Sea focused program with the Oil and Gas Technology Centre, energy provider and producer Total and National Air Traffic Services.

Flylogix says the project will also allow it to mobilize at short notice from four strategically located operating hubs and reach any UK offshore asset within hours, providing a range of services including environmental monitoring, surveillance and delivery.

https://www.commercialdroneprofessional.com/flylogix-selected-for-caa-innovation-sandbox/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-329258-Commercial+Drone+Professional+DNA+-+2020-05-11

Disinfection drone sprays down sports arenas Sean Captain May. 11th 2020



Virtually all public sporting events are closed down due to the coronavirus. But when venues consider reopening, a New York-based drone company is offering a solution to keep them germ free by spraying disinfectant from above.

Until recently, Syracuse startup EagleHawk specialized in drone-based roof inspections using thermal cameras. But as that work slowed down due to the lockdowns, it began exploring the disinfection business. The company has retrofitted its inspection drones, replacing cameras with sprayers for applying disinfectant quickly over wide areas. A long hose runs from the drone to tanks of disinfectant stored on the ground. To prevent the hose from snagging on stadium seats or other objects, **a second drone holds up the slack** in the hose.

EagleHawk bills this setup as a faster method than sending workers into the seats to disinfect them all by hand. It's also eliminates the risk of exposure for workers. The company has tested



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the system in three indoor sports venues, including the KeyBank Center in Buffalo, home of the NHL’s Buffalo Sabres. EagleHawk says the system can also disinfect outdoor stadiums.

“We’re getting **strong interest** now, but I think everybody’s in a waiting game, unfortunately,” said the company’s CEO Patrick Walsh. <https://dronedj.com/2020/05/11/disinfection-drone-sprays-down-sports-arenas/#more-28532>

12May20

Here’s How Uber Is Designing Skyports for Future Air Taxis Brian Garrett-Glaser May 11, 2020



Uber revealed some details about its approach to building ground infrastructure for urban air mobility — which it calls ‘Skyports’ — as the company seeks to make progress despite a [dearth of industry standards and regulations](#).

Through Uber Elevate, the ridesharing giant is working with at least **eight developers** of electric vertical takeoff and landing (eVTOL) aircraft, to be used for urban aviation in concert with cars, scooters and other modes of public transportation.

With the launch of its Uber Air service planned for **2023** in Melbourne, Los Angeles and Dallas, the company — and others planning to be early investors in ground infrastructure for urban air mobility — faces the challenge of building and designing in an uncertain environment.

Uber is focused on renovating existing parking garages, as seen in previously revealed mockups. Learn admitted these images show the company’s “aspirational existence ... where we want to go, not necessarily where we see ourselves starting.”



One of Uber's "common reference models," named eCRM-003, is being used to make assumptions about vehicle requirements. This is not an aircraft design that is being built. Photo: Uber

Learn’s team is using a “common reference model” eVTOL design created by Uber, called eCRM-003, as a guide for vehicle requirements, including size, weight, maneuverability, and charging. <https://www.aviationtoday.com/2020/05/11/heres-uber-designing-skyports-future-air-taxis/>



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Cygnus departs space station, beginning extended experimental mission May 11, 2020 Stephen Clark



WATCH LIVE:

[https://spaceflightnow.com/2020/05/11/cygnus-departs-station-beginning-extended-experimental-mission/...](https://spaceflightnow.com/2020/05/11/cygnus-departs-station-beginning-extended-experimental-mission/)

A Cygnus supply ship built by Northrop Grumman departed the International Space Station Monday, beginning an extended mission in orbit to deploy a pair of **CubeSats** and perform a NASA-sponsored fire experiment.

The Cygnus spacecraft arrived at the space station Feb. 18, three days after launching aboard an Antares rocket from **Wallops Island, Virginia**. The cargo freighter delivered to the space station 7,445 pounds of hardware, supplies and experiments inside the spacecraft's pressurized module, made in Italy by Thales Alenia Space.

Northrop Grumman has multibillion-dollar contracts with NASA for a series of resupply missions to the space station. The agreements cover at least 17 resupply flights through 2024, and the NG-13 mission set to conclude this month marks the 13th mission under the cargo transportation contracts. <https://spaceflightnow.com/2020/05/11/cygnus-departs-station-beginning-extended-experimental-mission/>

ADS-B Transponder Enables Controlled Airspace UAV Flight 10 May 2020 Mike Ball



[Sagotech Avionics'](#) ADS-B transponder has been utilized in a UAV that performed a continuous flight of over **fifteen hours through controlled airspace** in the Czech Republic. [Primoco UAV's](#) Model One 150 flew for 15 hours and three minutes before landing at Písek – Krašovice airport, breaking the company's previous endurance record of 12 hours, eight minutes.

Sagotech Avionics' [XPS transponder](#) was **integrated** with UAV Navigation's Vector autopilot, providing a low-SWaP (size, weight and power) flight control solution that enabled seamless and safe incorporation of unmanned flight into manned airspace. The ADS-B Out feature of the XPS transponder allowed for the drone to be seen by Air Traffic Control as well as other aircraft in the area. The flight was tracked online using a commercial website displaying real-time flight path data from the aircraft's ADS-B transmissions, which are generally required for all aircraft in



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controlled airspace. In total, the UAV flew a distance of 1650 km, at an average fuel consumption of 2.2 liters per hour of flight.

https://www.unmannedsystemstechnology.com/2020/05/long-endurance-uas-flight-conducted-in-controlled-airspace/?utm_source=UST+eBrief&utm_campaign=901d9681ea-eBrief_2020_05May_COPY_01&utm_medium=email&utm_term=0_6fc3c01e8d-901d9681ea-119747501

Phased-Array Communications Used for Long-Distance UAS Flight 08 May 2020 Mike Ball



[Radionor Communications'](#) phased-array communications technology has been integrated into a modified Penguin B UAV owned by the Norwegian Defence Research Establishment that undertook a 200km **coastal long-distance flight through several civilian airspaces.**

Radionor's [Cordis Array II next-generation technology](#) uses an electronically steerable beam to provide point-to-multipoint broadband data links. The system provides wireless IP connectivity over non-line-of-sight ranges, with high output power and reception that exceed conventional radio systems.

The UAV used Radionor's phased-array datalink technology to continually stay connected to its operations center as it passed through different types of controlled civil airspace handled by civil air traffic control. The unmanned aircraft was fitted with a **transponder** that allowed it to flexibly operate in controlled airspace, and its status and telemetry were accessible online via the broadband datalink to effectively maintain command and control capabilities for the entire flight. https://www.unmannedsystemstechnology.com/2020/05/phased-array-communications-used-for-long-distance-uas-flight/?utm_source=UST+eBrief&utm_campaign=901d9681ea-eBrief_2020_05May_COPY_01&utm_medium=email&utm_term=0_6fc3c01e8d-901d9681ea-119747501

Drone video of Mercedes Benz Museum may beat being there Sean Captain May 12th 2020



The Mercedes Benz Museum in Stuttgart is truly a temple of the automobile. To celebrate the museum's reopening after Germany's months of coronavirus shutdown, Mercedes has



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released a stunning FPV drone video flying through the full length of the spiraling structure.

Mercedes celebrates with a two-minute, twenty-second drone tour of the [entire structure](#), covering over a century of auto making. Beginning at the roof, a facemask-wearing guard opens the door and allows the drone in. What follows is a historical tour that begins with vintage models from the early 20th century. At one point, the drone even flies through the windows of a gull-wing Mercedes sports car, complete with a swoosh sound effect. The wide angle of the drone's camera seems to stretch out the bodies of roadsters, accentuating their sleek lines.

On Saturday, 9 May 2020, we will be opening our doors to the public again. But before we do that, we had a special little flying visitor Initially, visits are only possible from Friday to Sunday. See you in Stuttgart, Germany! [#MBmuseum](#)

At last, the drone flies down to the first floor of the Mercedes Benz Museum, though an auditorium where it zooms through the railings. Then it's out the front door to the plaza in front of the building with the drone turning back to provide a full view of the building's exterior. At the end, it's hard to believe that there's so much history is packed into one building and just over two minutes of flight. <https://dronedj.com/2020/05/12/drone-video-of-mercedes-benz-museum-may-be-better-than-being-there/>

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Phoenix-Wings Wins at African Drone Competition PRESS 2020-05-11



[Phoenix-Wings](#), a young German company focusing on cargo drones, scores at the international Lake Kivu Challenge held in Rwanda, Africa. The competition took place in February and published results Tuesday May 5th. Using its vertical takeoff and landing drone "Manta Ray", the company won the sample pickup competition and also closely competed in emergency delivery. Additionally, the team achieved the innovation award. Following up on the success, Phoenix-Wings is already working with partners on medical and disaster relief applications including remote island supply in crisis as the Covid-19 pandemic.

The LKC competitions were held as part of the African Drone Forum, an international conference on the use of drones in civil applications on the African continent. The LKC tasks required take-off at a drone port at the shore of lake Kivu, fly to an island about 20km out and deliver or pickup medical supplies. From early 2019, companies had to present their technical approach, safety concept and market strategy. Starting at over **70 applications** in the first



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phase, 10 companies were finally invited to Rwanda.

http://www.uavexpertnews.com/2020/05/phoenix-wings-wins-at-african-drone-competition/?utm_source=Master&utm_campaign=ac688c32b2-EMAIL_CAMPAIGN_2017_12_20_COPY_01&utm_medium=email&utm_term=0_35ad7bc94d-ac688c32b2-89168288

As COVID-19 Rocks Markets, Digital Health Start-Ups Rake In Cash Rachel Warren

May 10, 2020

While many industries plummeted in the first quarter of the year, digital health companies closed the first quarter of 2020 with **unprecedented** levels of funding.

Private equity and venture capital financing of digital health [start-ups](#) reached an all-time high of just over \$3 billion in Q1 2020. Telemedicine companies generated **three times** the amount of financing they received in Q1 2019, raising \$788 million in venture capital backing, compared to \$220 million in the first quarter of 2019. Start-ups in mental health also saw landmark levels of funding in Q1 2020, reaching a total of \$576 million.



Rock Health, a venture capital fund dedicated to digital health start-ups, recently released a [report](#) examining the sector's record Q1 and the anticipated market impact of the COVID-19 pandemic later in 2020.

Though a broad pullback in venture investing was likely underway at the start of 2020, US digital health companies nonetheless raised **\$3.1B across 107 deals**—more than **1.5X** the total funding in Q1 of any previous year. This caps off the largest ever twelve-month funding period for digital health with \$9.3B invested across Q2 2019-Q1 2020. Here are three top digital health start-ups to watch in the months to come. <https://www.fool.com/investing/2020/05/10/as-covid-19-rocks-markets-digital-health-start-ups.aspx>

DRL, NBC Sports Network and FanDuel Launch Virtual Drone Racing Series for Direct Relief May 11, 2020 Drone Racing



The Drone Racing League today announced the first-ever fantasy virtual drone racing series, the 2020 FanDuel DRL SIM Racing Cup, will premiere on Saturday, May 16 at 2:30pm ET on NBCSN. The series will run for eight weekends on NBCSN and Twitter.

The 2020 Cup will feature 12 DRL pilots battling it out on the [DRL](#)



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[SIM](#), the drone racing simulator, for the chance to be crowned the series' Champion. Fans tuning in will feel as if they are in the drone's cockpit as the pros fly digital versions of custom DRL drones through historic DRL maps and tracks, all from their homes **around the globe** including the U.S., Canada, the U.K. and Switzerland.

"DRL merges the digital with the real, so we're thrilled to highlight the virtual side of drone racing starting this Saturday. The high-speed, futuristic racing combined with daily fantasy is great for the whole family — and it's all for an amazing **charity** supporting frontline workers," said DRL President Rachel Jacobson. All pilots have committed to donate their winnings to Direct Relief, the largest charitable provider of protective gear and medical essentials to health facilities in response to Covid-19. The schedule is listed here:

https://uasweekly.com/2020/05/11/drl-nbc-sports-network-and-fanduel-launch-virtual-drone-racing-series-to-benefit-direct-relief/?utm_source=rss&utm_medium=rss&utm_campaign=drl-nbc-sports-network-and-fanduel-launch-virtual-drone-racing-series-to-benefit-direct-relief&utm_term=2020-05-12

A Passenger Drone Hotel: EHang and LN Holdings make it a Reality Miriam

McNabb May 12, 2020



Urban air mobility pioneers [EHang](#) (Nasdaq:EH) have partnered with LN Holdings, a tourism platform and hotel development group, to create the **world's first passenger drone hotel**. Guests may have the opportunity to travel by EHang's iconic passenger drone for both transport and aerial tourism at the new hotel.

The passenger drone hotel is a brilliant way to showcase automated aviation vehicles and [urban air mobility \(UAM\) technology](#). Tourists visiting Guangzhou will be able to travel around city landmarks such as the Canton Tower, Beijing Road and the Pearl River from the air as well as experience educational and entertainment opportunities like drone light shows.

"The program will promote integration of aerial sightseeing, traveler transportation, air logistics, aerial media light shows, intelligent exhibitions and education," says the EHang press release. "It will also promote the new experience of air tourism and explore other commercial use cases for EHang AAVs."

The first passenger drone hotel will be the LN Garden Hotel in Nansha, a coastal district in Guangzhou. <https://dronelife.com/2020/05/12/a-passenger-drone-hotel-ehang-and-ln-holdings-make-it-a-reality/>



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Hawaii Signs Participating Addendum with DroneUp Amy Wiegand 757-657-4886



Virginia Beach, VA (May 12, 2020) -- DroneUp, LLC, and the State of Hawaii have signed a Participating Addendum for the National Association of State Procurement Officials ValuePoint contract for Unmanned Aerial Vehicle services. This begins the offering for the purchase of drone solutions to all state agencies, commissions, political subdivisions, institutions, and local public bodies allowed by law. The award is the **first of its kind** for the drone industry.

DroneUp’s award includes but is not limited to service categories for Emergency Support Services, Law Enforcement Support, Aerial Inspection or Mapping Data Services, Agricultural and Gaming, and Agency Media Relations and Marketing. It’s anticipated that the primary users will be Agriculture & Game Management, Emergency Management, Transportation, Forestry, Mines, Minerals and Energy, and Public Universities and Community Colleges.

For further information: <https://www.naspovaluepoint.org/portfolio/unmanned-aerial-vehicle-drone-services-2019-2024/droneup-llc/>

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Space debris tracker LeoLabs unveils automated collision alert service for satellites MAY 13 2020 Michael Sheetz@THESHEETZTWEETZ



A visualization by LeoLabs of the possible collision of two defunct spacecraft

Space start-up LeoLabs unveiled a service on Wednesday that will send alerts in real-time to help satellite and spacecraft operators avoid crashing into debris or each other in space.

In all, there are as many as 200,000 objects whizzing around the Earth, according to data analysis firm AGI. The estimate includes pieces as small as two centimeters. Even a piece of plastic that small would be deadly to a spacecraft, as objects in Low Earth Orbit are moving at thousands of miles per hour. Additionally, companies like SpaceX and [Amazon](#) plan to launch **thousands more satellites** in the years ahead.

The cost of subscription will be based on the number of satellites an organization has in space. LeoLabs sees a wide market of users for the service, ranging from the “megaconstellations” of



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SpaceX and Amazon to **cube satellites** launched by startups or research groups.

<https://www.cnn.com/2020/05/13/space-debris-tracker-leolabs-automated-collision-alert-service-for-satellites.html>

Mapping an Ecuadorian Research Base in Antarctica with a Drone MAY 13, 2020 Juan Plaza Surveying & Mapping



The [Ecuadorian Antarctic Institute](#) partnered with the Ecuadorian mapping agency to select an unmanned aerial vehicle to be the platform of choice. The only vehicle that guaranteed stabilized flight with winds of 65 km/h was the Trimble UX5. It would be one of the **first times** that a UAV had been used in Antarctica.

The UX5 distributor agreed to supply a Trimble UX5, processing software and a technician to assist in the month-long mapping operation at Maldonado Base. The total expedition comprised 38 people including biologists, microzoologists, cartographers, weather experts and soldiers.

Once the weather finally improved to allow human outdoor activities, the UAV team was able to launch the first flight. Conditions were challenging: 23°F and winds of 10 to 15 knots with unpredictable gusts. The first flight landed smoothly after covering the entire scientific base in about 25 minutes with an overlap of 80% at an altitude of 250 ft. When the weather improved, the UX5 climbed to 600 ft and flew for 45 minutes, covering the entire peninsula.



Orthophotomosaic of Maldonado Base

With the flights completed, the resulting ortho-rectified, georeferenced photomosaics of the peninsula and the base area provided excellent detail. Despite the difficult and rapidly varying weather, the UAV had proven its worth and expansion plans are underway, thanks to the perseverance of the team and the reliability of the platform. https://www.commercialuavnews.com/surveying/mapping-an-ecuadorian-research-base-in-antarctica?utm_source=marketo&utm_medium=email&utm_campaign=newsletter&utm_content=newsletter&mkt_tok=eyJpIjoiWTJReVIUSXINamhtTm1RdyIsInQiOiJFM1dISGhpREdEQWxJZ1k3bFA1K0lvdW53MnYybUN1dHl6c3NJUGp1d1VxYUVndTZ2OEpjYTIxVzlnbVFJYzc0emxUTkpzQlJlY0dtZ3NwYzBjBFRJd0NPM2FKOTErd3ArWmtUVVI0TisxZ1NIU2NJT1BQaUNKZnRFaG1pTm1ZSCJ9



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FAA Targets 2021 for Launch of Drone Remote ID Service Brian Garrett-Glaser May 14, 2020



The FAA's remote ID cohort hopes to launch at last one remote ID service supplier by sometime next year

Earlier this month, the FAA chose a cohort of eight companies to develop technology requirements for its implementation of remote ID, working in parallel with the agency's policymaking process. A critical goal for that cohort is to launch remote ID services through at least one UAS service supplier (USS) by 2021.

Through the remote ID system [described in the agency's proposed remote ID rule](#), released in December 29, drone operators will be required to transmit via broadcast and network their location, their drone's location, velocity and identifying data to a centralized system, which a variety of remote ID USSs share and retrieve information in near-real-time. That publication received more than **53,000 comments** from the public, including UAS service providers, hobbyists, law enforcement agencies and many other stakeholders concerned about the cost of compliance, privacy implications, timeline for implementation and much more.

The following companies were selected by the FAA to form the remote ID cohort: **Airbus, AirMap, Amazon, Intel, OneSky, Skyward, T-Mobile and Wing.**

With the inclusion of Intel, Skyward and T-Mobile, the remote ID cohort is noticeably network-heavy. Many dissenting voices, including drone manufacturing giant DJI, have argued that broadcast alone is sufficient to enable remote ID; the FAA's choice of three telecom providers and its **exclusion of DJI** from this cohort indicates proceeding with a primarily network-based solution, perhaps mandating broadcast as well or including it as a backup option.

<https://www.aviationtoday.com/2020/05/14/faa-targets-2021-launch-first-public-drone-remote-id-service/>

Autonomous Drones: French Manufacturer Azur Demonstrates Skeyetech

[VIDEO] Miriam McNabb May 14, 2020



Autonomous drones – those that can be [programmed to execute missions from a distance](#) – are a growing market segment. While U.S. regulations for flight beyond visual line of sight do not yet accommodate fully remote

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operations, in other countries, autonomous drones have taken a significant role in industrial applications. French manufacturer [Azur Drones](#) has joined the market with Skeyetech, an industrial autonomous platform demonstrated in this video.

In remote areas where constant security is desirable – but constant staffing is unsafe, expensive or impracticable – drones that can operate without human pilots offer the perfect solution. For infrastructure like power plants; oil and gas facilities; data centers; or shipping and logistics centers; where theft or smuggling may be an issue; autonomous 24/7 surveillance drones offer a new and effective tool.

Skeyetech offers the “drone in the box” solution (the base station recharges the aircraft) and is a rugged system designed to be left alone. Combined with sensors and integrations that make data readily available, Azur has an impressive industrial offering. See the video at:

<https://dronelife.com/2020/05/14/autonomous-drones-azur-skeyetech/>